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Ministry of Labor and Skills

CAPACITY BUILDING TRAINING FOR TVT TRAINERS ON INNOVATIVE PEDAGOGY AND DIGITAL INTEGRATION

PART II: DIGITAL INTEGRATION

August 2024



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FDRE TECHNICAL & VOCATIONAL
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TABLE OF CONTENTS

1	Introduction	i
I.	Module Descriptor	i
II.	Background.....	i
III.	What is in this module?	ii
IV.	Expected duration and target group	ii
V.	Module language	ii
Part II: Integrating Digital Technologies and Tools for Pedagogy		1
Unit 1: Introduction to Digital Literacy		2
Unit 2: Accessing Relevant Information over the Internet.....		4
Unit 3: Managing Online Resources using Web Browsers		25
Unit 4: Using Productivity Applications		43
Unit 5: Using Online Digital tools for communication and collaboration.		48
Unit 6: Online Security and Privacy Control		90
Unit 7: Digital Content Creation		117
Unit 8: Using LMS for Digital Content Delivery.....		129
Unit 9: Using Digital Technologies for Assessment, Feedback, and Analysis.....		138
Unit 10: Using Generative AI		148
Unit 11: Using Assistive Tools		159
Bibliography		166

Acronyms

TVET:	Technical and Vocational Education and Training
OS:	Operating Systems
WWW:	World Wide Web
URL:	Uniform Resource Locator
2FA:	Two factor Authentication
AUP	An acceptable use policy

Definition of terms

Configuration:	refers to the arrangement or setup of different components, software, or settings to make a system or application function in a specific way.
Operating Systems:	is a software component that serves as the foundation for managing and coordinating various hardware and software resources in a computer system.
Threat:	a "threat" refers to any potential danger or harm that can exploit a vulnerability in a system or organization, leading to a breach of security and potential damage to assets, data, or operations.
Security:	"security" refers to the measures and practices implemented to protect computer systems, networks, data, and information from unauthorized access, attacks, damage, or theft
Digital tool:	"digital tool" refers to a software application, program, or online resource that is designed to perform specific tasks, enhance productivity, or facilitate various activities in a digital environment.
Diagnosis:	is used in many different disciplines, with variations in the use of logic, analytics, and experience, to determine "cause and effect".
Troubleshooting:	is a systematic approach to problem-solving that is often used to find and correct issues with complex machines, electronics, computers, and software systems.

1 Introduction

I. Module Descriptor

This module aimed at nurturing trainers of the Ethiopian Technical and Vocational Education training (TVET) to improve their institutions' performance. The module equips contents with the knowledge and skills needed to effectively integrate digital technologies into their work environment. Participants will learn to leverage digital tools and platforms to enhance workflow, communication, and decision-making settings. In addition, it gives the knowledge and skills necessary to protect personal information, manage digital identity, distinguish online threats, and promote a safe online environment. Participants will understand the importance of online safety and security, and apply best practices in managing privacy settings, passwords, and safe browsing habits.

II. Background

In the 21st century, the role of TVET and industry sectors has evolved significantly. With the advent of digital technologies, trainers are presented with both unprecedented opportunities and challenges. The need for digital literacy, especially among TVET Trainers, has never been more pertinent.

Digital literacy is the ability to utilize digital tools and technologies to access, evaluate, create, and communicate information effectively. It has become an essential competency in our rapidly changing world, particularly in the realm of education. TVET trainers must navigate a landscape where online digital technologies have permeated every facet of teaching, learning, and administration. In recent years, Ethiopia's TVET sector has witnessed a significant shift towards digitalization and technology integration. TVET trainers play a pivotal role in steering this transition. To effectively guide their trainees and institutions, they need a deep understanding of digital technologies and tools relevant to their work environment. In addition, the educational landscape in Ethiopia, like many other countries, is continually evolving. To remain competitive and effective, TVET trainers must adapt to new technologies and changing methodologies.

The subsequent sections of this module will elucidate why this training is highly relevant for TVET trainers in Ethiopia, focusing on four key learning objectives: understanding the concept of digital content, working and presenting digital content using LMS, using generative AI, safeguarding digital identities and data, and mitigating online threats. By addressing these objectives, trainers are not only better prepared for the digital age but also positioned to apply to their institutions effectively in an increasingly digital-centric world. The training module

designed for TVET trainers in TVET sectors in Ethiopia, which is not only relevant but also crucial for the professional growth and effectiveness of these trainers.

III. What is in this module?

This part contains the second chapter: Integrating Digital Technologies and Tools for Pedagogy

Contents under the chapter include:

- Access relevant information over the Internet
- Managing Online Resources Using Web Browser
- Using Productivity Applications
- Using Online Digital tools for communication and collaboration
- Digital Content Creation
- Using LMS for Digital Content Delivery
- Using Digital Technologies for Assessment, Feedback, and Analysis
- Using Generative AI
- Using Assistive Tools
- Online Security and Privacy Control

IV. Expected duration and target group

This module is expected to take 38 hours: chapter 2 (38 hours).

Target group: The module is aimed at TVET trainers of Ethiopian TVET institutions who wish to improve their institutions' performance.

V. Module language

The module will be delivered in English language. Participants should have a good command of the English language and able to understand written material and freely engage in discussions.

Part II: Integrating Digital Technologies and Tools for Pedagogy

Learning objectives of the Module

This module is designed to equip TVET teachers and trainers with the knowledge, skills, and tools necessary to effectively integrate digital technologies into their teaching practices. By the end of this module, participants will be able to:



- Understand the foundational concepts of digital literacy and the internet, and how these apply to the educational context.
- Access, evaluate, and manage online information effectively to enhance teaching and learning processes.
- Utilize productivity applications and digital tools for content creation, collaboration, and communication in educational settings.
- Employ digital technologies and Learning Management Systems (LMS) for content delivery, assessment, and feedback.
- Integrate assistive technologies to create inclusive learning environments that accommodate students with disabilities.
- Leverage Generative AI and other emerging technologies to enhance educational content and processes.
- Implement online security measures and privacy controls to protect personal and institutional data.

Unit 1: Introduction to Digital Literacy



Discussion

- What is digital literacy?
- What digital competencies and digital skills are essential for Trainers?

1.1.Introduction

Digital literacy refers to the ability to effectively use digital devices, communication tools, and networks to access, manage, integrate, evaluate, and create information in various formats using a range of digital technologies. It encompasses a wide range of skills, from basic computer knowledge to advanced information processing and critical thinking (Brown & Wilson, 2019). Digital literacy is an essential skill in the 21st century and essential in the modern educational landscape, as it empowers educators to integrate technology into their teaching practices, enhancing the learning experience for students.

1.2. Key Competencies Needed for Trainers:

To be digitally literate, trainers must develop several key competencies that enable them to use digital tools and resources effectively. These competencies include:

1. Technical Proficiency:

- **Basic Computer Skills:** Understanding how to operate digital devices such as computers, tablets, and smartphones.
- **Software and Applications:** Proficiency in using common software applications like word processors, spreadsheets, presentation tools, and educational software.
- **Internet and Browsers:** Navigating the internet, using search engines, and managing web browsers efficiently.

2. Information Literacy:

- **Information Retrieval:** Digital literacy empowers individuals to effectively search for and locate information online, utilizing search engines, databases, and other online resources. This includes the ability to employ search strategies and assess the quality and reliability of information sources.
- **Information Evaluation:** Assessing the credibility, reliability, and relevance of information sources to make informed decisions. A crucial aspect of digital literacy is the capability to critically assess the credibility and relevance of digital information. Users should be able to differentiate between trustworthy and untrustworthy sources and recognize bias or misinformation in digital content.
- **Managing Digital Information:** Organizing, storing, and retrieving digital information in a systematic manner.

3. Communication and Collaboration:

- **Digital Communication Tools:** Using email, instant messaging, video conferencing, and social media platforms to communicate with colleagues, students, and parents.
- **Collaborative Platforms:** Leveraging tools such as Google Workspace, Microsoft Teams, and other collaborative software to work with others and share resources.
- **Etiquette:** Understanding and adhering to proper email etiquette when composing, sending, and responding to emails.

4. **Digital Content Creation:**

- **Multimedia Integration:** Creating and integrating multimedia content, including text, images, audio, and video, to enhance teaching materials.
- **Educational Technology Tools:** Using digital tools like interactive whiteboards, online quizzes, and virtual labs to create engaging and interactive learning experiences.

5. **Ethical and Responsible Use:**

- **Digital Citizenship:** Understanding the principles of digital citizenship, including ethical behavior online safety and privacy. ethical behavior includes Understanding and promoting responsible and ethical use of technology. digital safety and security includes awareness of common online threats, such as phishing and malware, and the ability to adopt practices to safeguard personal and organizational information.
- **Netiquette:** Observing good online manners and etiquette when interacting with others in digital environments.
- **Plagiarism and Copyright:** Recognizing and preventing plagiarism, understanding copyright laws, and respecting intellectual property rights.

6. **Problem-Solving and Critical Thinking:**

- **Troubleshooting:** Identifying and resolving common technical issues that may arise with digital tools and devices.
- **Critical Thinking:** Applying critical thinking skills to evaluate digital content and its relevance and appropriateness for educational purposes.

7. **Continuous Learning and Adaptability:**

- **Staying Updated:** Keeping up with the latest developments in digital technologies and educational tools.
- **Professional Development:** Engaging in continuous professional development to enhance digital literacy skills and adapt to new technologies.

By developing these key competencies, trainers can harness the power of digital technologies to create a more dynamic, interactive, and effective learning environment. Digital literacy not only enhances your teaching practice but also prepares students for the digital world, fostering their own digital literacy skills.

Unit 2: Accessing Relevant Information over the Internet

Learning Outcomes: By the end of Unit Two, Trainers will be able to:



- Demonstrate an understanding of the basic concepts of the internet, web browsers, and the World Wide Web.
- Apply effective searching strategies and techniques to locate relevant information online.
- Critically evaluate the credibility and reliability of online information sources.
- Organize and manage digital information efficiently using web browsers and other tools.
- Use online resources responsibly by adhering to ethical standards, including proper citation and respecting intellectual property rights.

2.1.Introduction



Discussion

- Discuss the difference between the internet and the World Wide Web.
- What is a search engine? Mention some examples of a search engine?
- What is the difference between a search engine and a web browser?

In today's digital age, accessing relevant information over the internet is a critical skill for educators. The objective of this topic is to equip teachers with the necessary tools and techniques to efficiently and effectively find, evaluate, and utilize online information. By mastering these skills, teachers can enhance their instructional methods, enrich their curriculum, and provide students with up-to-date, accurate, and engaging learning materials. This section will begin with an **Introduction to the Internet, Web Browsers, and the World Wide Web**, providing a foundational understanding of how the internet operates and the role of web browsers in navigating the digital landscape. Next, we will delve into **Searching Strategies and Techniques**, where teachers will learn how to perform targeted searches, use advanced search features, and critically evaluate search results. Additionally, we will cover **Information Management**, teaching educators how to organize and manage the information they find. Finally, we will emphasize the importance of **Using Online Resources Responsibly**, including understanding issues related to plagiarism, copyright, and intellectual property rights. By mastering these topics, teachers will be well equipped to harness the power of the internet to

support their teaching and foster a more dynamic and interactive learning environment for their students.

2.2. Introduction to the Internet and the World Wide Web

The Internet and the World Wide Web (WWW) are two closely intertwined technologies that have revolutionized the way we communicate, access information, and conduct business in the modern world. While often used interchangeably, they serve distinct yet complementary roles in our digital lives.

The Internet:

The Internet is the global network of interconnected computers and devices, allowing them to communicate and exchange data with each other (Marek & Yanchun , 2023). It's a vast, decentralized network that spans the globe, connecting billions of devices, including personal computers, servers, smartphones, and more. This network operates on a set of standardized protocols and technologies, the most fundamental of which is the Transmission Control Protocol/Internet Protocol (TCP/IP). The Internet's primary function is to facilitate data transfer between devices, making it possible for us to send emails, share files, browse websites, and stream videos. It doesn't host content itself; rather, it serves as the infrastructure that enables the transfer of information.

The World Wide Web (WWW):

The World Wide Web, often referred to as "the web," is a subset of the Internet (Marek & Yanchun , 2023). It is a vast collection of interconnected documents and multimedia content, accessible through web browsers. The web relies on a specific protocol called Hypertext Transfer Protocol (HTTP) for transmitting web pages, images, videos, and other resources. It was invented by Sir Tim Berners-Lee in 1989, who also created the first web browser and web server. The key innovation of the WWW is the use of hyperlinks, or simply "links," which allow users to navigate from one web page to another by clicking on highlighted text or objects. This interconnected structure of documents and resources creates a web of information, where users can access a wide variety of content, from text articles to videos, through a web browser like Chrome, Firefox, or Safari.

In summary, the Internet provides the infrastructure and the means for devices to connect and communicate globally, while the World Wide Web offers a user-friendly and visually appealing way to access and interact with the vast array of information available on the Internet (Marek & Yanchun , 2023). Together, they have transformed the way we work, learn, socialize, and

entertain ourselves in the digital age, making the world a more connected and information-rich place.

URL:

URL stands for Uniform Resource Locator. This is a unique address for each web page on the Web (Davis & Garcia, 2018). When you want to visit a specific web page you can enter its URL into the address field in a web browser. The URL consists of the name of the protocol (usually HTTP) and is usually followed by www and the name of the website that you want to connect to (hostinger.com, n.d.). Example:

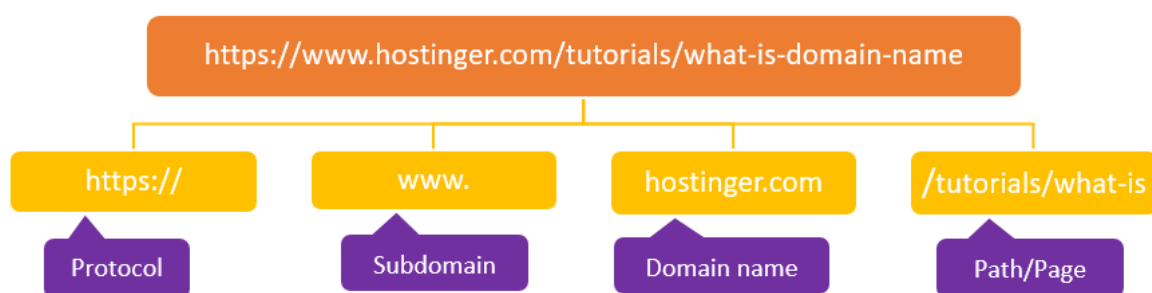


Figure 1: Parts of URL

2.3.Introduction to web browsers

A web browser is a software application that allows users to access and interact with content on the World Wide Web (WWW). It serves as a user interface for navigating the Internet, retrieving web pages, and displaying them on a computer or device. Web browsers are essential tools for accessing a wide range of online resources, including websites, web applications, multimedia content, and more (Inamdar & Rane, 2013). They enable users to input web addresses (URLs), search for information, view text and images, watch videos, and interact with web-based forms and services. Here are descriptions of some common web browsers:



Figure 2: Common web Browsers

1. Google Chrome: Developed by Google, Chrome is one of the most popular web browsers. It is known for its speed, simplicity, and seamless integration with Google services. Chrome offers a clean, user-friendly interface, and it supports a vast library of extensions and add-ons, making it highly customizable.

2. Mozilla Firefox: Firefox is an open-source web browser developed by the Mozilla Foundation. It is celebrated for its strong privacy features and customizable add-ons. Firefox emphasizes user security, offering enhanced privacy settings and features like "container tabs" to keep browsing activities isolated.

3. Microsoft Edge: Microsoft Edge is the default web browser for Windows 10 and later. It is built on the Chromium engine (the same core technology as Chrome) and is known for its speed and compatibility with web standards. Edge also integrates with Microsoft's ecosystem, offering features like Cortana and Windows Hello.

4. Apple Safari: Safari is Apple's web browser, available on macOS and iOS devices. It is recognized for its speed and energy efficiency. Safari offers seamless integration with Apple's ecosystem and is designed to deliver a smooth, user-friendly experience on Apple hardware.

5. Opera: Opera is a feature-rich web browser with a focus on speed and privacy. It includes a built-in ad blocker and a free VPN service. Opera's sidebar offers quick access to various tools and services, making it a popular choice for users who value convenience and customization.

These web browsers share core features such as tabbed browsing, bookmark management, and password storage. However, they differentiate themselves through speed, privacy features, customizability, and integration with other services and platforms. Users can choose the web browser that best suits their preferences and needs for web browsing.

2.4. Search effectively and critically

The ability to conduct effective and critical searches is paramount for TVET trainers in their quest to find relevant and reliable information for their teaching materials. By mastering search techniques, trainers can efficiently locate high-quality resources, evaluate their credibility, and integrate them into their curriculum and TTLMs.

"Search for Information" refers to the process of actively seeking and retrieving specific data, facts, or knowledge from various sources, often utilizing search engines or databases. This can be done for a variety of purposes, such as academic research, professional projects, or personal curiosity. The key steps in a search for information typically include formulating a clear query or question, using appropriate search tools, evaluating search results, and extracting relevant information to meet the intended purpose.

Navigating the sea of information requires more than just typing keywords. In the context of web browsing, "Search for Information" often involves using search engines like Google, Bing, or Yahoo to locate relevant web pages, articles, or resources related to a particular topic. Users input keywords or phrases into the search bar, and the search engine returns a list of results

ranked by relevance. Effective searching requires refining queries, understanding search operators, and critically evaluating the credibility and reliability of the information obtained. It is a fundamental skill in the digital age for accessing and utilizing the vast amount of information available on the internet. In this section, you will delve into the fundamentals of accessing information on the internet.

2.4.1. Introduction to Search Engine

A search engine is a software system embedded in a website that is used to search for information on the World Wide Web. They are powerful tools that enable users to find information on the Internet quickly and efficiently. They index millions of web pages and provide results based on the relevance to the user's query. Understanding how search engines work and their functions is essential for navigating the vast amount of information available online. The search results are generally presented in a line of results, often referred to as search engine results pages (SERPs). The information may be a mix of web pages, images, videos, infographics, articles, research papers, and other types of files. The information may be a mix of web pages, images, videos, infographics, articles, research papers, and other types of files.

2.4.2. Popular Search Engines

Several search engines are widely used around the world, each with unique features:

- **Google:** The most widely used search engine, known for its speed, relevance, and comprehensive index. Google also offers various tools like Google Images, Google Maps, and Google Scholar.
- **Bing:** Microsoft's search engine, which integrates well with Windows and Microsoft services. Bing offers unique features like image search, video search, and integration with Microsoft Office.
- **Yahoo:** Provides a variety of services including search, news, email, and more. Yahoo search is powered by Bing.
- **DuckDuckGo:** Focuses on user privacy and does not track search activity, making it a popular choice for those concerned with privacy.



Figure 3: Examples of search engines

2.4.3. Key Functions of Search Engines

- **Keyword Search:** Users type in words or phrases (keywords) to find relevant web pages.
- **Advanced Search:** Offers options to refine search queries with filters for date, language, region, and more.
- **Image and Video Search:** Allows users to find images and videos related to their queries.
- **Voice Search:** Enables users to perform searches using voice commands, which is especially useful on mobile devices.
- **Local Search:** Helps users find businesses, services, and points of interest in their local area.

Note that we will use the Google Chrome web browser in this lesson. For ease of access, we will open Google Chrome from the taskbar. If you need to add (pin) the Google Chrome app to the taskbar follow the steps below.



Steps: To add the Google Chrome app to the taskbar:

1. Click on the search icon  in the taskbar.
2. Type: **Google Chrome**.
3. Click on the **Google Chrome** app icon. This will launch the web browser.
4. Right click on the **Google Chrome** icon on the taskbar.
5. Select **Pin to Taskbar** from the menu.

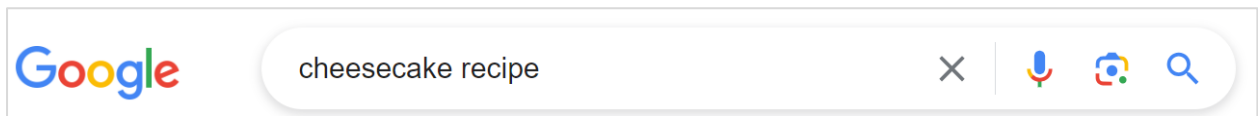
 Pin to taskbar

6. Click the **Google Chrome** icon on the taskbar to open the web browser.

2.4.4. Searching strategies and techniques

A search strategy is the action plan that is drawn to search. The search results that a given search will generate is largely dependent on the search word or phrase used. Different techniques are available to conduct searches effectively so that maximum relevant information are retrieved according to users need. The more exact you can be in your choice of word(s) the more accurate the search results. Google, as the world's leading search engine, offers a range of searching strategies and techniques to help users find relevant information. For educators, mastering these techniques can significantly enhance research capabilities and productivity. Here are some common strategies and techniques:

1. Basic Search: A search can be conducted by entering a single search term or a phrase comprising more than one term. Keyword search is the simplest form of search, facility offered by a search system. Basic searches involve entering a few keywords or phrases related to the topic you're interested in. Google then returns results that include web pages containing those keywords. For example, you can search for "Cheese **cake recipe**" to find recipes for making cheesecake.

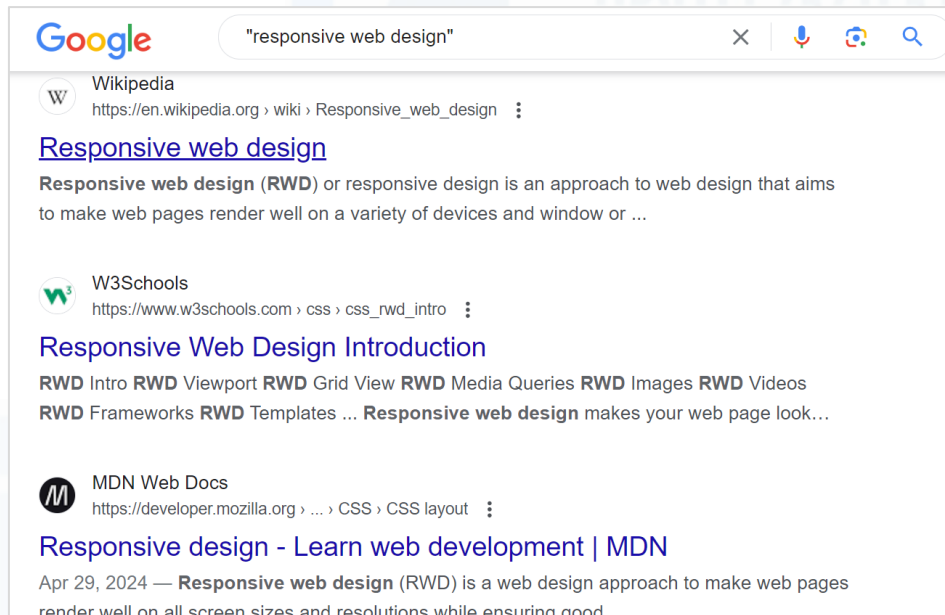


Tips: Use precise keywords relevant to your topic. Include specific terms to narrow down the results.

2. Exact Match Search: An exact match search is a technique used to find results that contain the exact phrase or terms specified in the search query. By using quotation marks around a phrase or set of words, Google will return only those results that contain the precise sequence of words in the same order as typed. This method is particularly useful when looking for specific phrases, names, quotes, or any exact string of text. For example, if you were searching for information on "responsive web design," you would type:



Then, Google will return results that contain the exact phrase "responsive web design" in that order, ensuring more relevant and precise matches.

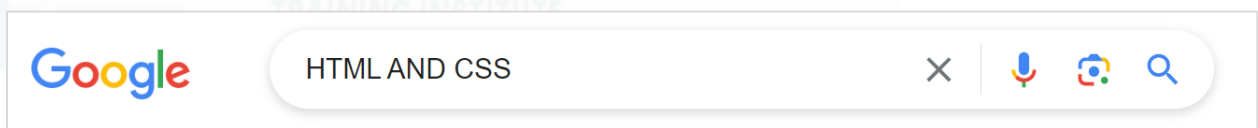


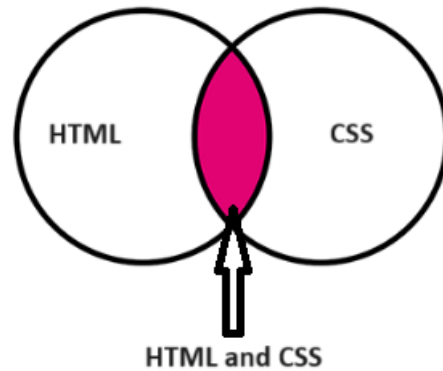
This technique is particularly useful for locating specific phrases, quotes, names, and product information, making your search process more efficient and effective.

3. Boolean Search: This very common search technique combines search terms according to the Boolean logic. Three types of Boolean search are possible: AND search, OR search and NOT search.

A. Boolean AND search: allows users to combine two or more search terms using the Boolean AND operator. A Boolean AND search will retrieve all those items where all the constituent terms occur. For example, the following search expression "Internet and WWW" will retrieve all those records where both the terms occur. Boolean AND search adds more restrictions to a search expression by adding more search terms. Therefore, the more search terms are ANDed, the more restricted, or specific, will be the search, and as a result the less will be the search output. Sometime, a search may not produce any result if too many search terms are ANDed.

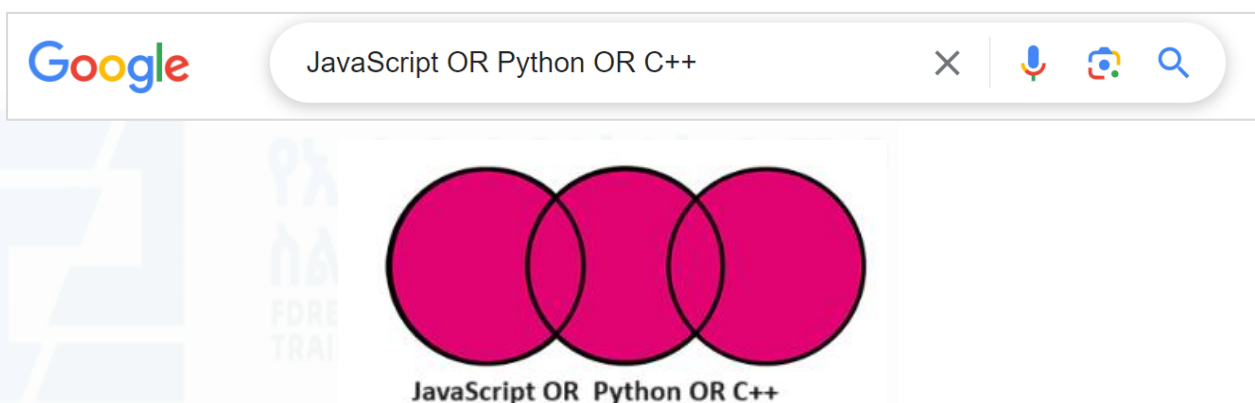
For example, "HTML AND CSS" will show results containing both HTML and CSS.





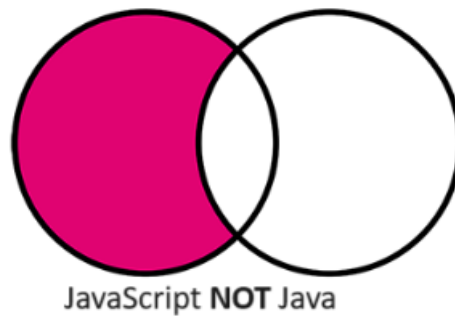
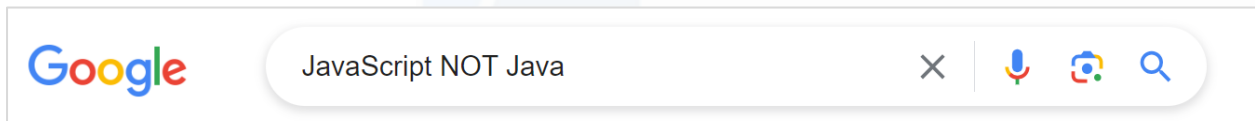
B. **Boolean OR** search: allows users to combine two or more search terms such that the system retrieves all those items that contain either one or all of the constituent terms. Thus, the following search expression "Colleges or Universities" will retrieve all those records (1) where the term Colleges occurs, (2) where the term Universities occurs, and (3) where both the terms occur. Note that this is contrary to the use of the term 'or' in normal English. Boolean OR search; though adds more terms to a search expression, adds less restrictions to a given search expression, because the search is conducted for occurrence of each single ORed term irrespective of whether the other term(s) occurs or not. Consequently, the output of OR searches will be more. When too many search terms are ORed, the search output may be too big to handle.

For example, "JavaScript OR Python OR C++" will show results containing either JavaScript or Python or C++.



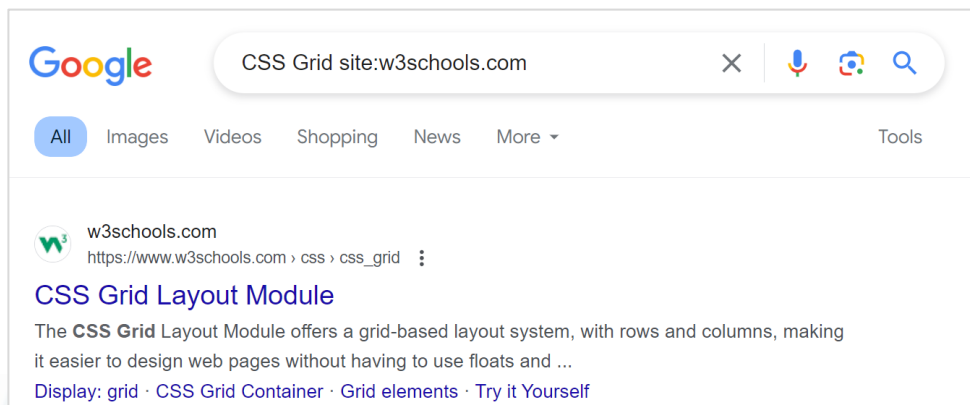
C. **Boolean NOT**: Excludes results containing the specified term. search allows users to specify those terms that they do not want to occur in the retrieved records. For example, the following search expression "Search engines NOT Hotbot" will retrieve all the records on search engines except those where the term 'Hotbot' occurs. Boolean NOT searches add restrictions to a search by forcing the search system to discard those items where the NOT term(s) occur. Hence the search output will decrease with increase in the NOT terms.

For example, "JavaScript NOT Java" will show results about JavaScript but exclude those about Java.



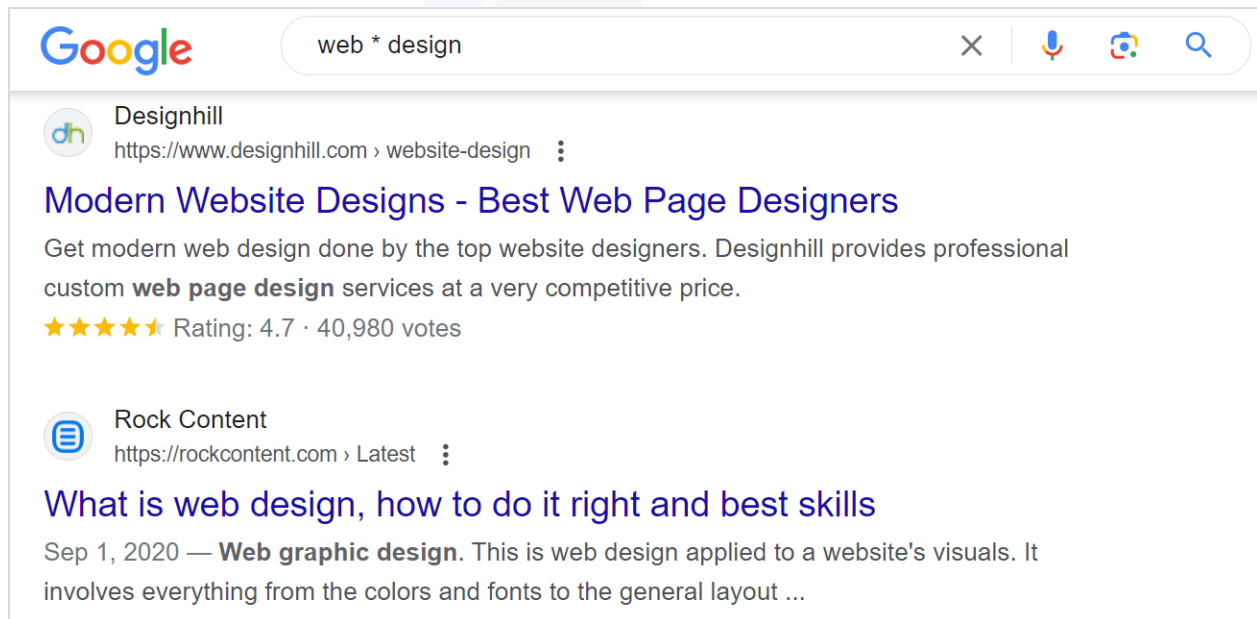
4. Site Search: To search within a specific website, use the "site:" operator.

Example: Searching for "CSS Grid site:w3schools.com" will return results about CSS Grid specifically from w3schools.com



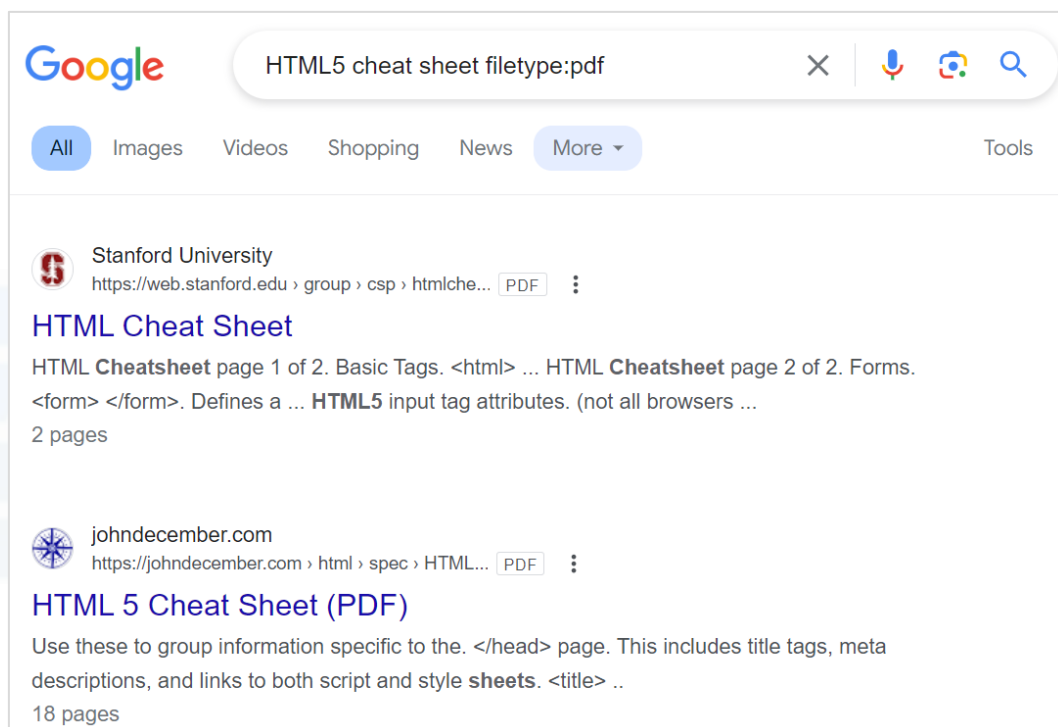
5. Wildcards (*) search: Using an asterisk (*) as a placeholder for any word or part of a word. Google allows the use of asterisks (*) as placeholders for missing words.

Example, Searching for "web * design" will return results for web development design, web graphic design, web responsive design, etc.



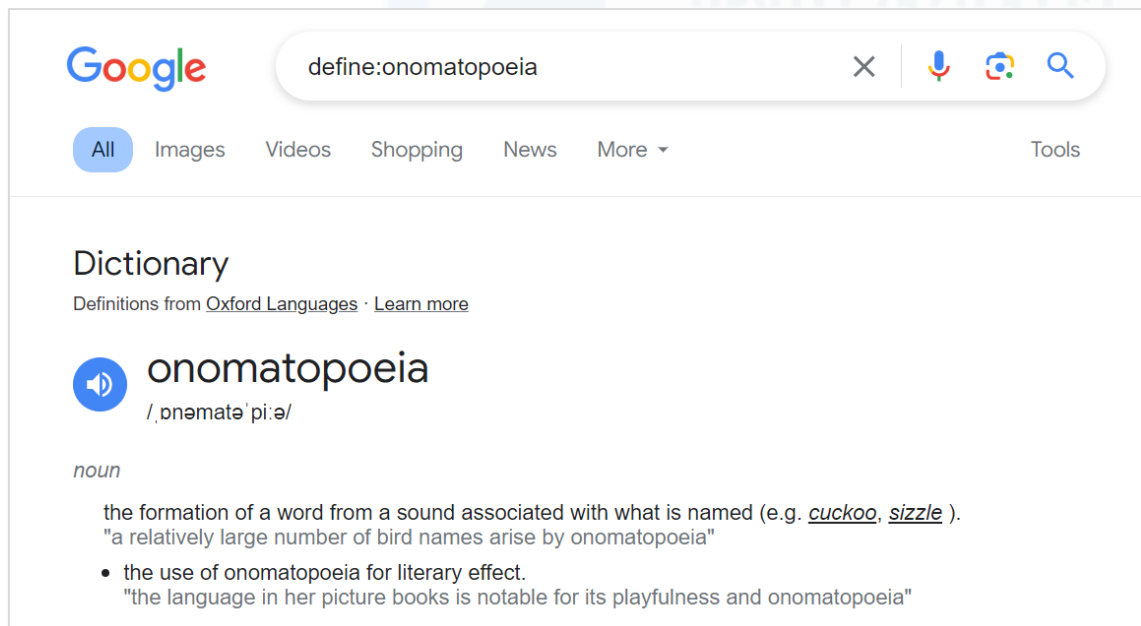
6. File Type Search: Using the filetype: operator to search for specific types of files.

Example: Searching for "HTML5 cheat sheet filetype:pdf" will return PDF files related to HTML5 cheat sheets.



7. Definitions: To get a definition of a word or term, simply type "define:" followed by the word.

Example: "*define:onomatopoeia*" will provide the definition of that word.



2.3.5. Refine a search using advanced search features

Google's Advanced Search Options provide a powerful way to refine and customize your searches, enabling you to find more specific and relevant information. These options allow you to narrow down your search results based on various criteria. When you have carried out a search using the Google search engine, it is possible to refine your results using advanced search features like: Date, Media types, Language, Usage rights. Here's a description of the key Advanced Search Options:

- **Exact Words:** Find results that include an exact phrase enclosed in quotation marks. This ensures that search results match the phrase precisely.
- **Exclude Words:** Exclude specific terms from your search to filter out irrelevant results.
- **Site or Domain:** Search for content within a specific website or domain by using the "Site or domain" field. This is useful when you want to find information from a particular source.
- **File Type:** Specify a file type, such as PDF, to search for documents in that format. This is helpful when looking for specific types of files.
- **Usage Rights:** Filter results based on usage rights, which helps you find content that can be reused, modified, or shared commercially. This is useful for content creators or educators.
- **Region:** Narrow your search results to a specific region or country to find information relevant to a particular location.

- **Last Update:** Choose a time frame (e.g., past day, past week, past month) to find content that has been updated recently.
- **SafeSearch:** Activate SafeSearch to filter out explicit or adult content from search results, making your search experience more family-friendly.
- **Language:** Specify the language in which you want your search results to appear

These features can help pinpoint a closer match to what you are searching for. For example:

- You may only want to find information from the last month, so you may refine your search by date.
- On the other hand, you may only want to find videos or images that have a creative commons license. In this case, you may refine your search by media type and usage rights.
- Alternatively, you may want to find results only in a specific language. In this case, you may refine your search by language. By default, results are returned in the default language set for Google Chrome.



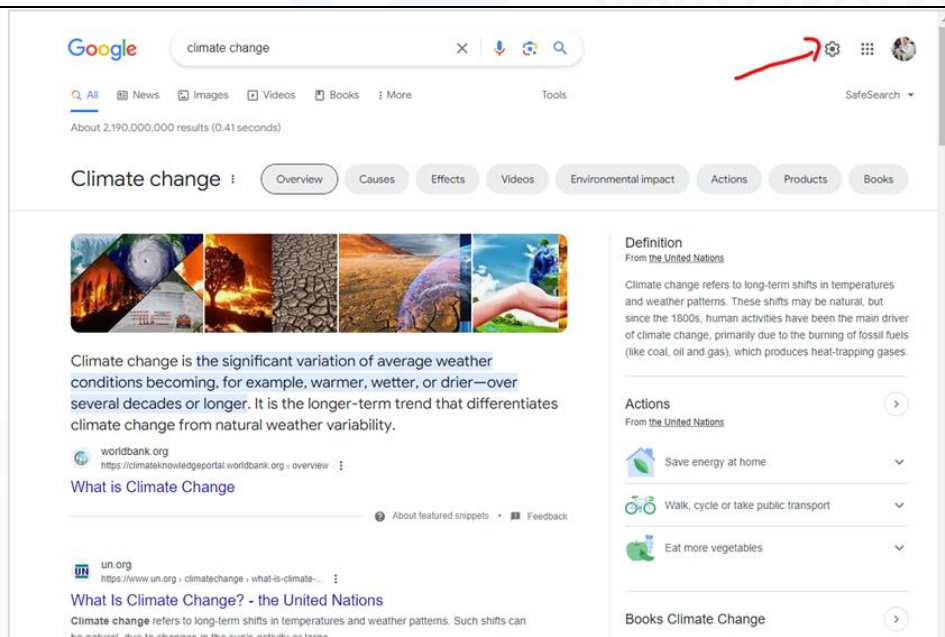
Activity 1: Exploring Advanced Search Options

Activity Title: " Exploring Google Advanced Search Options "

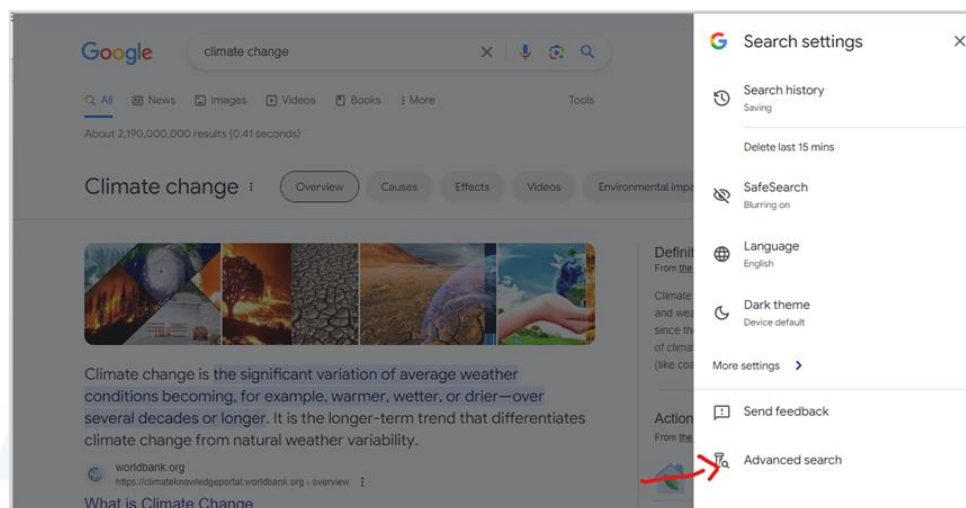
Objective: To familiarize participants with Google's Advanced Search options and encourage them to use these features to refine and customize their online searches.

Instructions:

- 1 Open web browser and go to Google (www.google.com).
- 2 Start with a basic keyword search. Choose a topic you're interested in, such as "climate change."
- 3 Click on "Settings" that is to the right side of the search bar.



4 Click on "Advanced Search." On the popup window.



Advanced search window will be displayed.

5 Participants should now explore and use the following advanced search options:

- a. **Exact Words:** enter a specific phrase enclosed in quotation marks, such as "global warming effects on wildlife."
- b. **Exclude Words:** exclude a term from their search, such as "renewable energy - solar."
- c. **Site or Domain:** search for information within a specific website or domain using the "Site or domain" field. For example, "site:wikipedia.org greenhouse effect."
- d. **File Type:** Encourage participants to search for a specific file type, like "PDF" or "PPT." For example, "filetype:pdf climate change report."
- e. **Usage Rights:** Show how to filter results based on usage rights, which can be helpful when looking for content that can be reused or modified.
- f. **Region:** Explore the option to specify results based on a particular region or country.
- g. **Last Update:** Use the "Last update" option to find information updated within a specific time frame, such as the past year or month.

2.3.6. Reverse Image Search

Google Reverse Image Search is a feature provided by Google that allows users to search for information, related images, and sources using an image as the search query instead of text. This tool is valuable for discovering more about a particular image, identifying its source, finding visually similar images, and exploring web pages where the image appears. Google's Reverse Image Search uses advanced algorithms to analyze the content of the uploaded image and retrieve relevant information.

Key Use Cases for Google Reverse Image Search:

- **Verifying Image Authenticity:** Check if an image has been edited or manipulated by comparing it with the original or other versions online.
- **Identifying Sources and Attribution:** Find the original source of an image to provide proper attribution or credit, especially for creative works.
- **Researching Products or Objects:** Use reverse image search to identify objects, products, landmarks, or artworks within an image.
- **Detecting Fake Profiles or Scams:** Verify the authenticity of profile pictures on social media or dating platforms to identify potential scams or fake accounts.
- **Locating Higher-Resolution Versions:** Find higher-resolution versions of images for various purposes, such as printing or design projects.

Google Reverse Image Search is a versatile tool that empowers users to delve deeper into the content and context of images found online. It is particularly useful for fact-checking, image verification, and obtaining more information about visual content.



Activity 2: To carry out a search using an image:

1. In the search box in the Google Images search engine, select the camera icon.



2. Enter an image URL in the search field, or drag an image into the search field. or Alternatively, click the Upload an image tab, click Choose file and browse to an image on your computer or device, select the desired file and click Open.



Search any image with Google Lens ×

 Drag an image here or [upload a file](#)

OR

3. Click the Search button or press Enter and visualize the different results.



Tips: Useful links: For further understanding of effective searching on Google click the video links below

GOOGLE: Top 12 Advanced Search Techniques

CLICK HERE 

How to use Google Search Properly

CLICK HERE 

2.4. Critically evaluating online information

In the digital age, it's essential to critically evaluate online information to ensure its accuracy, reliability, and credibility. When you start searching for suitable ICT resources, you will want to select resources that improve your lessons, your students learning experiences and learning outcomes. Moreover, you will want to select accurate and reliable content.

However, selecting appropriate resources can sometimes seem overwhelming. There are so many options to choose from and so many decisions to make about their suitability. And knowing when content is accurate and from a reliable source, especially when searching online, isn't always straightforward.

There are many sites, blogs and social media posts that aim to share inaccurate information to mislead people, either to further a political or religious agenda or for financial gain. There are hoax sites and “Fake news” sites and posts that are written as though they are factual and true but they are actually fabricated. There are also sites and posts that use misinformation and inaccuracies to promote radical ideologies or to support a particular point of view. It is important

for teachers and students to always critically evaluate online content to make sure that it is from a reliable source and can be trusted. In order to select suitable, effective and trustworthy ICT resources, you should always critically evaluate resources using A well-defined set of evaluation criteria. Here are some Steps to Critically Evaluate Online Information (www.uow.edu.au):

- **Check the Source's Credibility and Authority:** Look for information about the author, organization, or institution behind the content. Consider the author's qualifications and expertise in the subject matter. Verify the source's reputation and trustworthiness.
- **Assess Accuracy and Reliability:** Examine the information for accuracy. Is it supported by evidence or citations? Look for factual errors, inconsistencies, or exaggerations. Cross-reference the information with reputable sources to verify its accuracy.
- **Evaluate Currency:** Determine how up-to-date the information is. Information can become outdated quickly, especially in rapidly evolving fields. Look for publication or update dates, and consider whether recent developments are covered.
- **Analyze Bias and Objectivity:** Be aware of potential bias in the content. Consider the source's perspective and any potential conflicts of interest. Evaluate whether the information is presented objectively or with a particular agenda.
- **Check for References and Citations:** Reliable sources often cite their references. Examine whether the content includes citations to credible and relevant sources. Lack of proper citations can be a red flag.
- **Consider Relevance:** Assess whether the information is directly related to your research question or topic. Irrelevant information can distract from your purpose.
- **Use Fact-Checking Tools:** Utilize fact-checking websites and tools such as Snopes, FactCheck.org, and PolitiFact to verify claims and debunk misinformation.
- **Consult Multiple Sources:** Cross-reference information from multiple reputable sources to ensure accuracy and consistency.



Tips: Useful links: For further understanding of evaluating online information click the video links below

Evaluating Online Information

CLICK HERE 

How to evaluate online information critically?

CLICK HERE 

2.5. Using online resources responsibly

There are a vast number of ICT resources online that you can use. However, there are rules and responsibilities when using online resources. These rules apply to anyone using online resources including trainers so ensure that they know their responsibilities as well.

A. Plagiarism

Plagiarism is the act of presenting someone else's work as your own. For TVET trainers, it's crucial to understand and avoid plagiarism when developing teaching materials. This includes properly citing sources, paraphrasing information accurately, and giving credit where it's due. Most teachers look out for plagiarism in their students work but may not be thinking about it when they are searching for online resources to use in class. You should always acknowledge your sources appropriately with your selected citation styles. Citation styles are standardized formats for acknowledging sources. Common styles include APA and IEEE.

How TVET trainers Can Avoid Plagiarism:

To support responsible online behavior, consider using the following tools and resources:

- **Proper Citation:** Always give credit to the original authors when using their work. Use proper citation styles (e.g., APA, MLA, IEE) to attribute sources correctly. You can use tools like **Zotero, Mendeley or EndNote** for managing references and creating bibliographies.
- **Paraphrasing and Quotation:** When incorporating external information, paraphrase the content in your own words and use quotations for direct statements, ensuring that both are properly cited. You can use Paraphrasing Tool like **QuillBot and Spinbot** that helps rephrase sentences and paragraphs while maintaining the original meaning.
- **Plagiarism Detection Tools:** Utilize plagiarism detection software like Turnitin or Grammarly to check for unintentional plagiarism in your work. Plagiarism detection tools like **Turnitin** and **Copyscape** can help identify potential issues in your work.

Citation Examples

1. APA (American Psychological Association): In-Text Citation Examples:

- **Quoting:** "This is a direct quote" (Smith, 2020, p. 45).
- **Paraphrasing:** Smith (2020) stated that paraphrasing is a crucial skill.

Bibliography Example:

- **Book:**
 - Smith, J. A. (2020). *Understanding Citation Styles*. Academic Press.
- **Journal Article:**

- Brown, L. M. (2019). The importance of paraphrasing in academic writing. *Journal of Writing Research*, 10(2), 123-134.

2. IEEE (Institute of Electrical and Electronics Engineers): In-Text Citation Examples:

- **Quoting:** "This is a direct quote" [1].
- **Paraphrasing:** Smith [1] explains that paraphrasing is a crucial skill.

Bibliography Example:

- **Book:**
 - [1] J. A. Smith, *Understanding Citation Styles*. New York: Academic Press, 2020.
- **Journal Article:**
 - [2] L. M. Brown, "The importance of paraphrasing in academic writing," *Journal of Writing Research*, vol. 10, no. 2, pp. 123-134, 2019.



Tips: Useful links: For further understanding of reference and end notes, click the video links below

How To Use Mendeley Reference Manager

CLICK HERE 

How To Use EndNote

CLICK HERE 

B. Copyright

Another important rule is to avoid infringement of copyright. Copyright can be described as a set of rights granted to the creator of an original work, which allows them to copy, distribute and adapt their work and prevents anyone else from doing so. In most cases copyright is effective from the creation of the work for a set period of time, after which the work is said to enter the public domain. TVET teachers must respect copyright laws when using materials in their teaching. This involves understanding fair use guidelines, obtaining necessary permissions, and providing proper attribution for copyrighted works.

How TVET Trainers Can Respect Copyright:

- **Use Licensed Materials:** Ensure that any materials used in teaching are properly licensed or fall under fair use or public domain.
- **Creative Commons:** Utilize resources that are licensed under Creative Commons, which allows for legal sharing and adaptation with proper attribution.

- **Seek Permission:** When in doubt, seek permission from the copyright holder before using their work.

C. Intellectual Property Rights

Another concept to be aware of when sourcing online resources is intellectual property rights (IPR), which are the rights someone has over something they have created for a period of time. It can cover content, inventions, artistic works, symbols, names, images, and designs used in commerce among other things. Some types of IPR include patents, copyright and trademarks. You should be careful not to infringe someone's IPR. TVET trainers should be aware of intellectual property rights to avoid infringement and to educate students about the importance of protecting original ideas and creations. Understanding intellectual property rights can help trainers create a learning environment that fosters innovation and creativity.

D. Software Licenses

You should also be familiar with different types of software licenses and how you can use a resource depending on the type of license. Software products are usually licensed and it is important to use them in accordance with their license terms and conditions. Depending on the license and relevant laws, using software products without permission may result in civil and criminal penalties.

Types of Software Licenses:

- **Proprietary Licenses:** Software that requires purchasing a license for use, with restrictions on modification and redistribution (e.g., Microsoft Office).
- **Open Source Licenses:** Software that is freely available to use, modify, and distribute, often with conditions to maintain the same freedoms in derivative works (e.g., Linux, Apache).

How TVET Trainers Can Respect Software Licenses:

- **Adhere to License Terms:** Ensure that all software used in teaching is properly licensed and used in accordance with the terms of the license.
- **Use Open Source Software:** Where possible, use open-source software to avoid licensing issues and promote learning about software development.

Unit 3: Managing Online Resources using Web Browsers

Learning Outcomes: By the end of Unit Three, Trainers will be able to:



- Demonstrate efficient management of online resources using web browsers.
- Synchronize browser settings across multiple devices to maintain productivity.
- Enhance security by using browser features to manage passwords, cookies, and privacy settings.

3.1.Introduction

Dear Trainers! Can you effectively navigate and utilize the features of these browsers? What skills we need to professionally navigate in browser window? In our next topic, we will learn about navigating and utilizing web browser features to enhance our browsing experience.

Effective management of information accessed through web browsers is crucial for TVET trainers to optimize their research, planning, and content creation processes. By mastering the use of web browsers for managing tabs, bookmarks, history, and files, trainers can streamline their workflow, save time, stay organized and enhance their ability to access and organize educational resources. Here's how educators can leverage web browsers for online information management:

- **Time Efficiency:** Proper information management helps users find what they need quickly, reducing the time spent searching for websites, bookmarks, or saved pages. Time is saved by having easy access to frequently visited websites through bookmarks or a well-organized homepage.
- **Productivity:** Organized bookmarks and saved web pages can increase productivity by allowing users to focus on tasks instead of searching for information repeatedly. Customized homepages can provide a quick overview of important information, such as news, emails, or calendar events, to kickstart the workday.
- **Content Retention:** Effective information management ensures that valuable content is retained for future reference. Saved web pages and organized bookmarks help users remember and revisit articles, resources, or tools they found useful.
- **Cross-Device Accessibility:** Synchronization of browser settings and bookmarks allows users to access their information on various devices, including computers, smartphones, and tablets. This is essential for maintaining continuity and staying productive across different platforms.

- **Enhanced Security:** Effective information management includes using browser features like password managers to secure sensitive data. Managing cookies and privacy settings can also help protect personal information from potential threats.

3.2. Tabs and Windows Management

Tabs and windows are fundamental components of web browsing. This refers to the ability to open multiple tabs and manage them within a browser window, allowing users to navigate between different web pages efficiently without cluttering their screen with multiple windows. different browsers support these features but for this unit will explore how to manage tabs in google chrome.

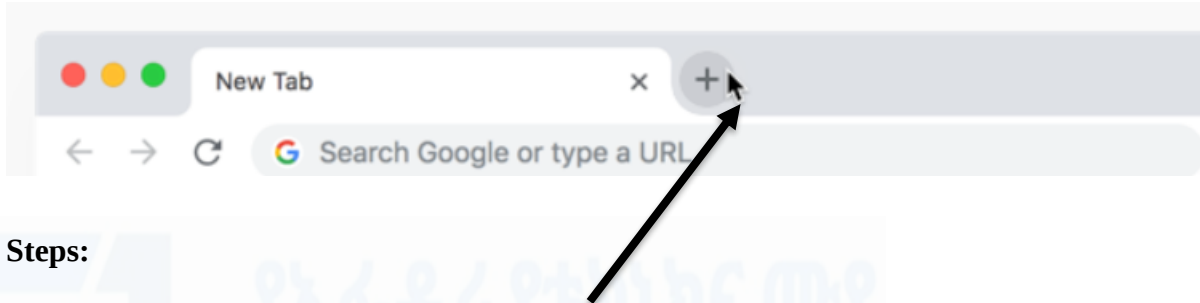
How to Manage Tabs in Google Chrome ?

Managing tabs effectively in Google Chrome is essential for a streamlined web browsing experience. Here are the different tab management skills you should master, along with the steps for each skill:



Steps: Tab Management in Google Chrome

1. Opening a New Tab: Opening a new tab allows you to visit another webpage without leaving your current one.



Steps:

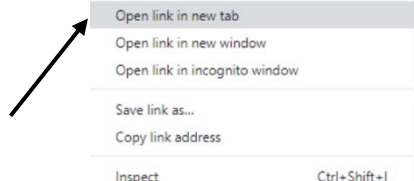
1. Click the "+" icon next to the last tab.

Or Press `Ctrl + T` (Windows/Linux) or `Cmd + T` (Mac).

2. Opening a Link in a New Tab or in new window: Opening a link in a new tab lets you explore linked content without navigating away from your current page. And Opening a tab in a new window helps you manage different tasks or projects separately.

Steps:

1. Right-click on the link you want to open.



2. Select "Open link in new tab." Or "Open link in new window."

Or Press `Ctrl` (Windows/Linux) or `Cmd` (Mac) and click the link.

3. Closing a Tab: Closing tabs you no longer need keeps your workspace tidy.

Steps:

1. Click the "X" icon on the tab you want to close.

or

Press `Ctrl` + `W` (Windows/Linux) or `Cmd` + `W`

(Mac).

or

Right-click on the tab and select "Close."



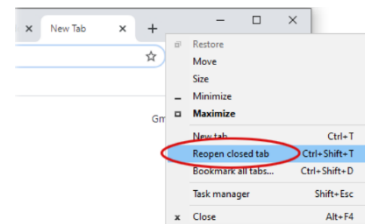
4. Reopening a Closed Tab: Reopening a closed tab helps you quickly recover tabs you might have closed by mistake.

Steps:

1. Right-click on any open tab and select "Reopen closed tab."

Or

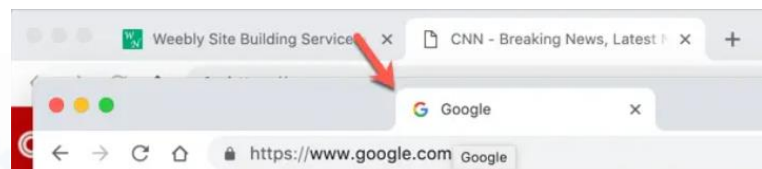
2. Press `Ctrl` + `Shift` + `T` (Windows/Linux) or `Cmd` + `Shift` + `T` (Mac).



5. Moving a Tab: Rearranging your tabs can help you keep related content together.

Steps:

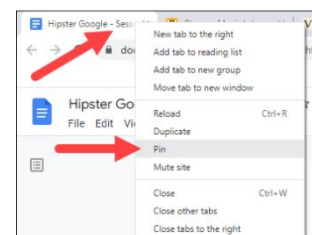
1. Click and hold the tab you want to move.
2. Drag it to the desired position in the tab bar.
3. Release the mouse button to drop the tab in place.



6. Pinning a Tab: Pinning tabs minimizes them and keeps frequently used tabs accessible.

Steps:

1. Right-click on the tab you want to pin.
2. Select "Pin tab."



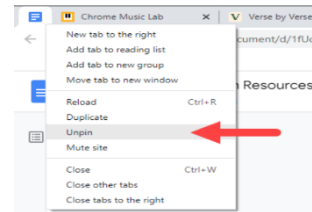
3. The tab will shrink and move to the leftmost part of the tab bar.

7. Unpinning a Tab:

Unpinning a tab returns it to its normal size and position in the tab bar.

Steps:

1. Right-click on the pinned tab.
2. Select "Unpin tab."
3. The tab will return to its normal size and position.

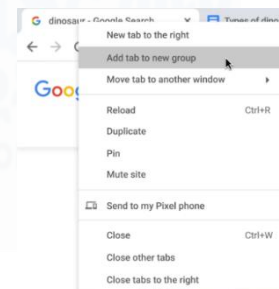


8. Grouping Tabs :

Grouping tabs helps you organize related tabs together, making it easier to manage multiple tasks.

Steps:

1. Right-click on a tab.
2. Select "Add tab to new group."
3. Name the group and choose a color if desired.
4. Drag other tabs into the group to add them.

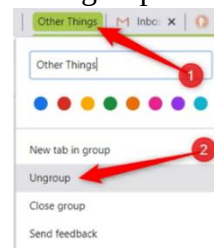


9. Ungrouping Tabs:

Ungrouping tabs removes them from a group and places them back in the regular tab bar.

Steps:

1. Right-click on the tab group name.
2. Select "Ungroup."

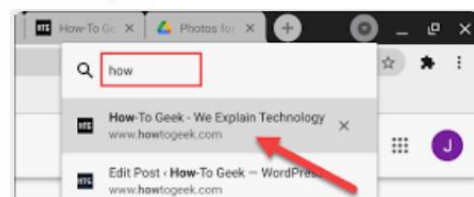


10. Using the Tab Search Feature:

The tab search feature helps you quickly find specific tabs when you have many open.

Steps:

1. Click the down arrow icon at the top right of the tab bar.
2. Type keywords to search for a specific tab.
3. Click on the desired tab from the search results.





Tips: Useful links: For further understanding of managing tabs click the video link below

How To manage tabs

CLICK HERE 

3.3.Managing Bookmarks

Bookmarks and favorites are tools for saving and organizing frequently visited websites. Learning to create, edit, and organize bookmarks enables users to quickly access their preferred online destinations, enhancing overall productivity. Bookmarks allow you to easily revisit webpages, without the need to search for or memorize URLs. This is a way of saving webpages, so next time you want to visit the webpage you just have to choose it from a menu. You can use folders so that you can group related bookmarks, or bookmarks with a common theme. Organizing bookmarks will make it easier for you to quickly find a webpage you want to revisit.

How to Managing bookmarks in Google Chrome?

PLEASE
NOTE

Note: that in some web browsers, such as Microsoft Edge bookmark is referred as “Favorites”.

Create bookmarks so Chrome can remember your favorite and frequently visited websites. When you sign in to Chrome with your Google Account, you can use bookmarks and other info on all your devices. Here are the steps to manage bookmarks in google chrome These skills will help you efficiently manage your bookmarks in Google Chrome, enhancing your browsing experience and organization.



Steps: Bookmark Management in Google Chrome

1. **Add a bookmark:** Adding a bookmark saves the current webpage for easy access later.

Steps:

1. On your computer, open Chrome.
2. Go to the site you want to visit again in the future.

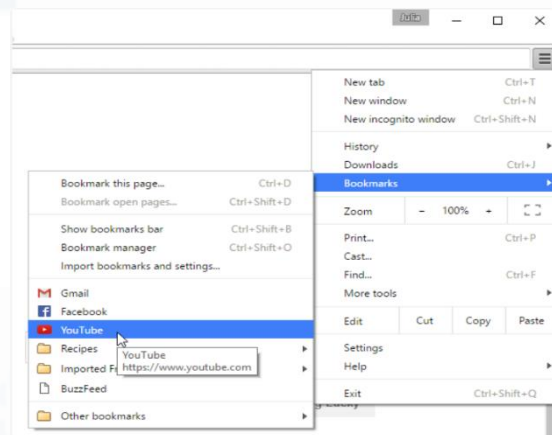


3. To the right of the address bar, select **Bookmark** ☆.

2. Accessing Bookmarks: Accessing bookmarks allows you to quickly visit your saved websites.

Steps:

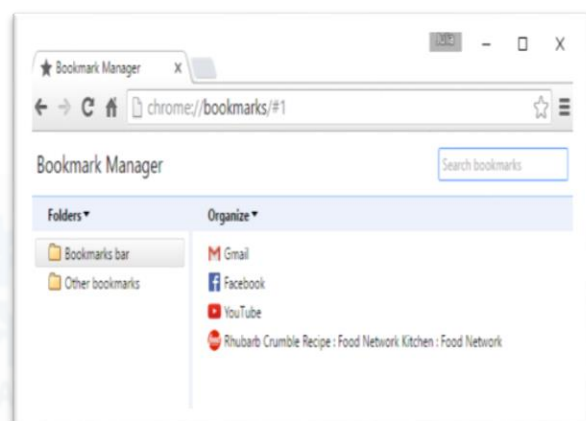
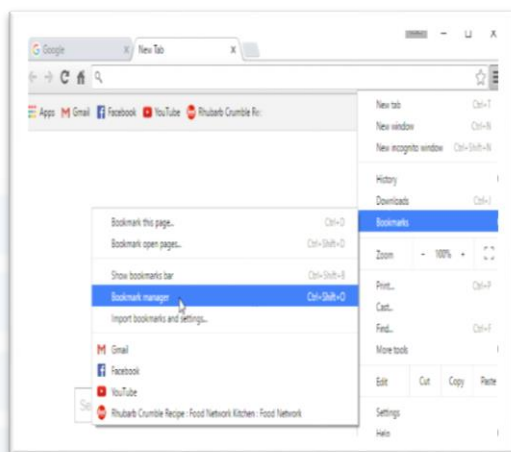
1. Click the three dots menu in the upper-right corner of Chrome.
2. Hover over "**Bookmarks.**"
3. Select the bookmark you want to visit from the list.



3. Organizing Bookmarks into Folders: Organizing bookmarks into folders helps you keep related bookmarks together.

Steps:

1. Click the three dots menu in the upper-right corner of Chrome.
2. Hover over "**Bookmarks**" and select "**Bookmark manager.**"
3. Click the three dots menu in the Bookmark manager and select "**Add new folder.**"
4. Name the folder and drag and drop bookmarks into it.



4. Edit a bookmark: Editing bookmarks allows you to change the name, URL, or folder location of a bookmark.

Steps

1. On your computer, open Chrome.
2. At the top right, select More ⋮ > **Bookmarks and lists** > **Bookmark Manager.**
3. Right click on the bookmark you want > click **Edit.**

5. Delete a bookmark

Steps

1. On your computer, open Chrome.
 2. At the top right, select More  > **Bookmarks and lists** > **Bookmark Manager**.
 3. Right click on the bookmark you want > Click **Delete**.
6. **Importing Bookmarks:** Importing bookmarks allows you to bring bookmarks from another browser into Chrome.
- Steps:**
1. On your computer, open Chrome.
 2. At the top right, select More  > **Bookmarks and lists** > **Bookmark Manager**.
 3. On the right, select More  > **Import bookmarks**
7. **Exporting Bookmarks:** Exporting bookmarks allows you to save your Chrome bookmarks for use in another browser.
- Steps:**
1. On your computer, open Chrome.
 2. At the top right, select More  > **Bookmarks and lists** > **Bookmark Manager**.
 3. On the right, select More  > **Export bookmarks**



Tips: Useful links: For further understanding of Bookmarks click the video links below

Understanding Bookmarks

CLICK HERE 

3.4.Managing Browser History

Browser history is a record of all the web pages a user has visited over a certain period of time, maintained by the web browser. When you use any web browser, various types of data can be stored in your browsing history. This stored data helps improve your browsing experience by making it easier to revisit previously visited sites, autocomplete forms, and resume activities where you left off. Here's a detailed list of the different types of data that can be stored in your browser history:

- **Browsing History:**

- **URLs of Visited Pages:** The web addresses (URLs) of the pages you have visited.
- **Page Titles:** The titles of the web pages you have visited.
- **Visit Timestamps:** The dates and times when you visited each page.

- **Download History:** A record of files you have downloaded, including filenames and download dates (note that the actual files are stored on your device separately).
- **Cookies and Site Data:**
 - **Cookies:** Small files stored by websites to remember your login status, preferences, and other information.
 - **Session Data:** Information about your current browsing session, such as items in a shopping cart.
- **Cached Images and Files:** Copies of web pages, images, and other media content saved to speed up loading times on future visits.
- **Passwords (Saved Login Credentials):** Usernames and passwords for websites you choose to save for easy access.
- **Autofill Form Data (Form Entries):** Information you have entered into forms, such as names, addresses, phone numbers, and email addresses.
- **Search History (Search Queries):** Records of the search terms you have entered into search engines.
- **Bookmarks:** URLs of pages you have bookmarked for quick access.
- **Site Settings (Permissions):** Settings you have configured for specific websites, such as whether a site can use your camera, microphone, or location.
- **Hosted App Data:** Data from Chrome apps and extensions, including settings and stored information.

How to View and Manage Stored Data in Google Chrome?

Google chrome stores Your History lists the pages you've visited in the last 90 days. The following steps will help you to Find your history, Find a page from your history, Manage Saved Passwords, Managing Autofill Form Data and Delete your history in google chrome.



Tips: If you're signed in to Chrome and sync your history, then your History also shows pages you've visited on your synced devices.

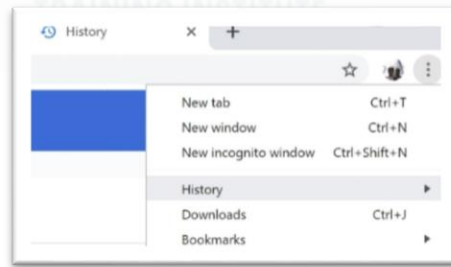


Steps: Manage Stored Data in Google Chrome

1. **Access Browser History:** Accessing your browser history lets you review and revisit the websites you've previously visited.

Steps:

1. On your computer, open Chrome.
 2. At the top right, click More .
 3. Click **History** > **History**.
2. **Find a Page from Your History :** Finding a page from your history allows you to quickly locate and revisit specific webpages.

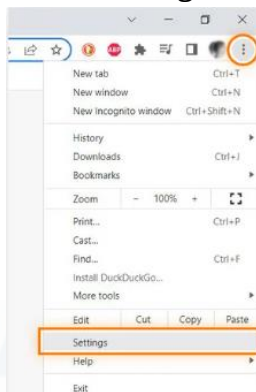


Steps:

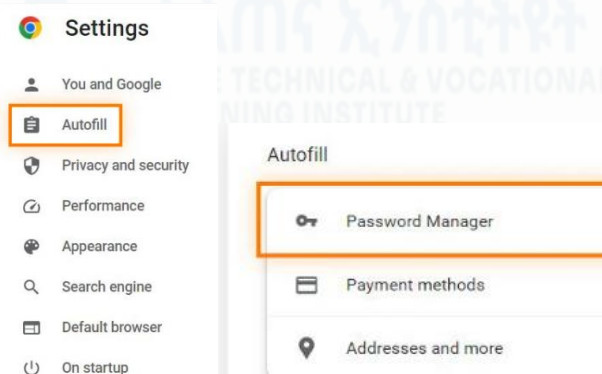
1. On your computer, open Chrome.
 2. In the address bar, enter @history.
 3. Press **tab** or **space**. You can also click Search History  in the suggestions.
 4. Enter keywords for the page you previously visited.
 5. Select the page from the list.
3. **Manage Saved Passwords:** Managing saved passwords helps you keep track of and secure your login credentials for various websites.

Steps:

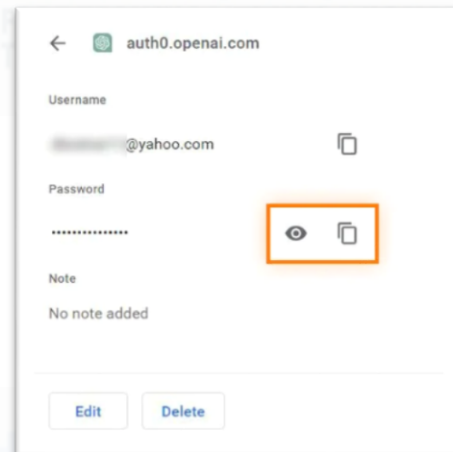
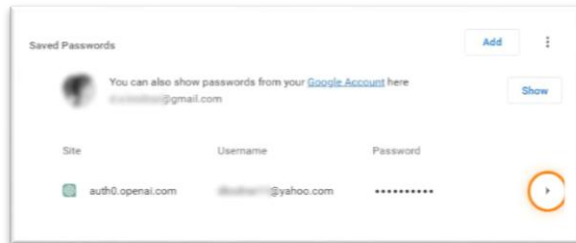
1. Click the three dots menu in the upper-right corner of Chrome.
2. Select "**Settings**" from the dropdown menu.



3. Under "**Autofill**," click "**Passwords**."



4. Here you can view, add, edit, or delete saved passwords.



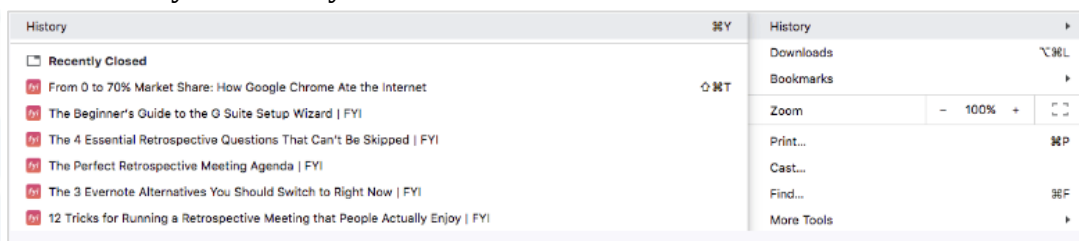
- 4. Managing Autofill Form Data in Google Chrome:** Autofill form data in Google Chrome helps save time by automatically filling in frequently used information such as addresses, phone numbers, and email addresses. Here's a step-by-step guide on how to manage your autofill form data:

Steps:

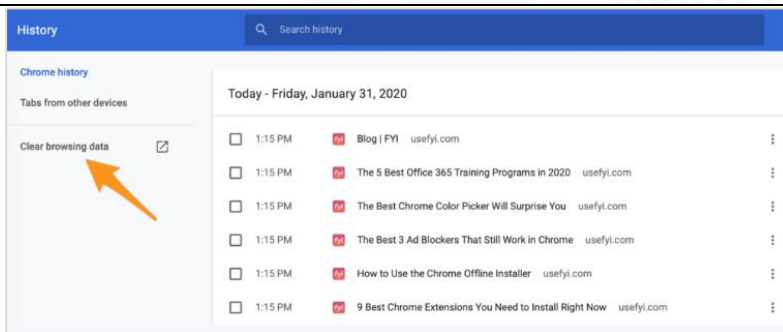
1. Click the three dots menu in the upper-right corner of Chrome.
 2. Select **"Settings"** from the dropdown menu.
 3. Under **"Autofill,"** click **"Addresses and more."**
 4. Here you can add, edit, or delete saved addresses and payment methods.
- 5. Delete Your History:** Deleting your history helps you maintain privacy by removing records of the websites you've visited. If you don't want a record of pages you visited in Chrome, you can delete all or some of your browsing history. When you delete your browsing history in Google Chrome, you have the option to clear various types of data.

Steps:

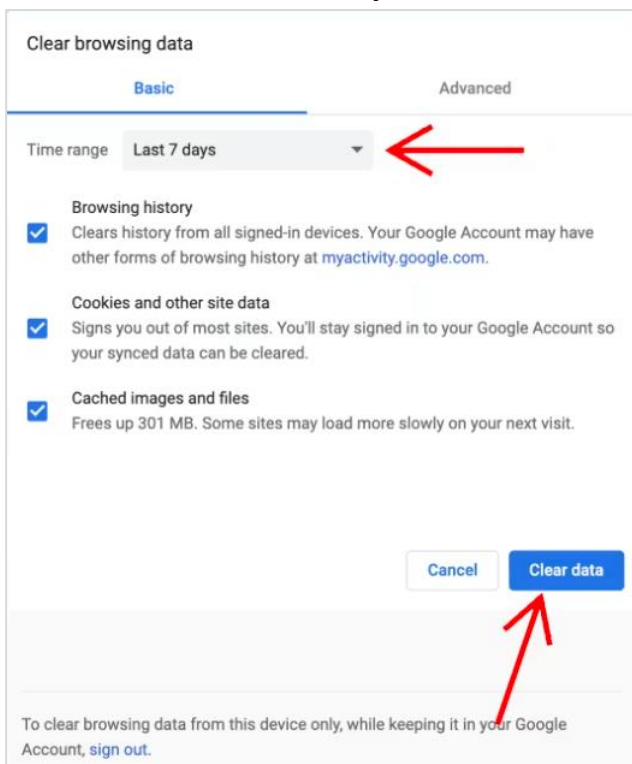
1. On your computer, open Chrome.
2. At the top right, click More .
3. Click **History** > **History**.



4. On the left, click **Clear browsing data**.



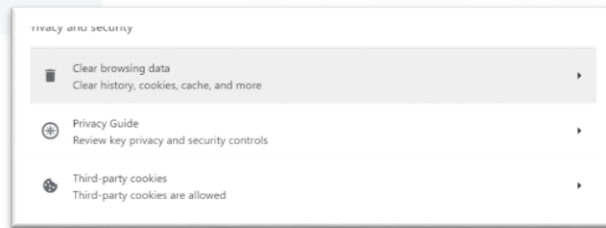
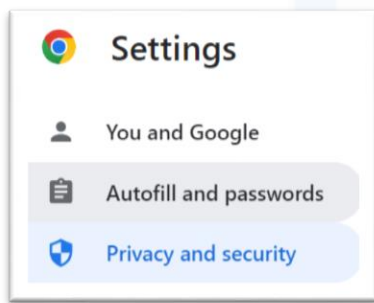
5. Select how much history you want to delete.
 - To clear everything, select **All time**.
6. Check the boxes for the info you want Chrome to clear, including **Browsing history**.



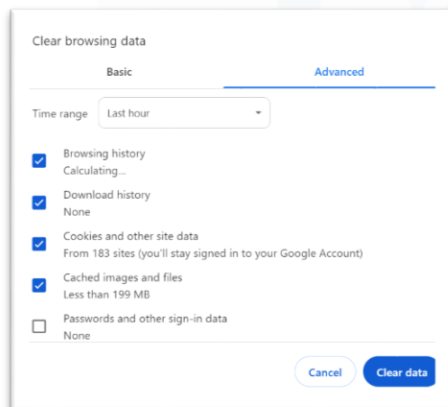
7. Click **Clear data**.
6. **Delete Your Activity:** Deleting your activity removes various types of browsing data to enhance privacy. When you use Google sites, apps, and services, some of your activity is saved in your Google Account. You can find and delete this activity in My Activity, and you can stop saving most activity at any time.

Steps:

1. Click the **three dots**  menu in the upper-right corner of Chrome.
2. Select "**Settings**" from the dropdown menu.
3. Scroll down and click "**Privacy and security**."



4. Click "**Clear browsing data.**"
5. Choose the time range and types of data you want to delete, including browsing history, cookies, cached images, and more.



6. Click "**Clear data.**"



Tips: Useful links: For further understanding of browsing history click the video links below

Key points about browsing history

[CLICK HERE](#)

3.5. Downloading and Managing Files

This feature allows users to download files from the internet and save them to their computer or another specified location. It's essential for acquiring documents, images, videos, and other files from the web for personal or professional use. Different browsers support file downloading however in this section we will demonstrate the file download and related operations using google chrome.

How to Download and Manage Files in Google Chrome?



Steps: Manage Stored Data in Google Chrome

- 1. Download a file:** To save a file or image on your computer or device, download it. The file will be saved in your default download location.

Steps:

1. On your computer, open Chrome.
2. Go to the site where you want to download the file.
3. Save the file:
 - **Most files:** Click the download link. You can also right-click on the file and choose **Save as**.
 - **Images:** Right-click on the image and choose **Save Image As**.
 - the video's owner or hosting site has prevented downloads.
 - **PDFs:** Right-click on the file and choose **Save Link As**.
 - **Web pages:** At the top right, click More  **More Tools**  **Save Page As**.
4. If asked, choose where you want to save the file, then click **Save**.
 - **Executable files (.exe, .dll, .bat):** If you trust the file, click **Save**. If you're not sure about the contents of the download, click **Discard**.
5. When you begin a download, a Download in progress icon  appears on the top right next to the address bar. Once the download completes, the Download tray opens.
6. To open your file, click Open new .
 - You can also click the file to open it.

Tips:

- To show extra actions like Show in Folder , point to the filename.
- If you download a file, or if you've recently downloaded a file, the Download tray will appear. Recently downloaded files will appear to the right of the address bar.
- To view all downloads if the Download tray isn't present to the right of the address bar, click More  **Downloads**.
- You can drag a downloaded file to another folder, program, or website. To move a downloaded file, in the Download tray , click the file and drag it to the target location.

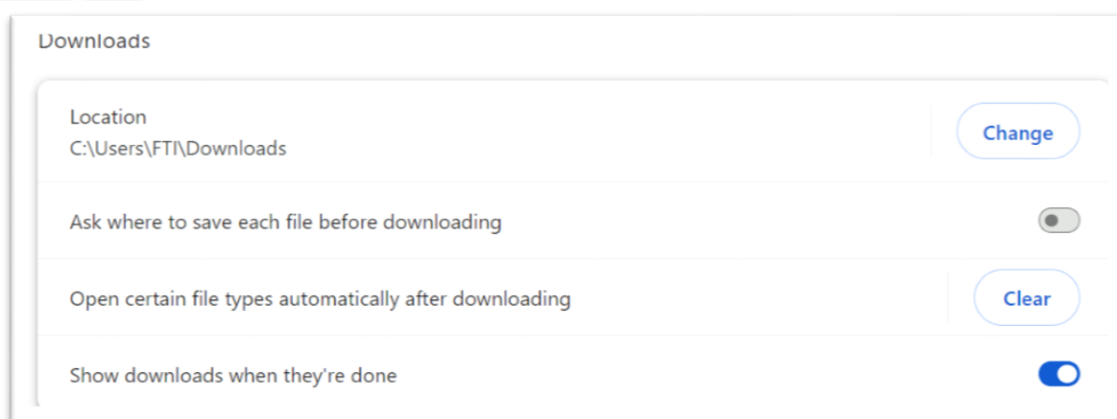
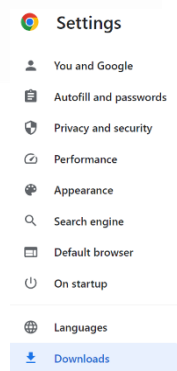
2. Find a list of files you've downloaded

Steps:

1. On your computer, open Chrome.
2. At the top right, click More  > **Downloads**.
 - To open a file, click its name. It will open in your computer's default application for the file type.
 - To remove a download from your history, to the right of the file, click Remove . The file will be removed from your Downloads page on Chrome, not from your computer.

3. **Change download locations:** You can choose a location on your computer where downloads should be saved by default or pick a specific destination for each download.

1. On your computer, open Chrome.
2. At the top right, click More  > **Settings** > **Downloads**.
3. Adjust your download settings:
 - To change the default download location, click **Change** and select where to save your files.
 - If you'd rather choose a specific location for each download, turn on **Ask where to save each file before downloading**.



3.6.Syncing Browsing Data across Devices

Synchronization, often referred to as "sync" in web browsers, is a feature that allows you to link your web browser settings, bookmarks, history, saved passwords, and other data across multiple

devices, such as your computer, smartphone, or tablet. This ensures a consistent and seamless browsing experience across all your devices, as changes made on one device are automatically reflected on others. Synchronization is particularly useful for those who use multiple devices to access the internet and want to have the same browsing experience everywhere. Managing sync settings allows you to control what data is synced and ensure your information is secure and up-to-date. While sync has many advantages it has also some disadvantages. The following section will mention some advantages and disadvantages.

Advantages of Syncing Across Devices

- **Consistent Experience:** Access the same bookmarks, history, passwords, and settings on all your devices. Start browsing on one device and continue on another without losing your place.
- **Convenience:** Automatically fill in passwords, payment methods, and addresses stored in your Google account. Keep extensions and themes consistent across devices.
- **Backup and Recovery:** Easily recover your data if you lose or replace a device.

Disadvantages of Sync:

- **Security Risks:** If your Google account is compromised, all synced data, including passwords and browsing history, can be accessed by unauthorized individuals. So don't sync on public devices.
- **Data Usage:** Syncing can consume data, which might be a concern for users with limited data plans or slow internet connections.
- **Device Dependency:** If sync settings are not managed properly, changes made on one device can affect your experience on all synced devices, which may not always be desirable.

How to configure Sync in Google Chrome?



Steps: Managing Extensions in Google Chrome

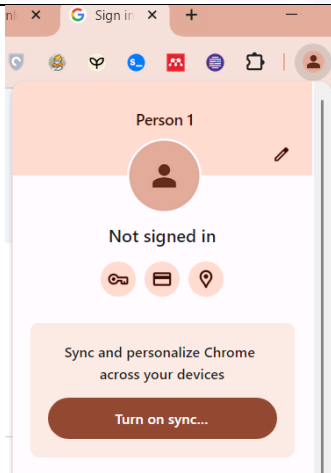
1. Sign in & turn on sync

To sign in to Chrome and turn on sync, you must have a **Google Account**.

Important: Only turn on Chrome sync with devices that you own. If you use a public computer, use guest mode instead.

Steps:

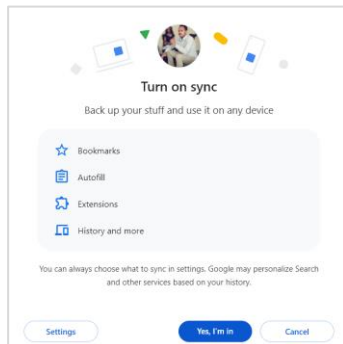
1. On your computer, open Chrome.
2. At the top right, click Profile .



3. Click **Turn on sync...**

- If you're not signed into your Google Account, you'll be prompted to sign in.

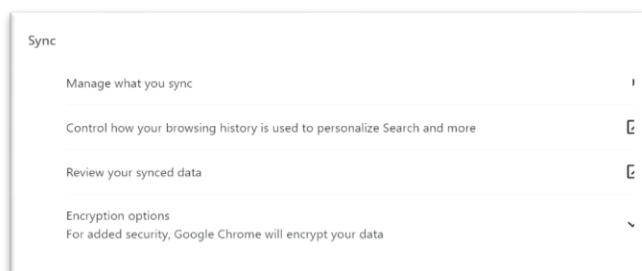
4. Click **Yes, I'm in.**

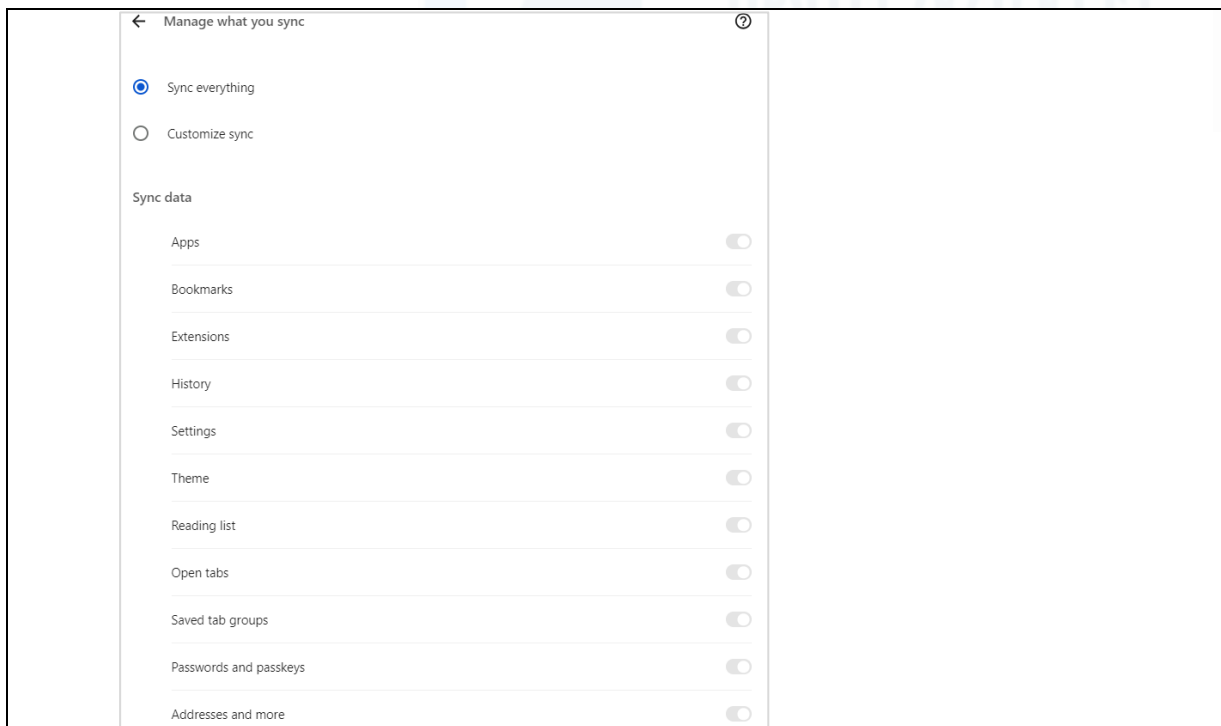


2. Customize Sync Settings (Optional):

Steps:

1. Click the three vertical dots in the upper-right corner to open the menu.
2. Select "Settings."
3. Under "You and Google," click "Sync and Google services."
4. Click "Manage sync" to choose which types of data you want to sync.





5. Toggle the switches next to each data type to enable or disable syncing.

3. Sign out & turn off sync

If you turn off sync, you can still find your bookmarks, history, passwords, and other settings on your computer. If you make any changes, they aren't saved to your Google Account and synced to your other devices.

When you turn off sync, you're also signed out of other Google services, like Gmail.

1. On your computer, open Chrome.
2. At the top right, click Profile  > **Sync is on**.
3. Click **Turn off**.



Tips: Useful links: For further understanding of syncing your browsers data across your devices click the video links below

Key points about syncing browser data

CLICK HERE 



Activity 3: Online Information Management

Activity Title: "Mastering Browser Information Management"

Objective: The objective of this activity is to teach participants how to effectively use web browsers to manage information. Participants will learn how to set a homepage, create bookmark folders, add bookmarks to folders, save webpages, and synchronize browser settings.

Instructions:

Setting a Home Page

Scenario: Imagine you're a professional who frequently uses a web-based project management tool like "https://trello.com" . You want to set it as your browser's homepage for quick access. **How will you do it ?**

1. Open your preferred web browser.
2. Navigate to the project management dashboard.
3. In Google Chrome: Click the three dots in the upper-right corner, then "Settings." Under "On startup," select "Open a specific page or set of pages." Click "Add a new page" and enter the URL.

Creating a New Bookmark Folder

Scenario: Imagine you're You are a student who wants to organize your research materials for different subjects. Like programming, analysis, Methodology

How will you do it?

1. Find a webpage related to one of your subjects.
2. Click the star icon (bookmark) in your browser's toolbar.
3. In the dialog box, click "More" (if available) and select "New folder."
4. Name the folder with the subject's name and save the bookmark inside it.

Adding a New Bookmark to a Bookmarks Folder

Scenario: You want to bookmark a page with useful programming resources within your "Programming" bookmark folder.

How will you do it ?

1. Find a programming-related webpage.
2. Click the star icon (bookmark) in your browser's toolbar.
3. In the dialog box, select the "Programming" folder you created earlier.

Saving Webpages

Scenario: Assume you are preparing a module about making different recipes in finding the information's You come across a webpage with a recipe you'd like to try out later when you go home and offline.

What will you do ?

1. Find the webpage with the recipe.
2. Click the three dots (menu) in your browser's toolbar.
3. Select "Save Page" or "Save as PDF" to save the content for offline use.

Synchronizing Browser Settings

Scenario: assume you are a remote worker who switch between multiple devices (e.g., computer, tablet, smartphone) and want your browser settings to be consistent.

What will you do?

1. Sign in to your browser account (e.g., Google account for Chrome, Firefox account for Firefox).
2. Sync your data and settings across devices. This includes bookmarks, history, passwords, and more.

Unit 4: Using Productivity Applications

Learning Outcomes: By the end of Unit Four, Trainers will be able to:



- Utilize both online and offline productivity tools to create, modify, and manage various digital resources effectively.
- Apply best practices in document formatting, data analysis, and presentation creation to enhance the quality of educational materials.

4.1.Introduction

Unit Four focuses on equipping TVET trainers with the knowledge and skills needed to effectively use productivity applications for creating and modifying various digital resources. The unit emphasizes both online and offline tools that can be used in diverse teaching environments, providing a comprehensive understanding of how to enhance content development, collaboration, and instructional delivery through digital means. Productivity applications are essential tools for TVET trainers to create and modify a variety of digital resources. These applications offer a range of features to support content development, from basic text editing to complex multimedia creation.

4.2. Online Productivity Tools

Online productivity tools, often cloud-based, provide accessible and collaborative platforms for creating and modifying digital resources. These tools are particularly useful for trainers working remotely or collaboratively with colleagues.

Popular Online Productivity Tools:

- **Google Workspace (formerly G Suite):** This suite includes tools like Google Docs, Sheets, Slides, and Forms, allowing for document creation, data analysis, presentations, and surveys.
- **Microsoft 365:** Similar to Google Workspace, Microsoft 365 offers Word, Excel, PowerPoint, and OneNote for various content creation needs.
- **Canva:** A user-friendly graphic design platform for creating social media graphics, presentations, and other visual content.
- **Adobe Creative Cloud:** A comprehensive suite of design and creativity tools, including Photoshop, Illustrator, and InDesign, for advanced graphic design and multimedia production.

Benefits of Online Productivity Tools:

- **Accessibility:** Access documents and collaborate with others from any device with internet access.

- **Real-time collaboration:** Multiple users can work on the same document simultaneously.
- **Automatic saving:** Changes are saved automatically, reducing the risk of data loss.
- **Integration:** Many online tools integrate with other applications and services.

4.3. Offline Productivity Tools

Offline productivity tools are installed on a local computer and do not require an internet connection. These tools are suitable for trainers who prefer to work offline or in environments with limited internet access.

Common Offline Productivity Tools:

- **Microsoft Office Suite:** Includes Word, Excel, PowerPoint, and Outlook for various content creation and management tasks.
- **OpenOffice/LibreOffice:** Free open-source alternatives to Microsoft Office with similar functionalities.
- **Adobe Creative Suite:** A comprehensive suite of design and creativity tools for offline use.
- **Video editing software:** Tools like Adobe Premiere Pro, Final Cut Pro, or DaVinci Resolve for creating video content.
- **Audio editing software:** Tools like Audacity or Adobe Audition for creating and editing audio content.

Benefits of Offline Productivity Tools:

- **Independence:** Work without relying on an internet connection.
- **Control:** Full control over software and data on the local computer.
- **Performance:** Often offer better performance compared to online counterparts for resource-intensive tasks.

By effectively utilizing both online and offline productivity tools, TVET trainers can create engaging and effective digital resources that cater to the diverse needs of their learners.

4.4. Best Practices for Using Productivity Applications

Effective utilization of productivity applications can significantly enhance the quality and efficiency of training material development. Here are some best practices:

1. Content Creation (Microsoft word)

- **Document Formatting:**
 - Use of styles for headings and paragraphs
 - Customizing fonts, sizes, and colors

- Applying themes and templates
- **Page Layout:**
 - Setting margins, orientation, and size
 - Using columns, page breaks, and section breaks
- **Tables and Charts:**
 - Inserting and formatting tables
 - Creating and embedding charts
- **References and Citations:**
 - Inserting footnotes and endnotes
 - Managing bibliographies and citation styles
 - Using cross-references and bookmarks
- **Graphics and Media:**
 - Inserting and formatting images, shapes, and SmartArt
 - Adding and customizing text boxes and word art
- **Accessibility:** Ensure created materials are accessible to all learners by following accessibility guidelines (e.g., using alternative text for images).
- **Collaboration:**
 - Track changes and comments for reviewing documents
 - Using co-authoring features and sharing documents online
- **Version Control:** Maintain multiple versions of training materials to track changes and revert if necessary.
- **Proofreading:** Thoroughly proofread all materials for errors in grammar, spelling, and content accuracy.
- **Digital Storage:** Store training materials in a centralized location (e.g., cloud storage or shared network drive) for easy access.

Content Creation and Analysis (Microsoft Excel):

1. **Data Entry and Management:**
 - Efficient data entry techniques and shortcuts
 - Sorting and filtering data
 - Using data validation to ensure accuracy
2. **Formulas and Functions:**
 - Basic arithmetic operations
 - Common functions like SUM, AVERAGE, COUNT, MIN, MAX

- Advanced functions like VLOOKUP, HLOOKUP, INDEX, MATCH
- Logical functions like IF, AND, OR

3. Data Analysis Tools:

- PivotTables and PivotCharts for summarizing data
- Conditional formatting for visual data analysis
- Data visualization using charts and graphs

4. Data Organization:

- Using tables to manage and analyze data
- Grouping and outlining data

Content Creation and Presentation:

1. Slide Design and Layout:

- Using themes and templates for professional slide design
- Customizing slide layouts with placeholders

2. Text and Graphics:

- Adding and formatting text boxes, images, shapes, and SmartArt
- Using icons and illustrations for visual enhancement

3. Multimedia:

- Inserting and customizing audio and video clips
- Creating and embedding animations and transitions

4. Charts and Tables:

- Creating and formatting charts and tables
- Importing charts from Excel

5. Slide Master and Templates:

- Creating and modifying slide master layouts for consistent formatting
- Using custom templates for brand consistency

6. Interactive Elements:

- Adding hyperlinks and action buttons for interactive presentations
- Embedding live data from Excel

7. Presenter Tools:

- Using presenter view for notes and slide previews
- Setting up and using slide show options effectively

8. Exporting and Publishing:

- Exporting presentations as PDFs or video files

- Publishing presentations to the web or sharing on platforms like Microsoft Stream

By following these best practices, TVET trainers can optimize the use of productivity applications to create high quality, engaging, and effective training materials.



Tips: Useful links: For further understanding of content development and analysis using Microsoft, office products click the video links below

Key points about content development using MS-Office

CLICK HERE 

Unit 5: Using Online Digital tools for communication and collaboration.

Learning Outcomes: By the end of Unit Four, Trainers will be able to:



- Utilize a variety of online digital tools email, instant messaging, and social media, to communicate effectively with students, colleagues, and industry professionals.
- Implement collaboration strategies using platforms like Google Workspace and Microsoft 365 to enhance teamwork.
- Apply Good ethics and best practices in managing online communications

5.1.Introduction

Unit Five focuses on the utilization of online digital tools to enhance communication and collaboration in educational settings. It emphasizes the importance of these tools for fostering a more connected and interactive learning environment, which is crucial for modern educators and trainers. The unit covers various platforms and technologies that enable effective communication and collaboration among educators, students, and industry experts.

In the modern educational landscape, online digital tools are essential for effective communication and collaboration. For trainers, these tools provide platforms to interact with colleagues, students, and industry experts, fostering a more connected and collaborative learning environment. They enable the sharing of ideas, resources, and feedback in real-time, enhancing the overall educational experience.

5.2.Online Communication

Online communication tools are digital platforms that enable users to exchange messages, hold discussions, and share information over the internet. These tools are crucial for maintaining clear and consistent communication in educational settings.

5.2.1. Key Tools and Features:

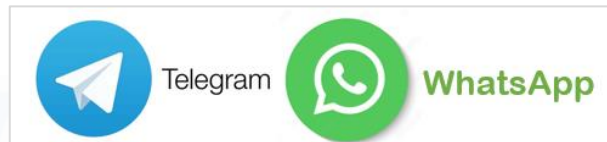
- A. Email:** Email is a fundamental communication tool that allows users to send and receive messages electronically. It is widely used for personal and professional communication, providing a reliable way to exchange information, documents, and media. They offer features like email filtering, labeling, and integration with calendars.

Example Platforms:



B. Instant Messaging: Messaging apps provide real-time text communication, often with additional features such as voice and video calls, file sharing, and group chats. Instant messaging platforms enable real-time, informal communication. Tools like Slack, Microsoft Teams, and WhatsApp allow for real-time text messaging, file sharing, and quick communication.

Example Platforms:



C. Video Conferencing: Applications such as Zoom, Google Meet, and Skype facilitate face-to-face meetings and virtual classrooms through video calls. They often include features like screen sharing, breakout rooms, and recording options.

Example Platforms:



D. Social Media Platforms: Social media platforms allow users to connect, share content, and engage with others online. These platforms are used for networking, marketing, and staying informed about current events. Platforms for both professional and casual communication. LinkedIn is particularly useful for professional networking and finding job opportunities, while platforms like Twitter and Facebook are great for engaging with the developer community and sharing projects.

Example Platforms:



5.2.2. Application for Trainers:

- **Student Interaction:** Trainers can use email and instant messaging to communicate with students, providing support, answering questions, and sharing resources.
- **Virtual Meetings:** Video conferencing tools enable trainers to conduct virtual classes, hold meetings with colleagues, and participate in professional development webinars.
- **Quick Updates:** Instant messaging platforms allow trainers to send quick updates and reminders to students and colleagues, ensuring everyone stays informed.

5.2.3. Using Email for Communication

Email is a fundamental tool for facilitating efficient and formal communication with students, colleagues, and stakeholders. It provides a reliable platform for sharing updates, discussing requirements, sending documents, and maintaining a written record of communications. To use email in a professional setting you should refer to set of guidelines and principles prepared by your institute. Here are some common Email etiquettes for trainers to follow when using email for business or work-related communication.

Email etiquette

Email etiquette in a professional setting refers to the set of guidelines and principles that individuals should follow when using email for business or work-related communication. Adhering to proper email etiquette is crucial for maintaining a positive, respectful, and effective online communication environment. Here are some key elements of email etiquette in a professional setting:

- **Use a Professional Email Address:** Your email address should reflect your professionalism, typically using your name or a variation of it, and be associated with your organization if applicable.
- **Clear and Informative Subject Lines:** Use clear, concise subject lines that accurately describe the content of your email. This helps recipients understand the purpose of the message.
- **Greeting and Salutation:** Start your email with a polite greeting, such as "Dear [Name]" or "Hello [Name]." Use the recipient's name when possible.
- **Concise and Relevant Content:** Keep your emails clear and to the point. Address the primary purpose of the email in the first few lines. Avoid unnecessary jargon or overly long emails.
- **Professional Tone:** Maintain a professional and respectful tone in your emails. Avoid using slang, humor, or overly casual language unless it's appropriate for your specific workplace culture.
- **Grammar and Spelling:** Proofread your emails to ensure they are free from grammatical and spelling errors. A well-written email demonstrates attention to detail.
- **Use Cc and Bcc Judiciously:** Only use the "Cc" (carbon copy) and "Bcc" (blind carbon copy) fields when necessary. "Cc" is for recipients who should be aware of the email's content, while "Bcc" hides recipients' email addresses to protect their privacy.
- **Replying and Forwarding:** When replying to or forwarding emails, trim the previous message to include only relevant information. Avoid sending lengthy email chains.

- **Attachments:** Clearly label and attach files, and be cautious not to overload the recipient with large attachments. Mention the attached files in the email body.
- **Response Time:** Respond to emails promptly, especially if it's related to work tasks or time-sensitive matters. Even a brief acknowledgment can be helpful.
- **Respect Privacy:** Always respect the privacy of email recipients. Do not share their email addresses without permission, and avoid sharing sensitive information via email.
- **Signature:** Include a professional email signature with your name, title, contact information, and any relevant disclaimers or confidentiality notices.
- **Use Out-of-Office Messages:** If you will be away from your email for an extended period, set up an out-of-office message to inform senders when they can expect a response.
- **Avoid Using Email for Emotional or Controversial Discussions:** Email is not the best medium for emotional or contentious discussions. Use other communication methods for such situations.
- **Follow Company Policies:** Adhere to your organization's specific email policies and guidelines, which may include rules for data security, email retention, and acceptable use.

Remember that email etiquette can vary slightly from one organization to another, so it's a good practice to be aware of your company's specific expectations regarding email communication. Ultimately, the goal of email etiquette in a professional setting is to facilitate clear, respectful, and efficient communication among colleagues, clients, and partners.

Key Email Skills

Developing strong email skills is essential for web developers to communicate effectively and professionally. Below are the key email skills students need to understand and utilize to communicate efficiently and professionally. Here are the important email skills you should have when you use Gmail and you are required to practice it step by step.



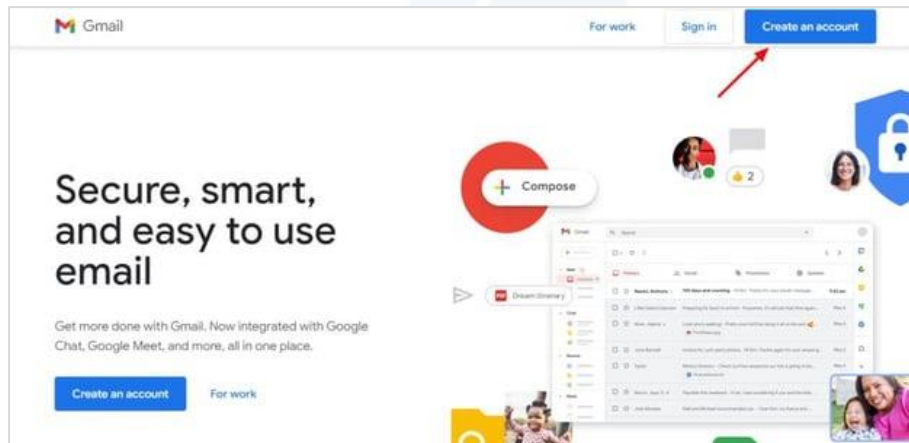
Steps: Gmail usage

1. Setting up a Gmail account: Creating an email account is the first step to using email services. This involves filling out necessary personal information, and setting up a secure password. Signing in involves entering your email address and password to access your inbox.

Steps:

Step 1: Visit Gmail's website

The first step to creating a Gmail account is to visit the <https://www.google.com/gmail>. Next, click on a blue button that says "Create an account" in the top-right corner of the page.



Step 2: Fill in your information

You'll need to input your first and last name and the username you'd like for your email address. The username is what comes before "@gmail.com" in your email address (for instance, in "example@gmail.com," the username is "example"). You will also need to set a strong password. Once you've done all of that, click on "Next."

A screenshot of the "Create your Google Account" form. The form is titled "Create your Google Account to continue to Gmail". It contains several input fields: "First name" (John), "Last name" (Doe), "Username" (doe482528), and "Password" (masked with dots). There is also a "Confirm" field for the password. A red box highlights the "First name", "Last name", "Username", and "Password" fields. Below the password fields, there is a checkbox labeled "Show password". To the right of the form is a graphic of a blue shield with a white person icon and a red location pin. Below the graphic is the text "One account. All of Google working for you." At the bottom of the form, there is a "Sign in instead" link and a blue "Next" button, which is also highlighted with a red box.

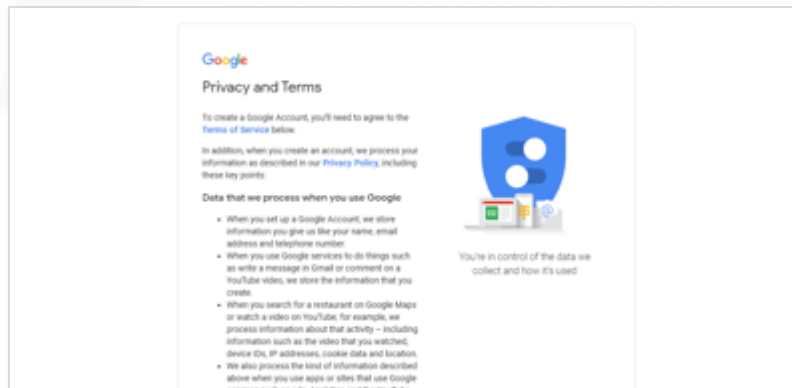
Step 3: Verify your phone number

Next, you must verify your phone number. You can choose to receive a verification code via text message or voice call. When you receive the code, type it into the verification box and click "Verify."



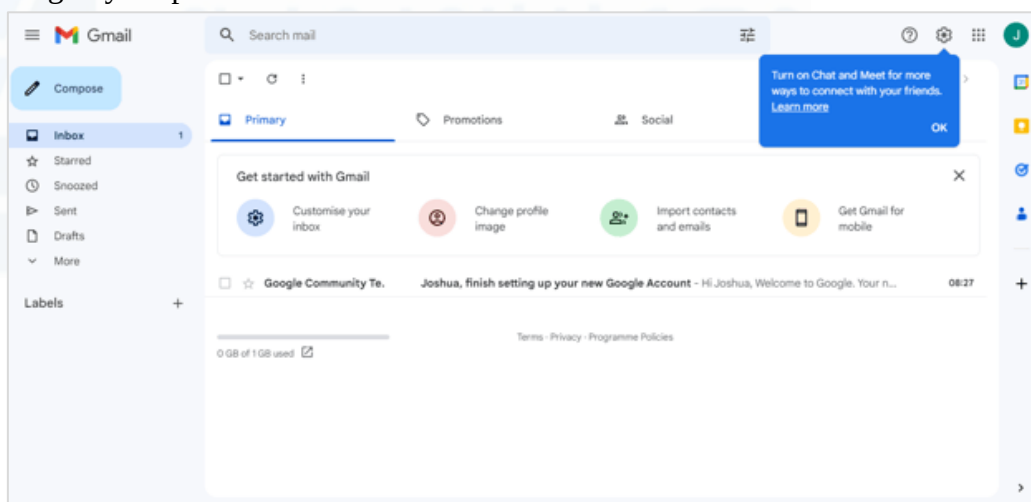
Step 4: Accept Google's terms of service and privacy policy

After verifying your phone number, the next step is to accept Google's terms of service and privacy policy.



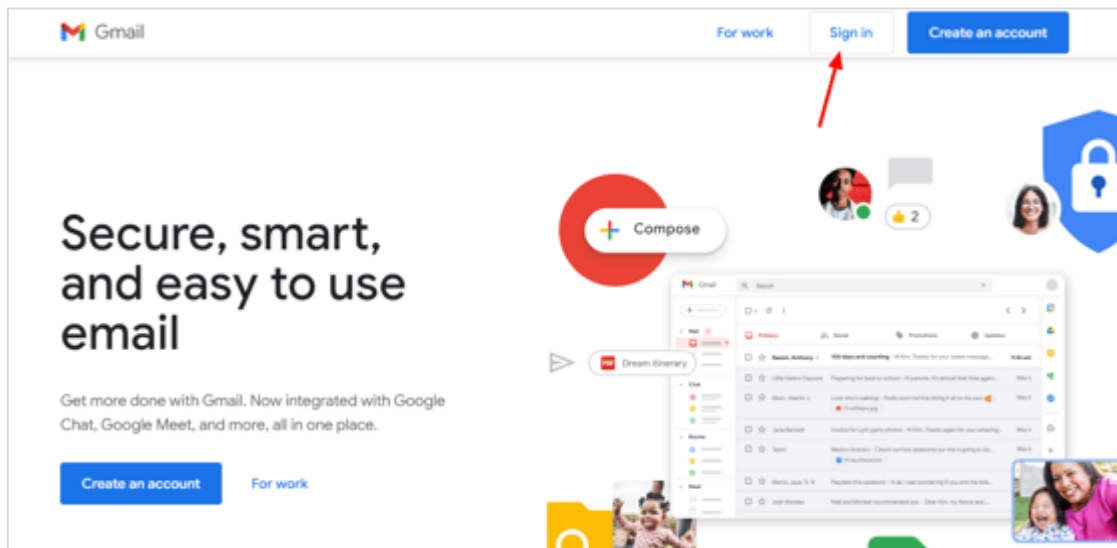
Step 5: Personalize your account

Your Gmail dashboard will be the next page you will see. This is where you can view your emails, create and send new emails, and set up Gmail to forward your emails to another address if you would like. You can also personalize your account by adding a profile picture and filling in your personal information.



Step 6: Sign in to your new Gmail account

To sign in to your Gmail account, all you have to do is visit Gmail's website and click on the "Sign in" button in the top-right corner of the page, then enter your email and password.



1. Sending Email

Recipients

Recipients are the people you are sending the email to. You will need to type the **email address** for each recipient. Most of the time, you'll add recipients to the **To: field**, but you can also add recipients to the **Cc: or Bcc: fields**.

Cc and Bcc

Cc stands for **carbon copy**. This is used when you want to send an email to someone who is not the main recipient. This helps to keep these people **in the loop** while letting them know that they probably don't need to reply to your message. **Bcc** stands for **blind carbon copy**. It works almost the same way as Cc, except that all of the email address in the Bcc fields are **hidden**, making it ideal when emailing a **large number** of recipients or when **privacy** is needed.

Subject

The **subject** should say what the email is about. Keep the subject **brief**, but give the recipients a reasonable idea of what's in the message.

Photography Studio Grand Opening!

Hi Everyone,

I have exciting news about my new studio, EC Photography. It's located in the heart of the city, and it's going to be a great place for entertainment and relaxation.

Body

The **body** is the actual text of the email. Generally, you'll write this just like a normal letter, with a greeting, one or more paragraphs, and a closing with your name.

My studio will be the the grand opening of my new studio, EC Photography. It's located in the heart of the city, and it's going to be a great place for entertainment and relaxation. The grand opening will be from 10:00 to 4:00. There will be a lot of fun activities and enjoy the festivities!

Hope to see you there!
Elena

Send Button

When you are satisfied with your message, click **Send** to send it to the recipients.

Send

Formatting Options

Click the **Formatting** button to access **formatting**

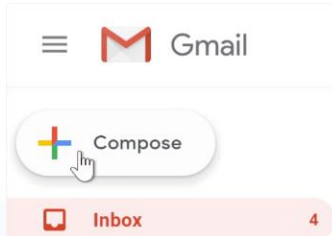
Add Attachment

An **attachment** is a **file** (like an image or a document) that is sent along with the email message. Gmail allows you to include **multiple** attachments.

Sans Serif | Font size: 14 | Bold (B) | Italic (I) | Underline (U) | Text color (A) | Background color | Bulleted list | Numbered list | Indented list | Link icon | Image icon | Video icon | Location pin icon | Currency icon | Saved | Trash icon | More options icon

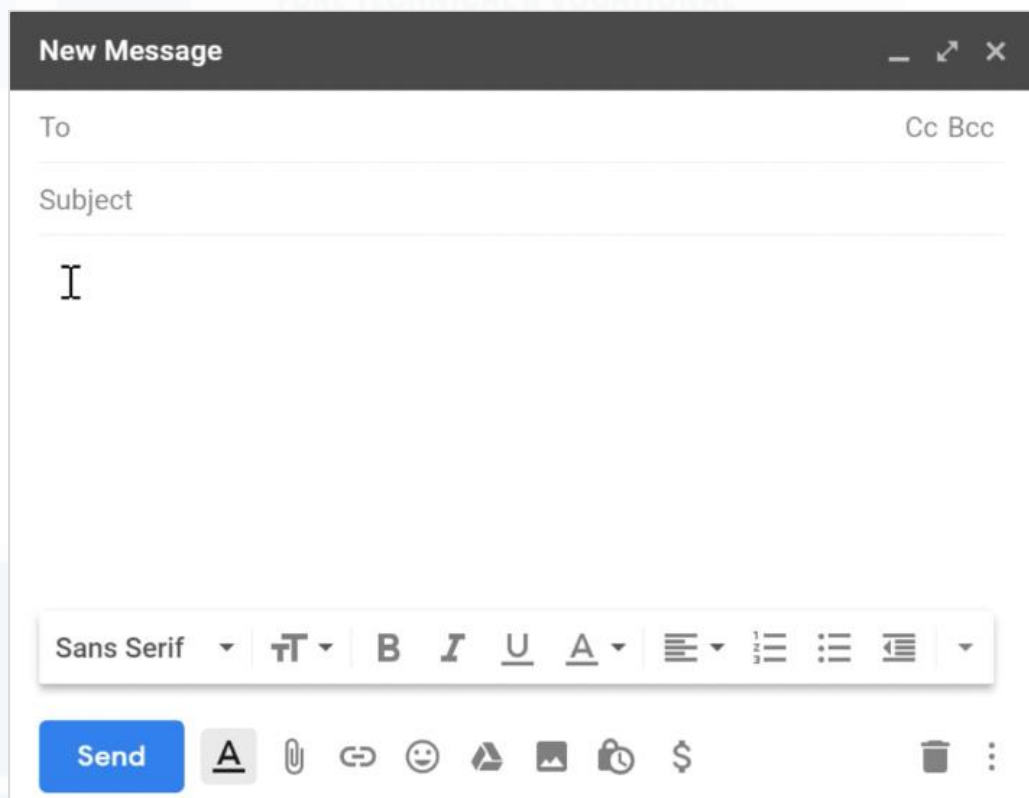
Writing a professional email requires clarity, conciseness, and a formal tone. Important components include a clear subject line, a formal greeting, an organized message body, and a polite closing. This ensures that the message is understood and leaves a positive impression.

1. On your computer, go to Gmail.
2. At the top left, click "Compose".



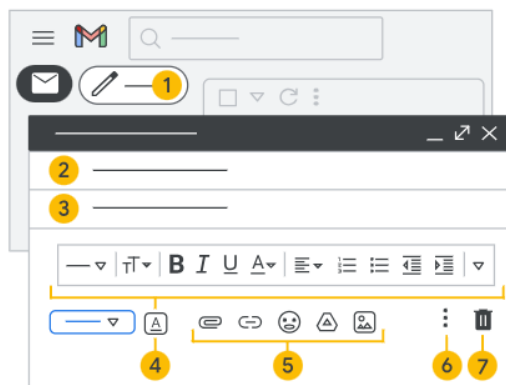
3. In the "To" field, add recipients. You can also add recipients:
In the "Cc" and "Bcc" fields.

When you compose a message, with a "+" sign or "@mention" and the contact's name in the text field.



4. Add a subject.
5. Write your message.
6. At the bottom of the page, click Send.

Compose an email



- 1 Click **Compose** to create an email
- 2 Add recipients
- 3 Add a subject
- 4 Format text
- 5 Add files and links
- 6 Show more options, such as templates
- 7 Delete draft

3. Using Cc and Bcc:

The Cc (carbon copy) field is used to send a copy of the email to additional recipients whose responses are not required. The Bcc (blind carbon copy) field allows sending a copy to recipients without others knowing. These fields help manage communication transparency and privacy.

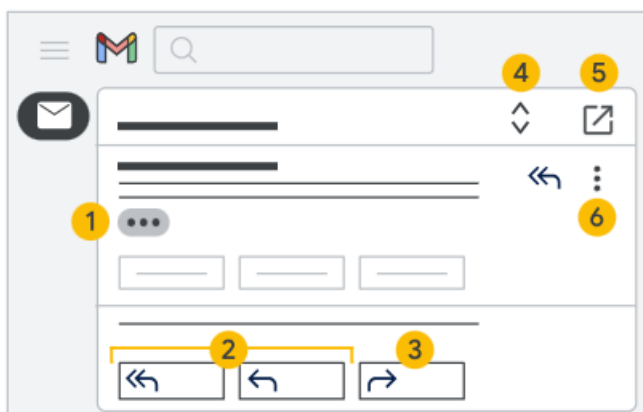
4. Adding Attachments:

Attachments are files sent along with an email. These can include documents, images, or other media. It is important to ensure attachments are relevant, appropriately named, and not excessively large to avoid delivery issues.

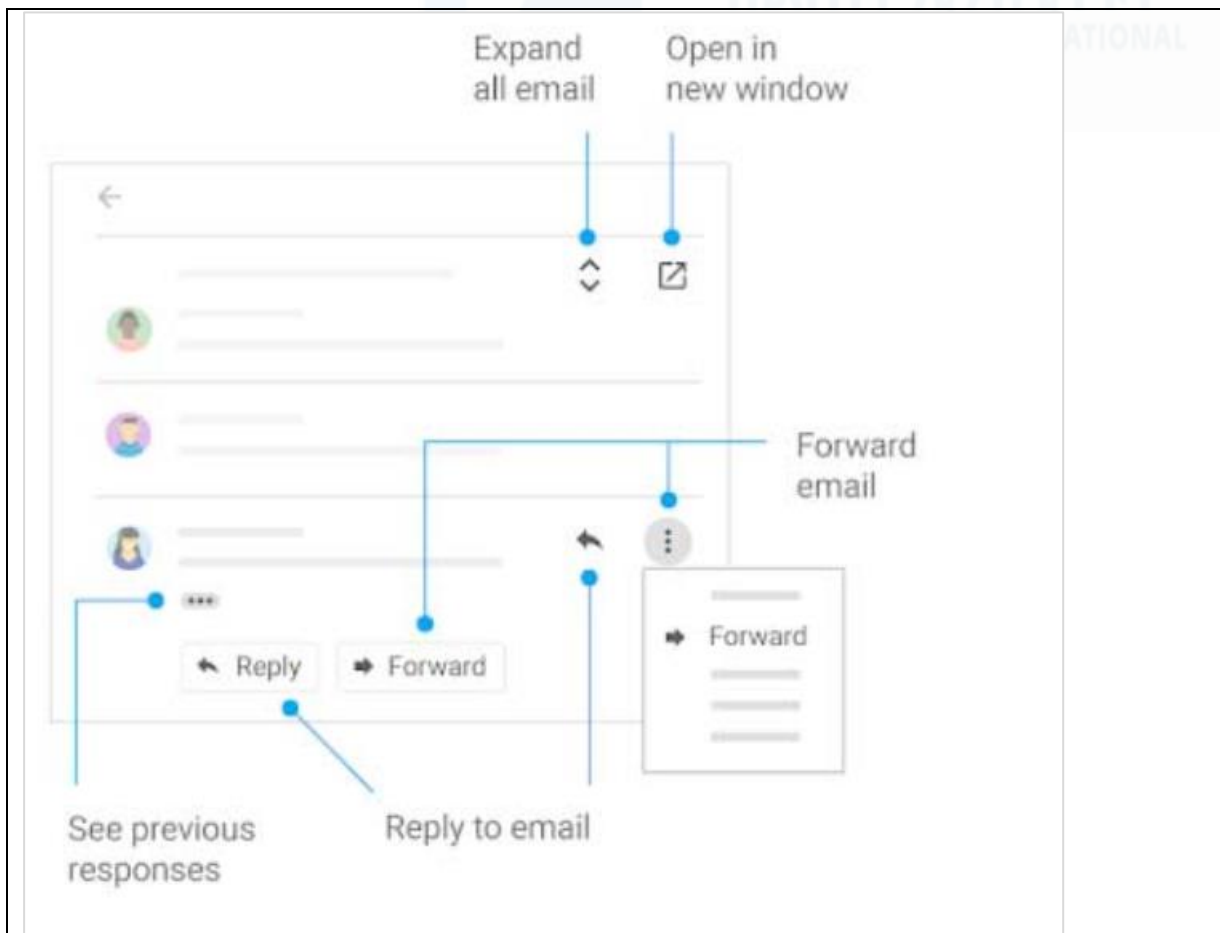
5. Replying and Forwarding:

Replying to an email involves responding to the sender's message, while forwarding allows you to send the original email to new recipients. Both actions should be done thoughtfully to maintain the context and relevance of the communication.

Reply to an email

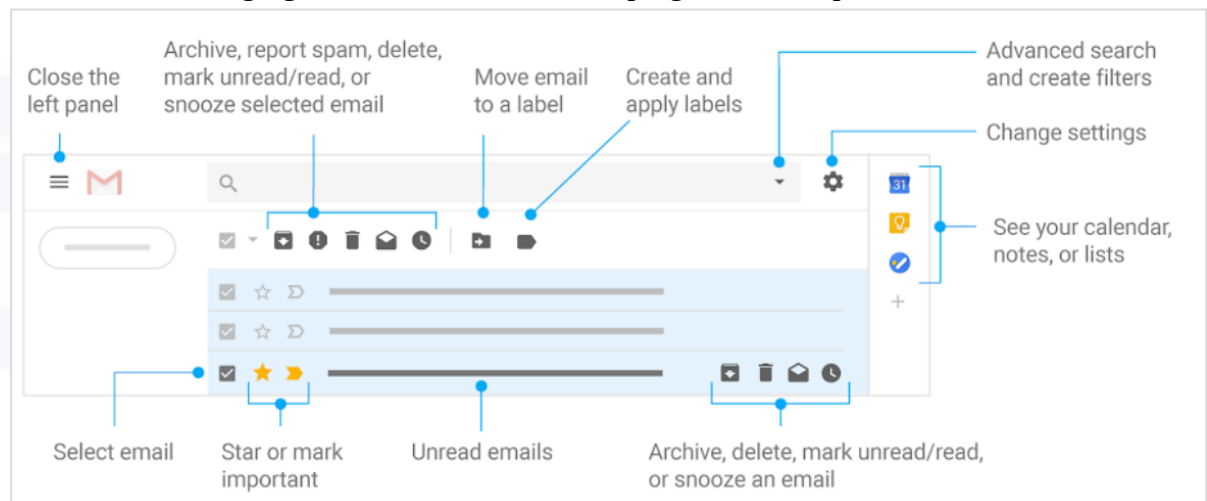


- 1 See previous responses
- 2 Reply to email
- 3 Forward email
- 4 Expand all email
- 5 Open email in a new window
- 6 Show more options



6. Using Labels and Filters:

Labels help categorize emails for better organization, while filters automate the sorting process based on specific criteria such as sender, subject, or keywords. These tools are essential for managing a cluttered inbox and keeping track of important emails.

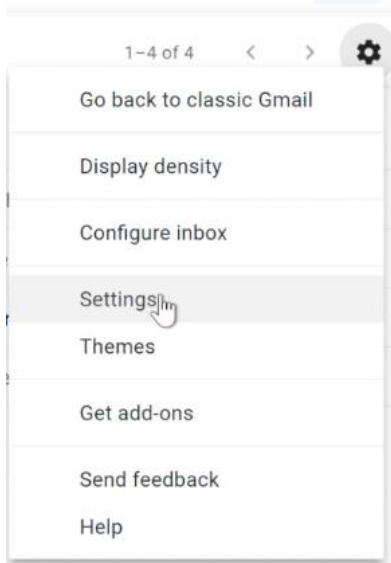


7. Setting Up an Email Signature:

An email signature provides a professional sign-off that typically includes your name, job title, contact information, and relevant links. It ensures consistency and professionalism in all email communications.

Steps

1. Open Gmail.
2. At the top right, click Settings and then see all settings.

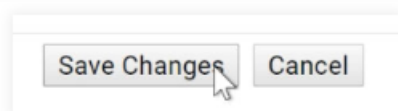


3. In the "Signature" section, add your signature text in the box. If you want, you can format your message by adding an image or changing the text style.

Tip: Your image also counts toward the character limit. If you get an error, try to resize the image.



4. At the bottom of the page, click Save Changes.



8. Out-of-Office Autoreply (vacation Reply):

An out-of-office autoreply is a pre-written response that is automatically sent to anyone who emails you while you are unavailable. It informs senders of your absence and provides alternative contact information if necessary.

Steps

1. On your computer, open Gmail.
2. In the top right, click Settings and then See all settings.
3. Scroll down to the 'Out of Office AutoReply' section.
4. Select Out of Office AutoReply on.
5. Fill in the date range, subject and message.
6. Under your message, tick the box if you only want your contacts to see your Out of Office reply.
7. At the bottom of the page, click Save changes.

Vacation responder: (sends an automated reply to incoming messages. If a contact sends you several messages, this automated reply will be sent at most once every 4 days) [Learn more](#)

☐ Vacation responder off
☒ **Vacation responder on**

First day: June 15, 2021 **Last day:** ☒ June 22, 2021

Subject: Out of office

Message:

Sans Serif **B** *I* U **A**

[Plain Text](#)

I ran off to join the circus. Lucky for you, I'll be back in the office on June 23 and will reply to your email then.

☒ Only send a response to people in my Contacts

groovyPost.com

Save Changes **Cancel**

Note: If you have a Gmail signature, it will be shown at the bottom of your out of office reply.

Here is a role-play activity for a group of five participants focusing on email usage in Gmail, with real-world managerial scenarios. In this activity, each participant will take on a role and perform specific email-related tasks.



Tips: Useful links: For further understanding of Gmail usage click the video links below

Gmail Tips & Tricks

CLICK HERE

Gmail Tutorial for Beginners

CLICK HERE



Activity 4: Email Management Role-Play

Title: "Gmail Email Management Role-Play"

Objective: To enhance participants' proficiency in Gmail usage and email etiquette within a professional context, while promoting effective teamwork and collaborative email management.

Scenario: You are all part of a management team in a fictional company called "Bikat Innovations." Your team has been tasked with preparing for an upcoming client presentation. Each of you has a specific role to play in this scenario, and you will be using Gmail for various email-related tasks.

Participants:

- **Manager (Participant 1):** You are the team manager responsible for coordinating the client presentation.
- **Team Leader (Participant 2):** You are the team leader overseeing the project details.
- **Technical Expert (Participant 3):** You are the technical expert responsible for creating and attaching a technical report.
- **Client Liaison (Participant 4):** You are responsible for maintaining communication with the client.
- **IT Support (Participant 5):** You are the IT support personnel assisting with email group creation and out-of-office settings.

Instructions:

- **Creating an Email Group:**

The Manager (Participant 1) should create an email group with all team members' email addresses, making it easier to communicate with the team as a whole. Ensure that the group is appropriately named and functional.

- **Creating and Sending an Email:**

The Manager (Participant 1) should draft an email to the entire team outlining the objectives and deadlines for the client presentation. Send this email to all team members.

- **Using Cc and Bcc:**

The Team Leader (Participant 2) should send a follow-up email to the technical expert (Participant 3) and the client liaison (Participant 4). Use "Cc" for the technical expert and "Bcc" for the client liaison to demonstrate the use of these fields appropriately.

- **Adding Attachments:**

The Technical Expert (Participant 3) should create a technical report (you can use a dummy document) and attach it to the email. Send this report to the entire team (including the client liaison) to demonstrate attaching files.

- **Replying and Forwarding:**

The Client Liaison (Participant 4) should reply to the email sent by the Manager (Participant 1) with confirmation of receipt and request a meeting time. Afterward, forward this email to the IT Support (Participant 5) to seek assistance with setting up an out-of-office autoreply.

- **Adding Signature:**

The IT Support (Participant 5) should create a professional email signature for all team members and guide them on how to add it to their Gmail accounts. Make sure to instruct the participants on what information should be included in the signature.

- **Out-of-Office Autoreply:**

The IT Support (Participant 5) should assist the Client Liaison (Participant 4) in setting up an out-of-office autoreply for her email account, mentioning that she's unavailable due to a client presentation.

Debrief:

After the role-play activity, the participants will discuss their experiences and challenges. Share best practices and ensure that everyone understands the various Gmail features and how they can be applied in a professional managerial context.

5.3.Conferencing and Virtual Meetings

Video conferencing tools have become integral in education, allowing educators and leaders to connect with students, colleagues, and stakeholders from anywhere. Platforms like Zoom, Microsoft Teams, and Google Meet enable virtual meetings, webinars, and interactive sessions. This topic will cover the use of these tools for effective online meetings.

- **Google Meet:** Google Meet is a video conferencing tool, which is valuable for virtual meetings, lectures, and webinars. Trainers can host virtual discussions, engage with students or staff, and conduct training sessions.
- **Zoom Meeting App:** Zoom is a popular video conferencing and online meeting platform that provides a range of services for hosting and participating in virtual meetings, webinars, and collaborative sessions. Zoom has gained immense popularity for its user-friendly interface, robust features, and cross-platform compatibility.

5.3.1. How to use Zoom meetings

Zoom makes it super easy for anyone to set up and conduct a virtual face-to-face meeting but if you've never used the tool before, this can still be tricky. To help you out, here's a step-by-step guide to using Zoom Meetings the right way. We'll cover the steps desktop platforms on:

- a. How to Get Started with Zoom
- b. How to Set Up a Zoom Meeting
- c. How to Join a Zoom Meeting
- d. How to Schedule Meetings
- e. How to Record Meetings
- f. How to share screen



Activity 5: Setting up online meeting session using Zoom meeting

A. How to get started with Zoom

Step 1: To get started with Zoom, head to <https://zoom.us>, and click on the “SIGN UP” button that’s at the top-right corner of the screen.

The screenshot shows the Zoom website's sign-up page. At the top, there's a navigation bar with links like 'SOLUTIONS', 'PLANS & PRICING', 'CONTACT SALES', 'JOIN A MEETING', 'HOST A MEETING', 'SIGN IN', and a prominent 'SIGN UP, IT'S FREE' button. The main heading is 'Sign Up Free'. Below it, there's a form for 'Your work email address' with a text input field and a blue 'Sign Up' button. A small note mentions 'Zoom is protected by reCAPTCHA and the Privacy Policy and Terms of Service apply.' Below the button, there's a link for 'Already have an account? Sign in.' and a section for signing in with SSO, Google, or Facebook. At the bottom, there's a small link to the Privacy Policy and Terms of Service.

Step 2: You have two options when it comes to creating a Zoom account.

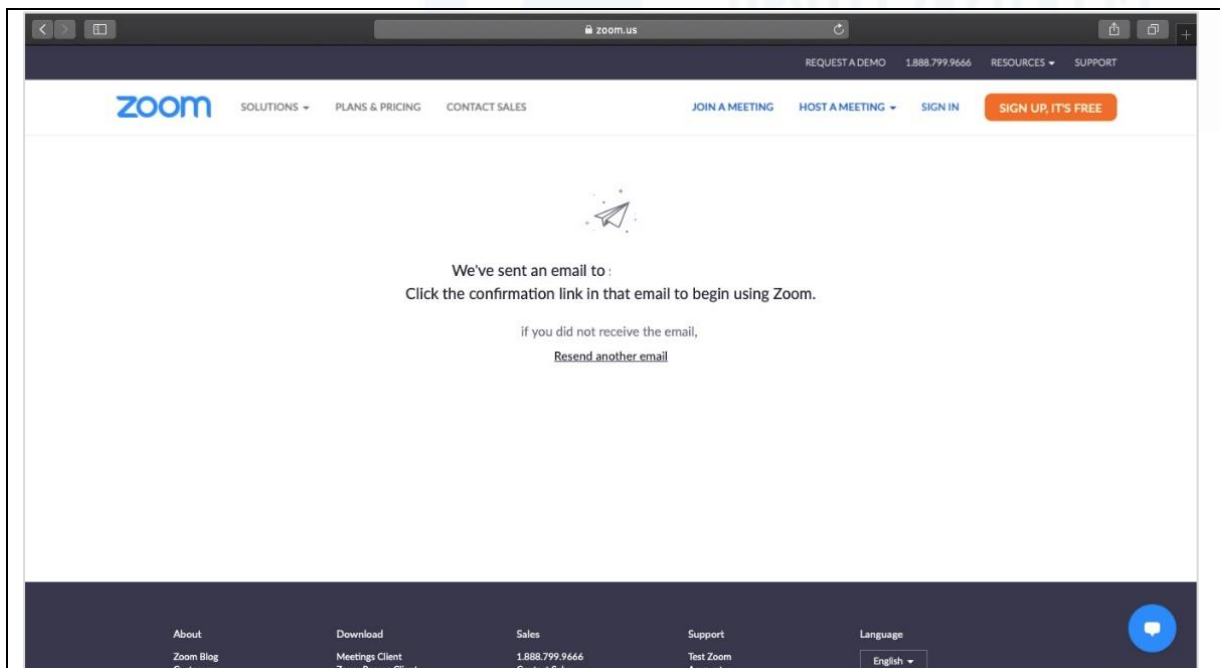
You can either:

- Create a new account using your work email address.
- Sign in using SSO (Single Sign-On) or your Google or Facebook account.

If you're using Zoom for a company meeting or other work purposes, it's best to sign up using your work email address.

Step 3: Zoom will now send you an email with a confirmation link.

Click on that link to go to Zoom's Sign Up Assistant and sign in using your credentials.



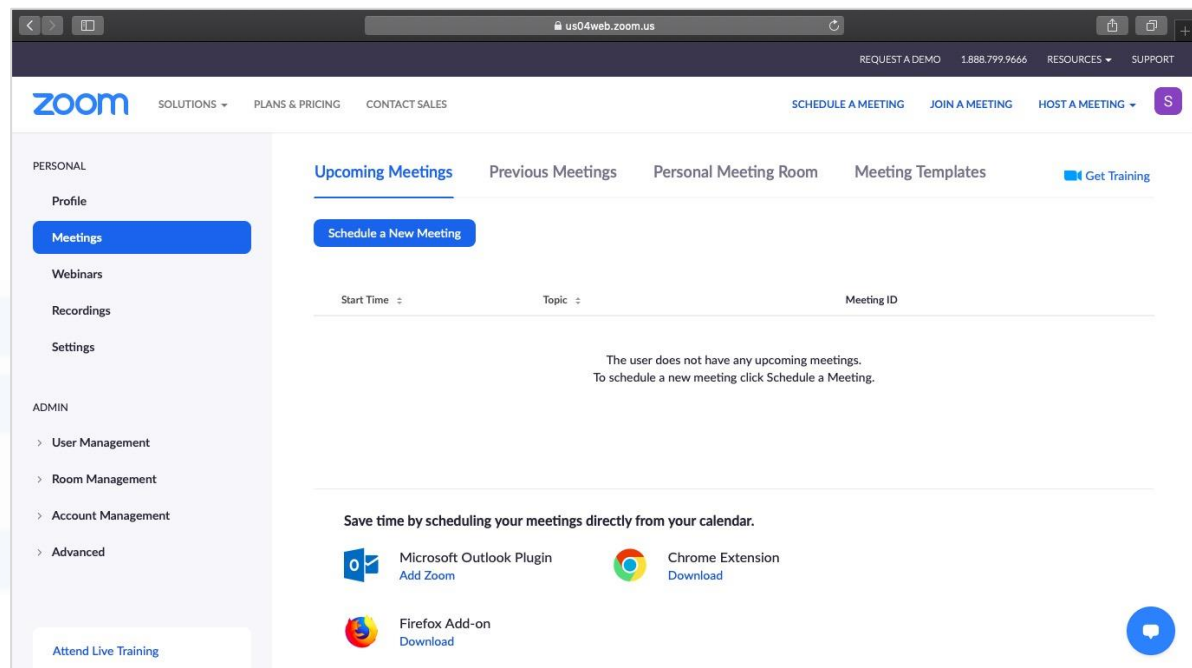
Step 4: Download the desktop app/Zoom client from the Zoom website for easy access.

B. How to set up a Zoom meeting

Here's a step-by-step guide to set up a Zoom meeting easily:

A. Starting a Zoom meeting

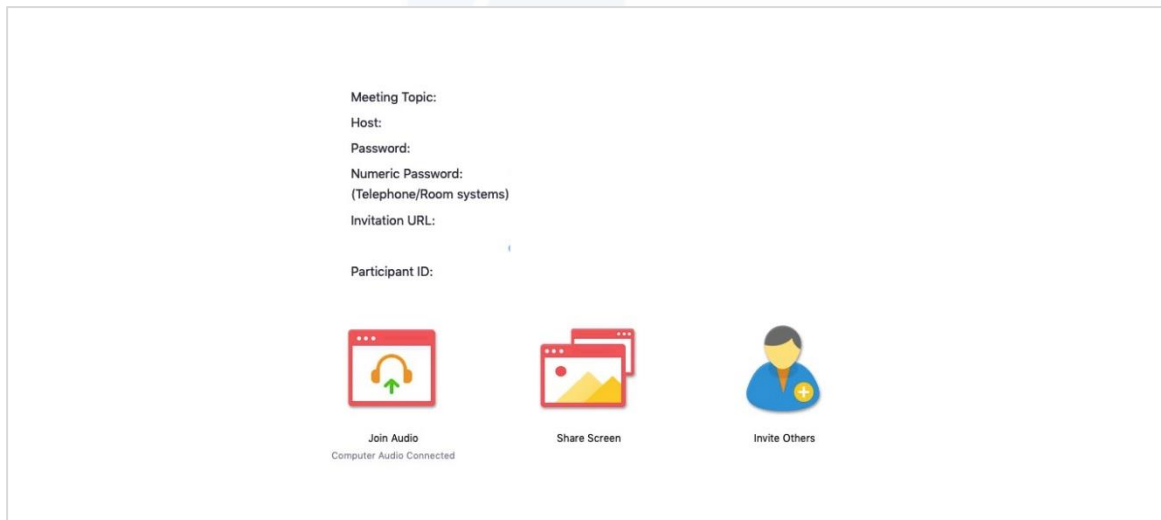
Step 1: Log in to your Zoom account.



Step 2: Hover your cursor over the “HOST A MEETING” link at the top-right corner of the screen, and select one of the following options:

- With Video On
- With Video Off
- Screen Share Only

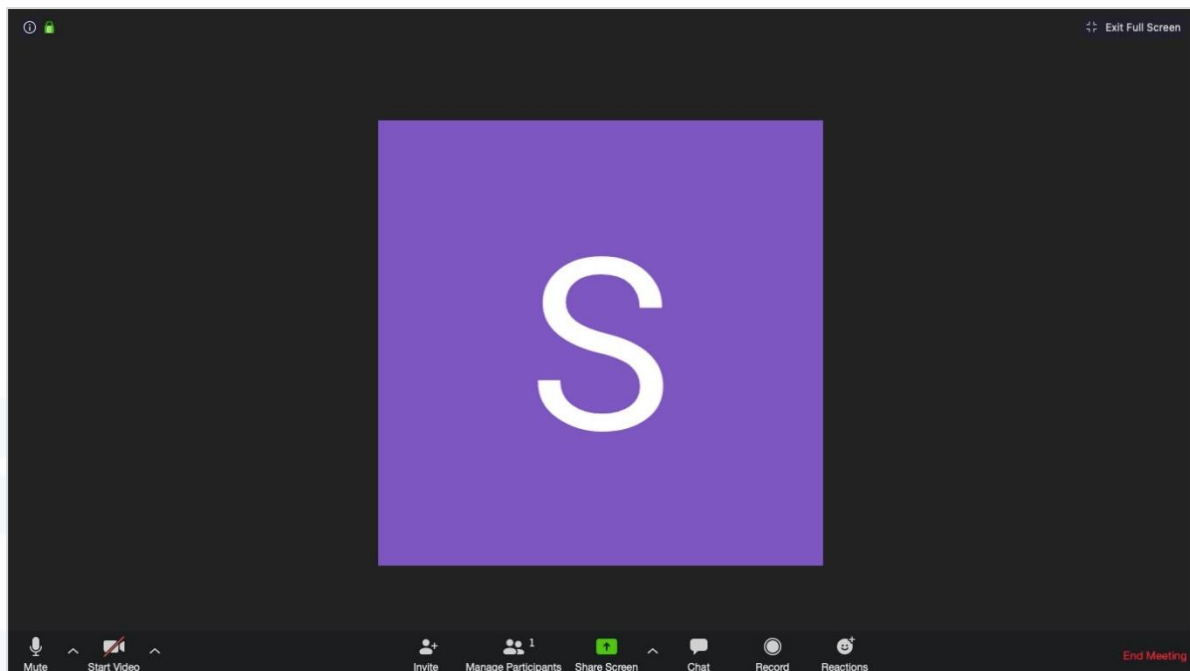
Step 3: The website will redirect you to the Zoom app and start a meeting. Here, you can edit meeting settings or copy the “Invitation URL” that you send to the attendees.



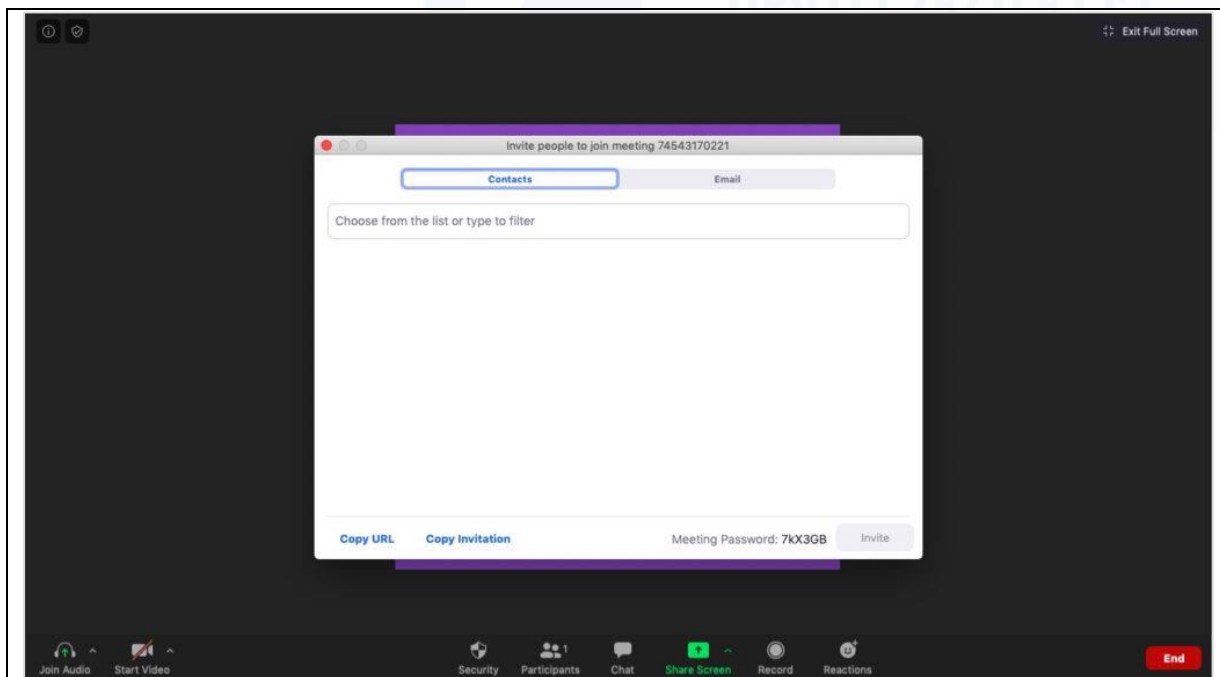
Note: You can also start a meeting quickly through the desktop app by following the instructions we list for mobile devices later on.

B. Adding participants

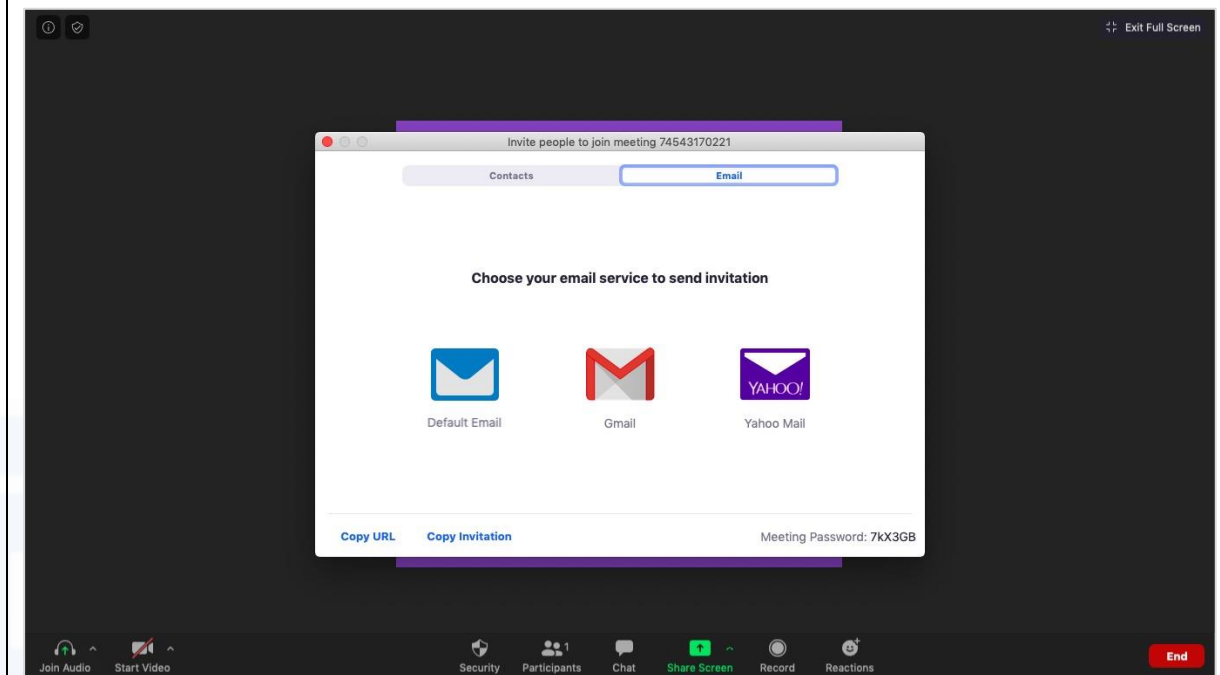
Step 1: Start a new meeting on the Zoom desktop app.



Step 2: In the new meeting screen, click on the “Invite” button in the toolbar at the bottom.



Step 3: Here, Zoom will give you the options to either “Copy URL” or “Copy Invitation”. You can send these to participants via text, email or instant messaging.



Step 4: You can also directly email the meeting details through your preferred email client via the Zoom app itself.

C. How to join a Zoom meeting

Here’s a step-by-step guide to join a Zoom meeting quickly:

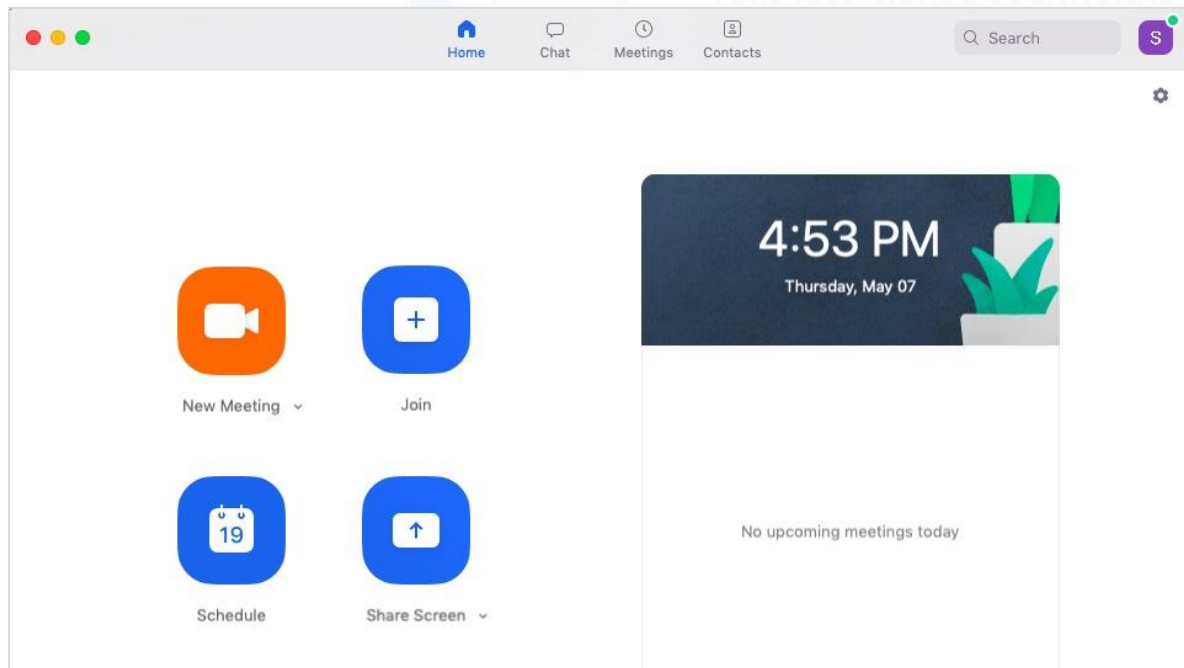
Note: The same steps apply to both your desktop and your phone.

A. Join using a Meeting Link

If you have a join link for a meeting, just click on it or paste it into your web browser to join the meeting.

B. Join using a meeting ID

Step 1: Open the Zoom app and click on the “Join” icon.



Step 2: Paste the Meeting ID in the box provided, add your display name for the meeting and click on the “Join” button.

A screenshot of the 'Join Meeting' dialog box. It has a title 'Join Meeting' in bold. Below the title is a text input field with the placeholder text 'Meeting ID or Personal Link Name'. Underneath that is another text input field containing the name 'Stan Rastogi'. There are two checkboxes: 'Don't connect to audio' and 'Turn off my video', both of which are currently unchecked. At the bottom right, there are two buttons: 'Cancel' and 'Join'.

You're now all set to communicate with your team members!

D. How to schedule meetings

With a busy schedule, you can easily forget about appointments or upcoming business meetings.

Luckily, Zoom lets you schedule meetings in advance to avoid this!

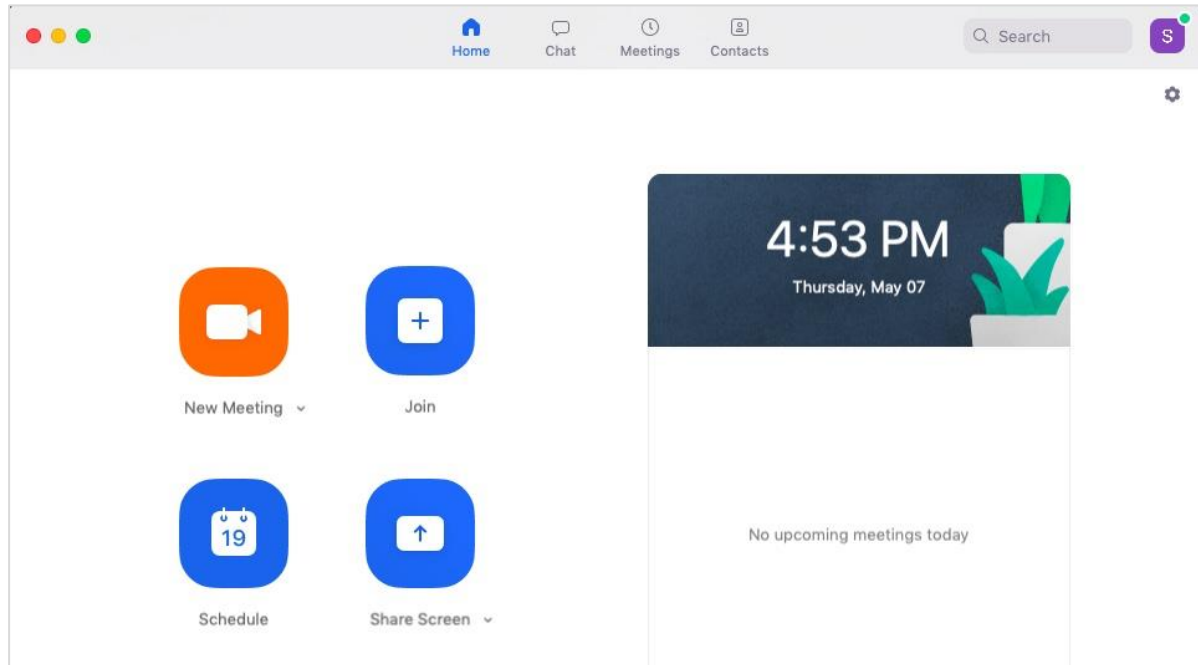
You can schedule a meeting by setting:

- Its date and time

- Meeting ID
- Whether it requires a password to join or not
- And more!

Here's a step-by-step guide to schedule meetings in Zoom easily:

Step 1: To schedule a meeting, head to the Zoom app and click on the blue “Schedule” button (looks like a calendar icon).



Step 2: Enter meeting details in the Schedule Meeting pop-up window that appears. You can set its date and time, privacy and access settings. You can also select your preferred calendar (between iCal, Google Calendar or others) to schedule the event in your calendar.

Schedule Meeting

Topic

Date

7/ 5/2020 ▼ 5:00 PM ▼ to 7/ 5/2020 ▼ 5:30 PM ▼

☐ Recurring meeting

Time Zone: Mumbai, Kolkata, New Delhi ▼

Meeting ID

☒ Generate Automatically

☐ Personal Meeting ID 573-299-7884

Password

☒ Require meeting password ?

Video

Host ☐ On ☒ Off

Participants ☐ On ☒ Off

Audio

☐ Telephone ☐ Computer Audio ☒ Telephone and Computer Audio

Dial in from United States [Edit](#)

Cancel

Schedule

Quick Tip: Setting a meeting password can help avoid Zoombombing, which happens when someone who hasn't been invited to the meeting joins and disrupts it.

Step 3: Once you've adjusted preferences, click on the "Schedule" button at the bottom right of the screen.

E. How to record Zoom meetings

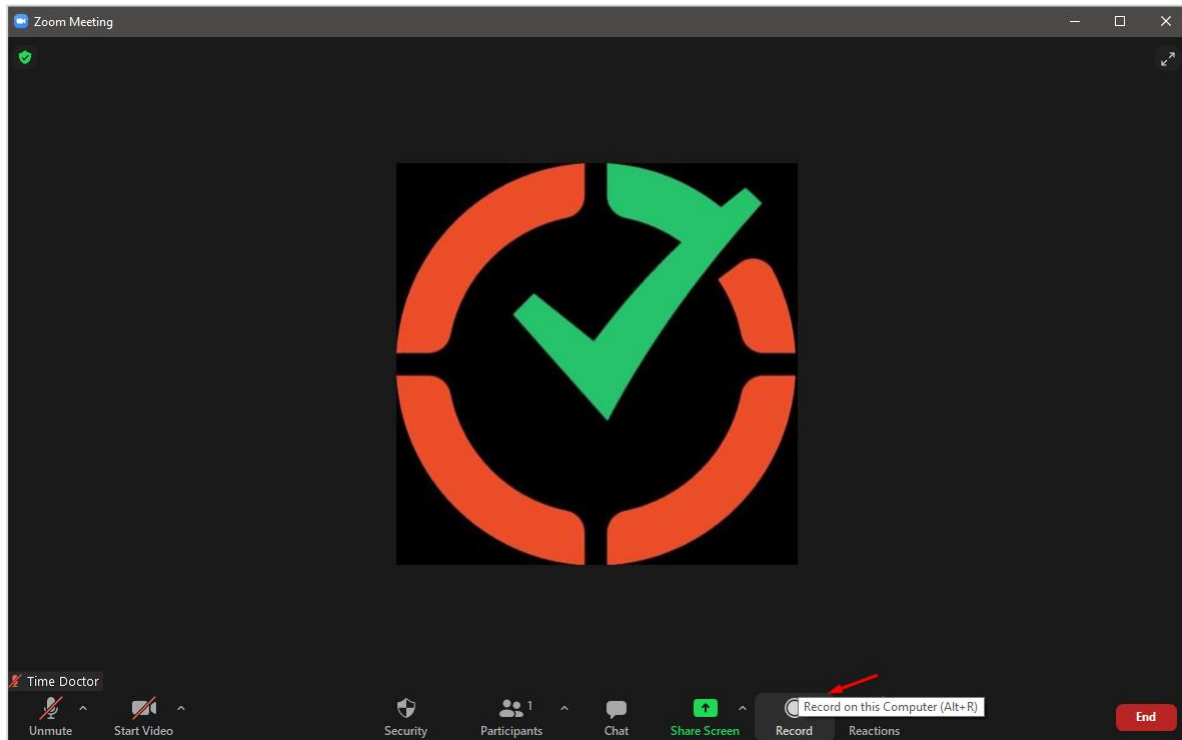
Recording a meeting lets you easily use it as a reference to document everything that was discussed. This is especially important for remote teams who use Zoom video conferencing as their key mode of communication.

Zoom allows you to record meetings easily and save them either to your local device or the Zoom cloud. By saving it to the Zoom cloud, your team members can access it across multiple platforms easily.

Here's how to record Zoom meetings:

Step 1: Start a meeting.

Step 2: In the Zoom toolbar, click on the “Record” icon.



Step 3: Choose between “Record on this Computer” or “Record to the Cloud.” This starts the recording, and all meeting members will see the word “Recording” in red at the top of the screen.

Step 4: Click on “Pause/Stop Recording” to stop recording the meeting. Alternatively, you can also end a meeting to stop recording it.

Step 5: After you end the meeting, Zoom converts the recording to MP4 format and stores it in your preferred location. You can now easily access your recorded sessions any time you want!

F. Screen sharing

Zoom lets you share your screen with other meeting participants easily.

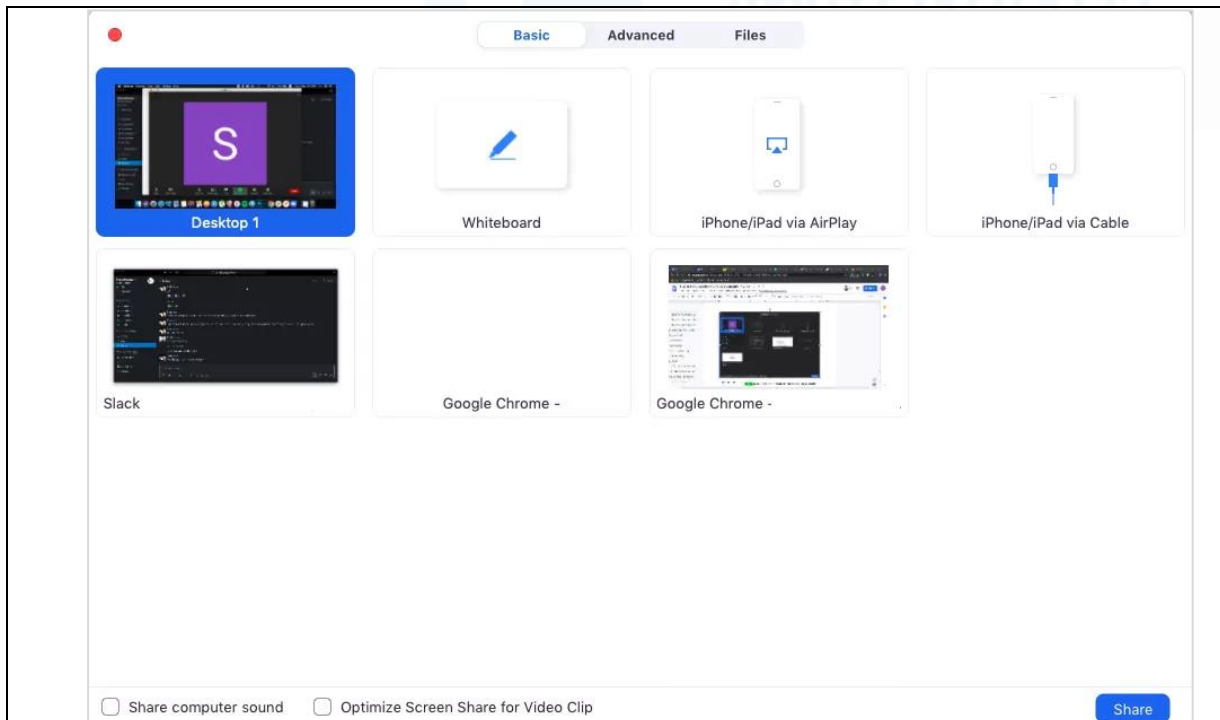
This lets you:

- Host virtual presentations and workshops.
- Explain processes in detail.
- Review work and project documents together with your team.

To share your screen, just click on the “Share Screen” icon in the toolbar at the bottom.

This lets you share:

- A specific app or window.
- A whiteboard.
- Apple iPhone / iPad screen (if your device supports this).



If you want more screen sharing options, click on the “Advanced” tab at the top of your screen. Here, you can choose to share:

- A part of your screen or the entire screen.
- Only your computer’s sound or your microphone’s sound as well.
- Content from a second camera or content only from your screen.



Tips: Useful links: For further understanding of Video Conferencing, tools click the video links below

How To Use Zoom STEP BY STEP

CLICK HERE 

Google Meet: How to Host a Meeting

CLICK HERE 

5.4. Online Collaboration

Collaboration refers to the joint effort of individuals or groups working together to achieve a common goal. Online collaboration tools are digital platforms that allow multiple users to work together on projects, share documents, and coordinate tasks in real-time. These tools are essential for fostering teamwork and enhancing productivity in educational environments. The following are Key Characteristics of Online Collaborative Tools in common:

- **Multiple users:** Multiple users can access, work and contribute on the same document or projects.
- **Real time:** Responses, editing and updates are shown immediately, thus saving time for all involved.
- **Global reach:** Most online collaborative tools can be utilized from any location with the right set-up and Internet connection. Dispersal of information globally is easily achieved.
- **Concurrent access:** Concurrent multiple user access allows for faster editing and decision making on tasks.

5.4.1. Utilizing Cloud-Based Collaboration Tools

Web-based productivity applications, also known as web apps, are software programs or tools that run in a web browser rather than being installed on a local computer or device. These applications are accessible from anywhere with an internet connection, making them convenient and versatile for a wide range of tasks. They are particularly valuable for collaborative work and remote access. Nowadays a variety of web apps such as word processors, spreadsheets, and presentation applications can be accessed using almost any browser.

Key Tools and Features:

- **Document Collaboration:** Platforms like Google Workspace (Docs, Sheets, Slides) and Microsoft 365 (Word, Excel, PowerPoint) enable real-time co-authoring and editing of documents. Google Workspace is a suite of cloud-based productivity tools designed for collaboration and communication. It includes Gmail for email, Google Drive for file storage, Google Docs for document creation, Google Sheets for spreadsheets, and Google Meet for video conferencing. Microsoft 365 offers a comprehensive suite of productivity tools, including Outlook for email, OneDrive for file storage, Word for document creation, Excel for spreadsheets, and Teams for communication and collaboration.

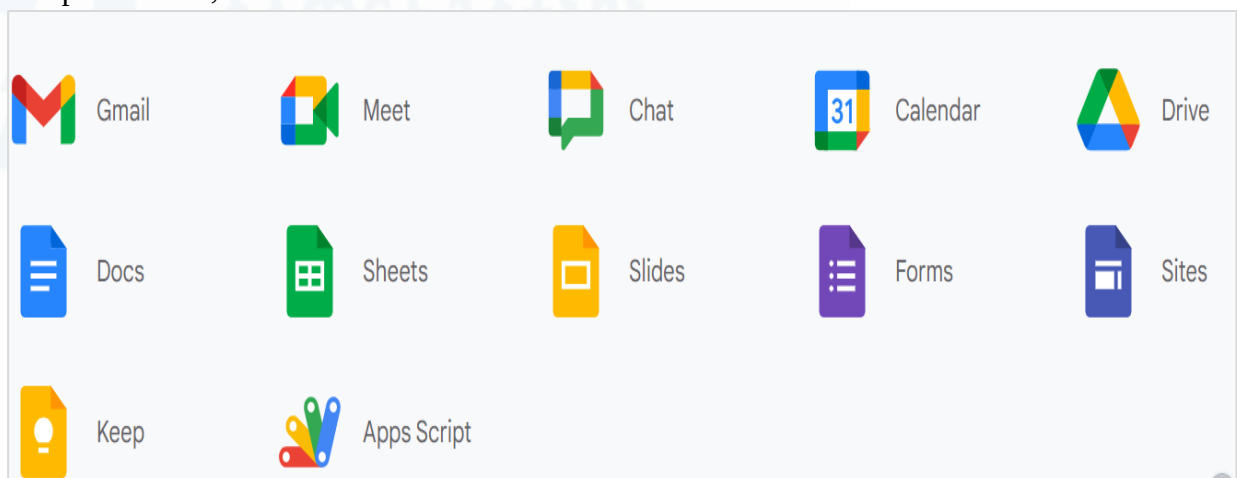


Figure 4: Google Workspace

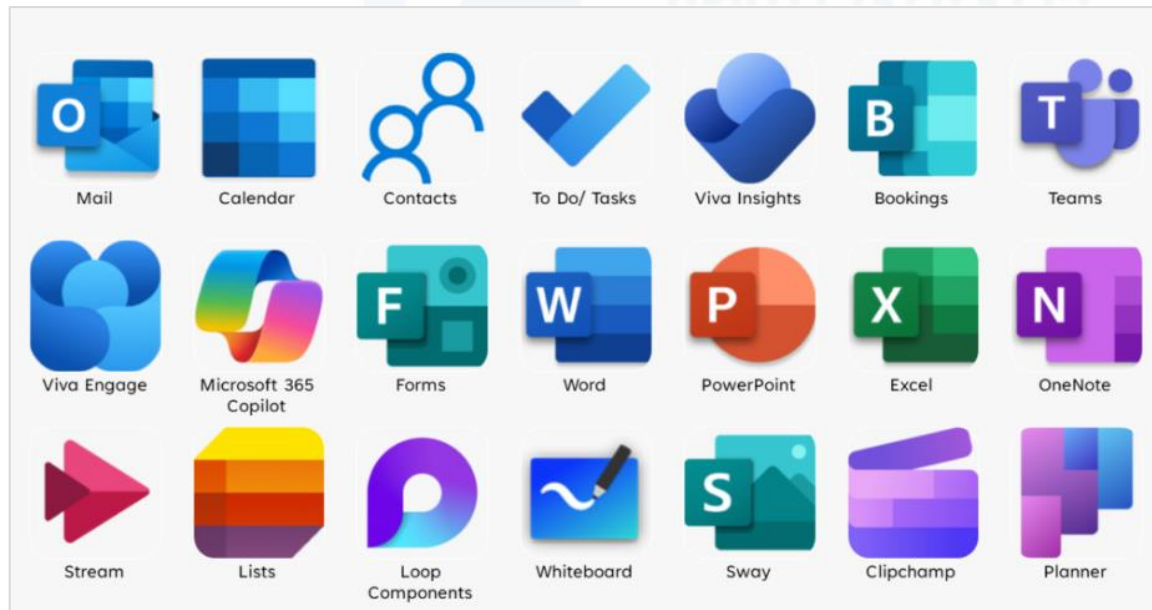


Figure 5: Microsoft 365

- **Project Management:** Tools like Trello, Asana, and Monday.com help manage projects by organizing tasks, setting deadlines, and tracking progress.
- **File Sharing:** Services such as Dropbox, Google Drive, and OneDrive provide cloud storage for easy sharing and access to files from any device.
- **Collaborative Whiteboards:** Applications like Miro and Microsoft Whiteboard offer virtual whiteboards for brainstorming, sketching ideas, and visual collaboration.

5.4.2. Application for Trainers:

- **Lesson Planning:** Trainers can collaborate with colleagues on lesson plans, curriculum development, and educational resources using document collaboration tools.
- **Student Projects:** Project management tools facilitate the organization and monitoring of group projects, ensuring that students collaborate effectively and meet deadlines.
- **Resource Sharing:** File sharing services allow trainers to distribute instructional materials, assignments, and multimedia content to students and colleagues.
- **Interactive Learning:** Collaborative whiteboards can be used in virtual classrooms for interactive activities, brainstorming sessions, and visual learning exercises.

5.4.3. Real-Time Collaboration on Documents and Projects

Web-based productivity applications, also known as web apps, are software programs or tools that run in a web browser rather than being installed on a local computer or device. These applications are accessible from anywhere with an internet connection, making them convenient and versatile for a wide range of tasks. They are particularly valuable for collaborative work and

remote access. Nowadays a variety of web apps such as word processors, spreadsheets, and presentation applications can be accessed using almost any browser.

Google Workspace (formerly G Suite) and Microsoft 365 (formerly Office 365) are two of the most popular and widely used cloud-based productivity and collaboration suites. They offer a range of applications and services that cater to individuals, businesses, and educational institutions. For this course this book will demonstrate you Google Workspace tools in various ways to enhance different work activities:

5.4.4. Online storage

Storing your work files online is the first step towards online collaboration. Online storage is a file hosting service that allows you to upload, store, and access your files online. It is also referred to as a cloud storage service, an online file storage provider, or cyberlocker. Google Docs, One Drive and Dropbox are examples of file storage and sharing services, aimed at allowing users to upload and share all types of files across all the devices they use.

 Google Drive	 OneDrive	
https://drive.google.com	https://onedrive.live.com	https://www.dropbox.com

Google Drive

Google Drive serves as a cloud-based storage solution for documents, images, and other files. is an option available for storing and sharing documents online. It provides several functionalities to help us manage our files and their access. It allows us to upload files from our devices and grant access to these files to others. Trainers can organize and share files with team members or students, ensuring access from any device with internet connectivity.

- **Document Storage:** Managers can use Google Drive to store and organize important documents, reports, and files securely in the cloud. This ensures easy access from any device and simplifies file management.
- **Collaboration:** Google Drive enables managers to collaborate on documents, spreadsheets, and presentations in real-time using Google Docs, Sheets, and Slides. Multiple team members can edit and comment on the same document simultaneously, streamlining the collaborative process.

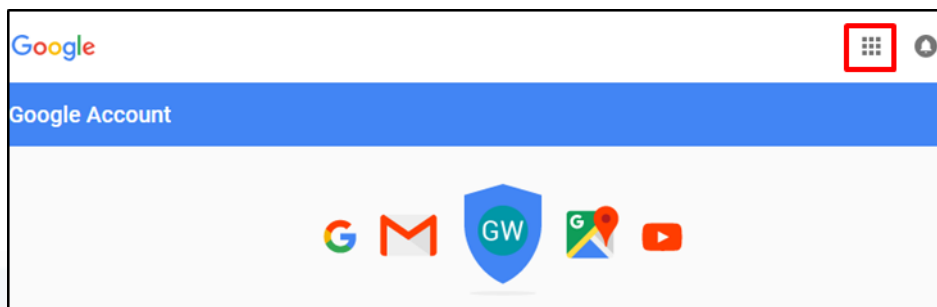
- **File Sharing:** Managers can share files and folders with team members, clients, or partners, allowing for easy information dissemination and collaboration on projects.
- **Version Control:** Google Drive automatically saves versions of documents, making it easier for managers to track changes and revert to previous versions when necessary.



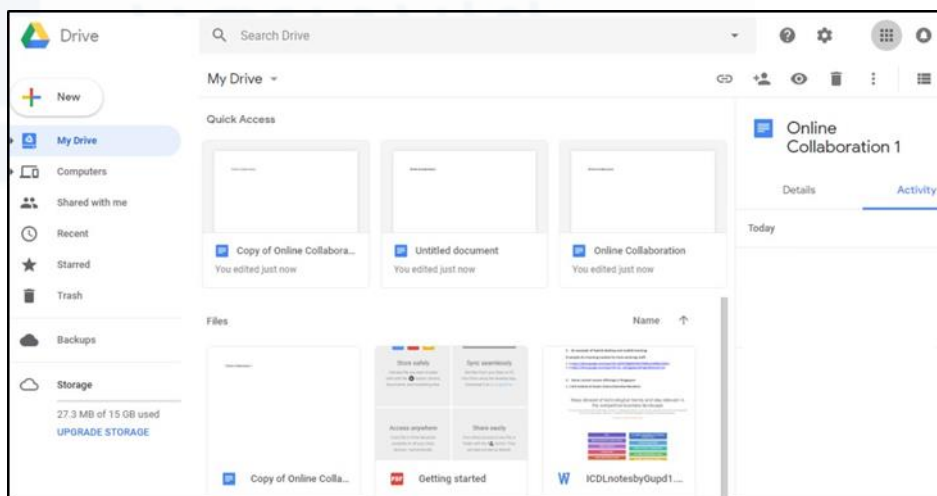
Steps: To open Google Drive:

1. Go to the webpage <https://accounts.google.com> and click Sign in.
2. Enter your registered email or phone account identity and click NEXT.

3. Enter your password.
4. Click on the tile icon at the right-hand corner of the opening page after successful sign-in:



5. Select the Google Drive icon from the drop-down menu and the Google



6. Drive screen will appear.

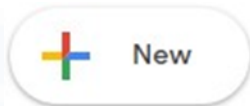


Steps: Managing Files and Folders

You can use the Google Drive account to create folders, upload and delete files.

Create Folder

1. Click on **New**.



2. Click on the option **Folder**.



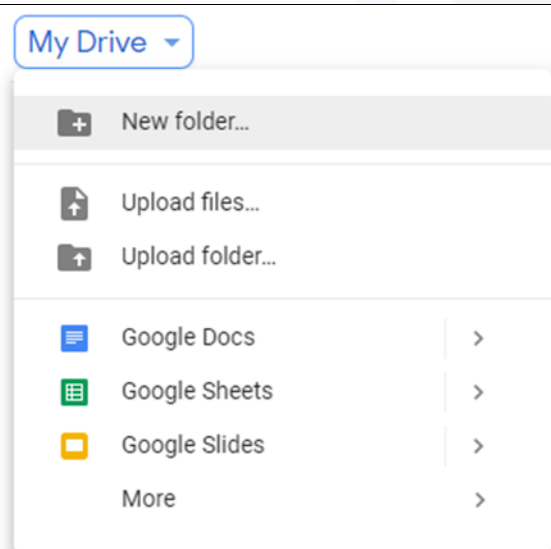
3. Type in a name in the space provided under New Folder.

4. Click on **Create**

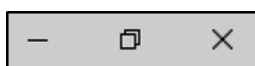


Steps: Upload a File

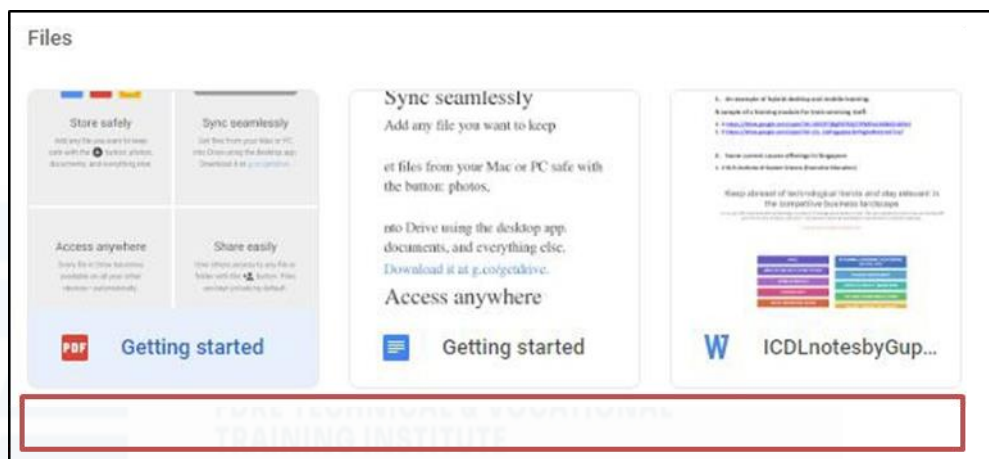
1. Click on the folder to add the file to.
2. Click on Upload files.



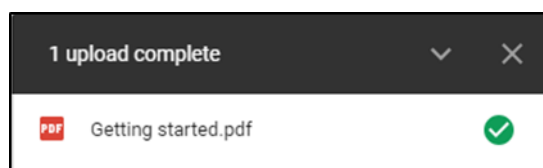
3. Locate the file you wish to upload from your computer or other storage device.
4. Click on the file name of the file you wish to upload.
5. Click Open or double-click on the file name using your mouse.
6. To upload the file quickly, reduce the size of active current window size by clicking on the following icon.



7. Drag the file to upload from the computer to the space under Files:



8. A message appears in the bottom panel, displaying the upload progress.
9. The pop-up panel will display 1 upload complete upon successful upload.





Tips: Useful links: For further understanding of managing Google Drive click the video links below

Key points about Google drive

CLICK HERE 

5.4.5. Online Calendars

An online calendar allows you to keep track of your events and activities. You can let others see your calendar, and view schedules that others have shared with you. Google Calendar simplifies scheduling and event management. you can create and share calendars to coordinate meetings, events, and deadlines. The calendar can also integrate with other apps to send event reminders.

Google Calendar:

- **Schedule Management:** you can use Google Calendar to create, manage, and organize your schedules. you can add and track meetings, appointments, and deadlines, helping you stay on top of your time management.
 - Schedule a weekly lecture: "Networking Fundamentals - Lecture" every Monday at 10:00 AM.
 - Schedule virtual office hours: "Office Hours with Trainer - Google Meet" every Friday at 1:00 PM.
- **Event Coordination:** Google Calendar allows you to schedule meetings, set reminders, and invite participants. It streamlines event coordination and ensures that team members are on the same page.
- **Sharing Calendars:** Trainers can share their calendars with their colleagues, helping everyone stay aware of each other's schedules and reducing scheduling conflicts.
- **Integration:** Google Calendar can be integrated with other tools like Gmail, making it easier for trainers to create events directly from emails.
 - Automatically sync assignments and class schedules by linking Google Classroom with Google Calendar.

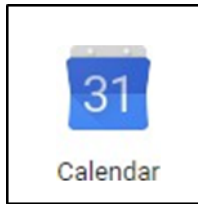


Steps: Sharing Calendar using Google Calendar

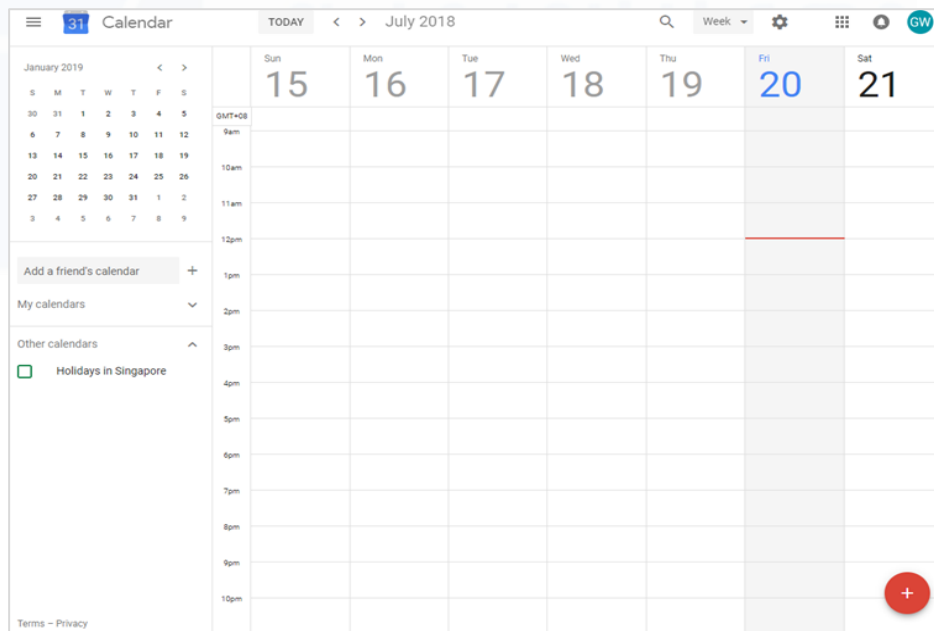
1. To Share a Calendar Go to the webpage <https://calendar.google.com> or click on the Google menu icon located on the right-hand corner of Google Chrome:



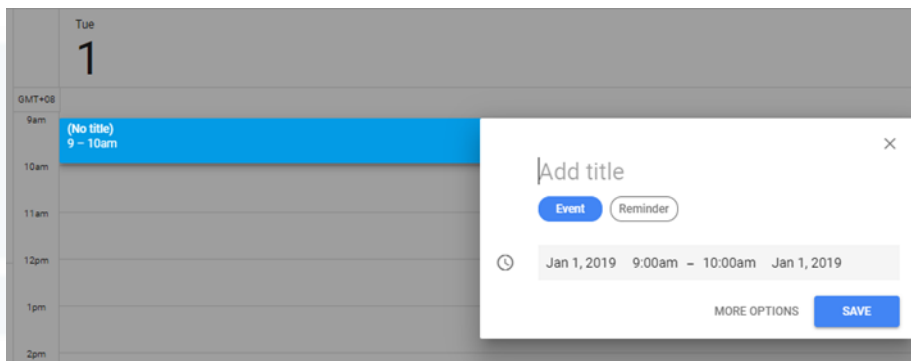
- On the expanded menu drop-down window select **Calendar**.



- Select a date on the Calendar on which you wish to mark an event.



- Select a time slot on the selected date and add a title.



- To include more details for the marked event, click on **MORE OPTIONS**.
- You may add details on the location, notification and add more descriptions about the event under the **EVENT DETAILS**.

× Add title SAVE

Jan 1, 2019 9:00am to 10:00am Jan 1, 2019 TIME ZONE

☐ All day Does not repeat ▾

EVENT DETAILS FIND A TIME

Add location

Add conferencing ▾

Notification ▾ 30 minutes ▾ ×

ADD NOTIFICATION

icdlasiageok@gmail.com ● ▾

Busy ▾ Default visibility ▾ ?

≡ B I U | | | | | | | | | |

Add description

GUESTS

Add guests

Guests can:

☐ Modify event

☒ Invite others

☒ See guest list

7. To share your calendar, enter the email address of the person with whom you want to share the event and check the appropriate boxes against the options provided under Guests can.

GUESTS

Add guests

Guests can:

☐ Modify event

☐ Invite others

☐ See guest list



Tips: Useful links: For further understanding of managing Google Drive click the video links below

Managing Google Drive

CLICK HERE

5.4.6. Productivity applications (Google Docs, Sheets, and Slides)

Google Docs, Google Sheets, and Google Slides are part of Google Workspace, which is a suite of productivity applications offered by Google. Each of these tools serves a distinct purpose:

1. Google Docs:

- Google Docs is a cloud-based word processing application. It allows users to create, edit, format, and collaborate on documents online. Features of Google Docs include:
 - **Real-time collaboration:** Multiple users can work on the same document simultaneously and see each other's edits in real-time.
 - **Access from any device:** Documents are stored in the cloud, making them accessible from any device with an internet connection.
 - **Version history:** Google Docs saves versions of documents, enabling users to track changes and revert to previous versions if needed.
 - **Template library:** Users can choose from a variety of templates for different types of documents, such as resumes, reports, and newsletters.

2. Google Sheets:

- Google Sheets is a web-based spreadsheet application. It allows users to create, edit, analyze, and collaborate on spreadsheets. Key features of Google Sheets include:
 - **Data analysis:** Users can perform data analysis, create charts and graphs, and use formulas to perform calculations on spreadsheet data.
 - **Real-time collaboration:** Like Google Docs, Google Sheets enables multiple users to collaborate on a single spreadsheet simultaneously.
 - **Cloud storage:** Spreadsheets are stored in the cloud, ensuring easy access from anywhere and automatic saving.
 - **Import and export data:** Google Sheets supports importing and exporting data in various formats, making it compatible with other spreadsheet software.

3. Google Slides:

- Google Slides is a web-based presentation application, similar to Microsoft PowerPoint. Users can create, edit, and deliver presentations online. Key features of Google Slides include:
 - **Slide creation and editing:** Users can create slides with text, images, charts, and other multimedia elements.
 - **Presentation delivery:** Google Slides provides tools for delivering presentations, including speaker notes and presentation mode.
 - **Collaboration:** Multiple users can collaborate on a presentation in real-time, allowing for group input and feedback.
 - **Template gallery:** Users can choose from a variety of presentation templates to create professional-looking slideshows.

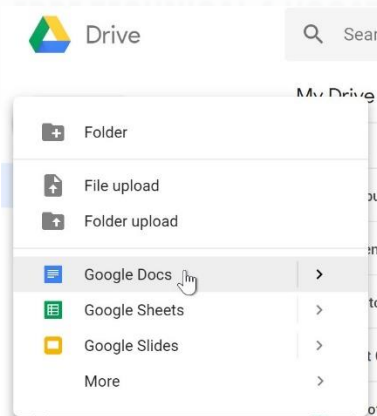
These three applications are accessible through a web browser and are designed for collaborative work. They are commonly used in both personal and professional settings for tasks such as document creation, data analysis, and delivering presentations. Additionally, they integrate seamlessly with other Google Workspace applications and offer compatibility with common file formats used in productivity software.

Starting from the section below you will practically go through the different steps that are necessary in collaborating works using google docs.

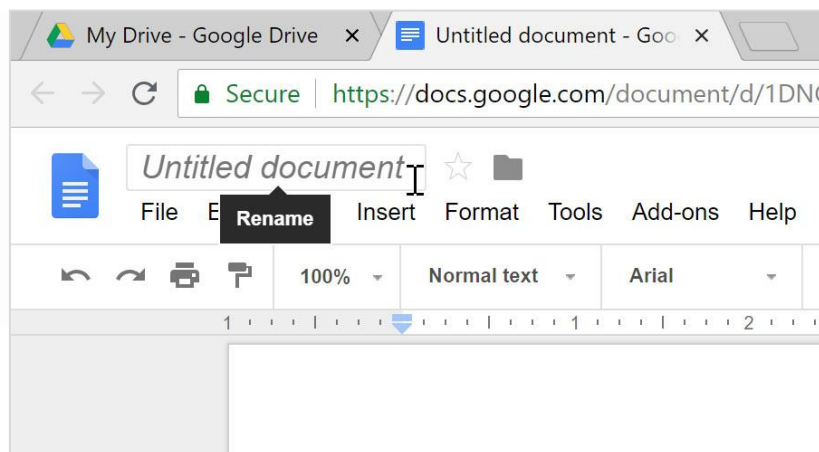


Steps: To create a new file on Google Docs

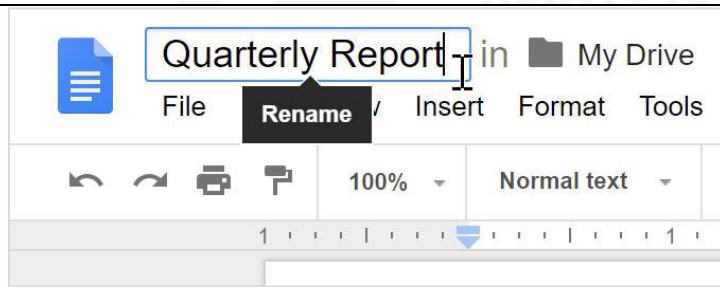
1. From Google Drive, locate and select the **New** button, then choose the type of file you want to create. In our example, we will select **Google Docs** to create a new **document**.



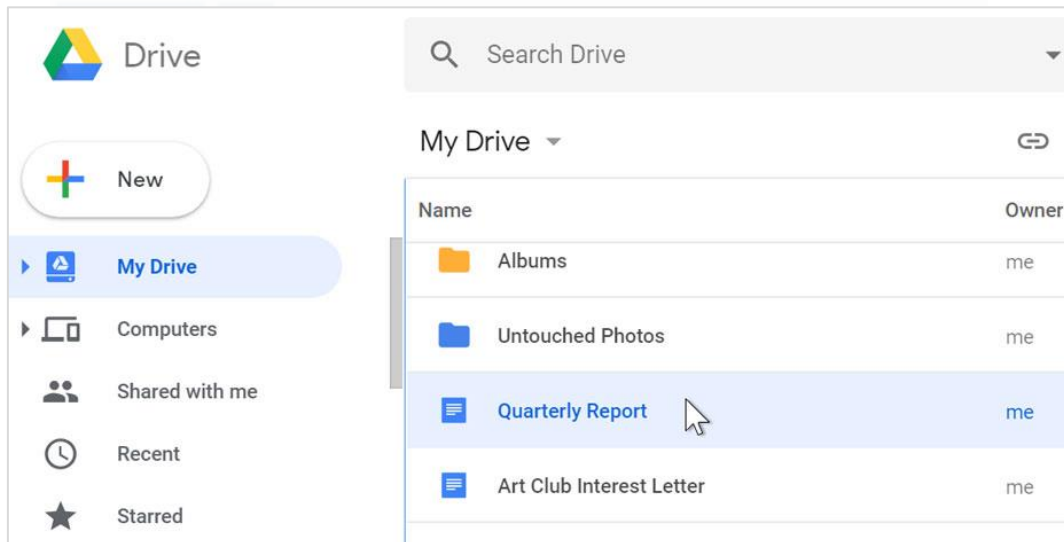
2. Your **new file** will appear in a **new tab** on your browser. Locate and select **Untitled document** in the upper-left corner.



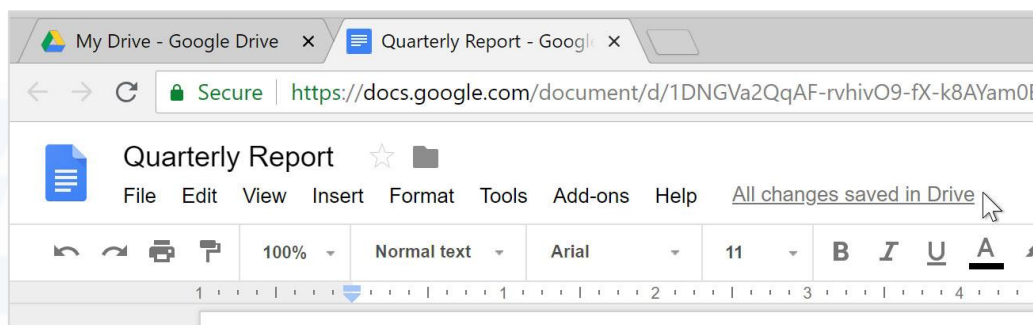
3. The **Rename** dialog box will appear. Type a **name** for your file, then click **OK**.



4. Your file will be **renamed**. You can access the file at any time from your Google Drive, where it will be **saved** automatically. Simply double-click to open the file again.

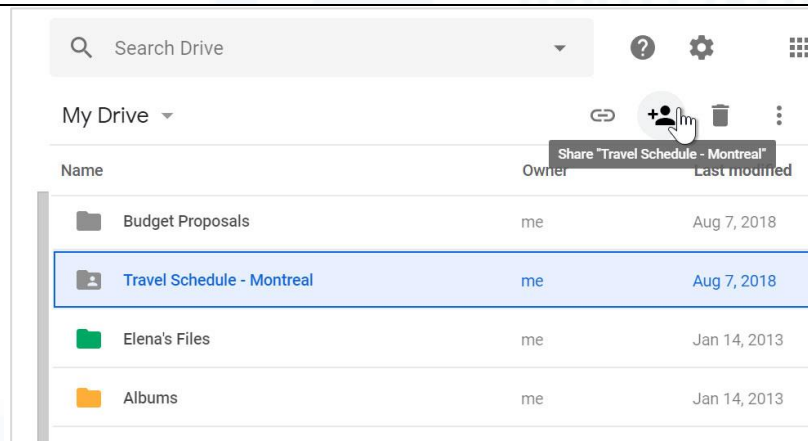


You may notice that there is no **Save** button for your files. This is because Google Drive uses **autosave**, which automatically and immediately saves your files as you edit them.

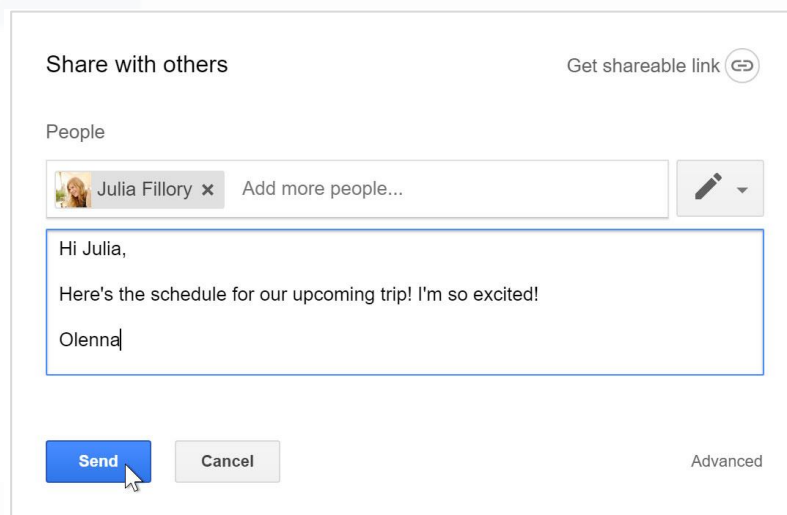


Steps: To share a file with a group of people

1. Locate and select the file you want to share, and then click the **Share** button.



2. A dialog box will appear. In the **People** box, type the email addresses of the people you'd like to share the file with. If you want, you can add a **message** that will be emailed to the people you share the file with.
3. Click **Send**. Your file will be shared.



For more control over your files, you can click the drop-down arrow to decide whether people can **edit**, **comment** on, or simply **view** the file.

Share with others

Get shareable link

People

Julia Fillory

Add more people...

Hi Julia,
Here's the schedule for our upcoming trip! I'm so excited!
Olenna

Can organize, add, & edit

Can view only

Send

Cancel

Advanced

Suggesting mode

Google Drive also has a feature called Suggesting mode, which is similar to the Track Changes feature in Microsoft Office. This allows each collaborator to make changes, while giving the other collaborators a chance to review the changes before making them permanent. This page has more information about how to make suggested edits and accept or reject other people's changes.



Steps: Adding and replying to comments

Comments are one of the features that allow you to collaborate in Google Docs. In this lesson, you'll learn how to create and reply to comments, tag collaborators, and more.

Anyone with editor or commenter access to the Google Doc can create a comment. There are several ways to add a comment, but the easiest way is to select the text that you want to comment on, then click the button that appears on the right side of the screen.

	Food or supplies
	Black beans and rice
	Fried plantains
	Plates, cups, silverware

+

Add a comment

The comment box opens, and you can type your message.



Javier Flores

Could these be made vegetarian?

Comment

Cancel

If you want to make sure that a specific person sees your comment, you can tag them. To tag someone, type the **@ symbol** and start typing their email address. Then select them from your list of contacts.



Javier Flores

Could these be made vegetarian?

@juli



juliafillory@gmail.com



If you tag someone who doesn't already have access to the document, Google will ask you to share the document with them before posting your comment. When you tag someone, you have the option to assign the comment to them. Assigning a comment to someone means that they will be responsible for marking it as complete.



Javier Flores

Could these be made vegetarian?

@juliafillory@gmail.com



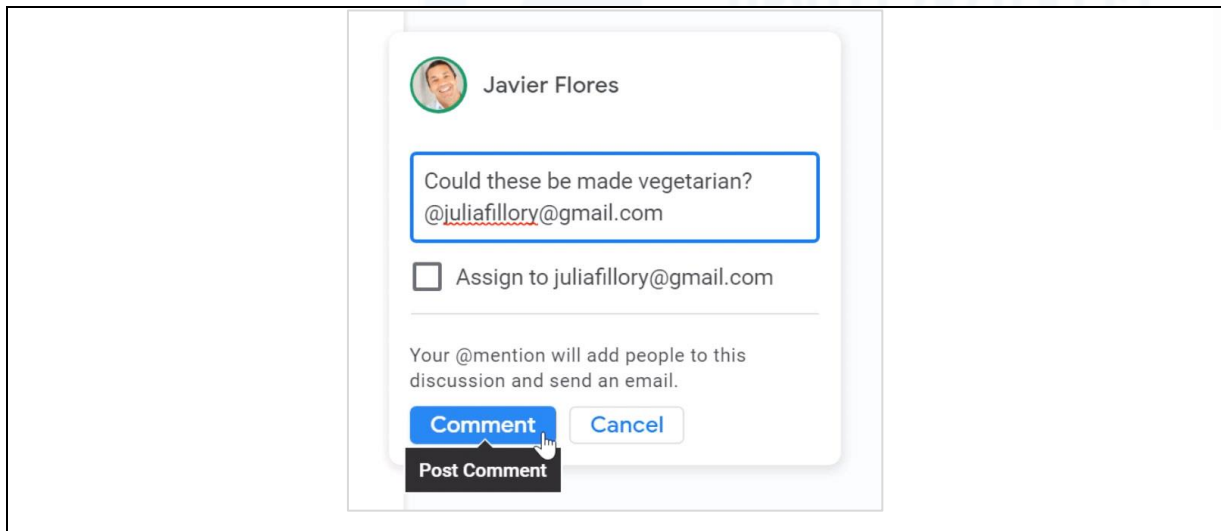
Assign to juliafillory@gmail.com

Your @mention will add people to this discussion and send an email.

Comment

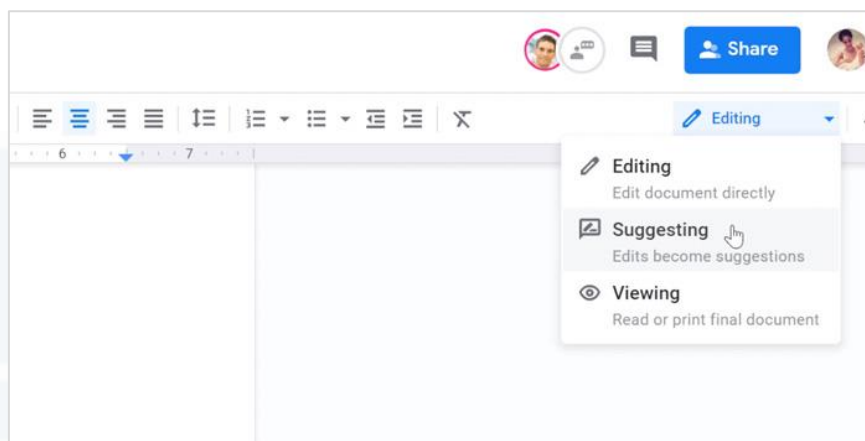
Cancel

When you're finished typing your comment, click **Comment**.



Steps: Using Suggestion mode to track changes

When multiple people are working on a document, it's helpful to see how the document changes and grows over time. Google Docs lets you track any edits that are made, comment on them, and decide whether they should be added to the document. Google Docs calls this feature Suggestion mode, but it's very similar to the Track Changes feature in Microsoft Word. To track changes in Google Docs, you have to switch from **Editing mode** to **Suggestion mode**. Click the pencil icon underneath the Share button, and choose **Suggesting** from the drop-down menu.



While in Suggestion mode, any text that you add is **highlighted** and any text you delete is **crossed out**. To the right, a suggestion box appears with every change. This gives other users a chance to review changes before they're made permanent.

Beautiful grounds Dine-in kitchen Spacious bedrooms

~~Private but centrally located,~~ historic Villa Piña is just moments from fine dining, shopping, and public transportation. Enjoy the best of both worlds at Villa Piña—the beauty of nature and the culture of a vibrant neighborhood. *Your new home is waiting!*

For more information, visit us online:
www.villapinacondos.com

Comments:

- Olenna Mason 9:06 AM Yesterday
Delete: "Private but centrally located,"
- Olenna Mason 9:06 AM Yesterday
Add: "Your new home is waiting!"

Reviewing changes

You can also see changes suggested by other people. If you have a question about a particular change, you can leave a comment in the suggestion box. Click the suggestion box, click the text field, write a response, and click **Reply**.

Henri Rousseau 11:13 AM Today ✓ ✕

Add: "is the cost of rent"

Do we need to include this?

Reply Cancel

Reply to comment

Henri Rousseau 11:13 AM Today ✓ ✕

Add: "long"

To approve a change, click the **checkmark**. It will then become part of the document. To reject a change, click the **X**, and the suggestion will disappear.

Do we need to include this?

Henri Rousseau 11:13 AM Today ✓ ✕

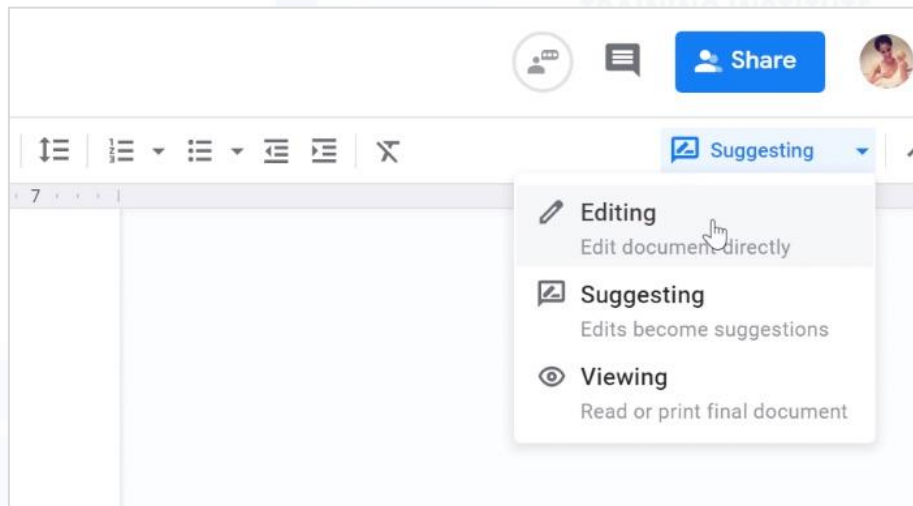
Replace: "June 1" with "May 15"

Reply...

Henri Rousseau 11:13 AM Today ✓ ✕

Replace: "ABOUT VILLA PIÑA" with "SAY HI"

To leave Suggestion Mode, click Suggesting in the top-right corner and select **Editing**.



While in editing mode, you can still accept, reject, or comment on suggestions, but you can't create any new ones.



Tips: Useful links: For further understanding of collaboratively work on Google Doc click the video links below

Learning the basics of Google Docs

CLICK HERE 

Google Docs collaboration: Editing, Suggestions, and Comments

CLICK HERE 

Track Changes and Suggest Edits in Google Docs

CLICK HERE 

In the following activity, participants learn how to collaborate on a group project using Google doc.



Activity 5: Collaborative Academic Project Using Google Drive

Title: Collaborative Academic Project Using Google Drive

Objective: To demonstrate effective collaboration on an academic project using Google Drive and google Doc.

Case Scenario: You are a group of four students working on a group project for your history class. Your project is about creating a presentation on "The Industrial Revolution." Each team member has specific tasks to complete, and you need to collaborate using Google Drive to create a cohesive and well-organized presentation.

Step-by-Step Activity:

Step 1: Set Up the Project Folder

1. Create a new Google Drive folder for your project and name it "Industrial Revolution History Project."

Step 2: Share the Folder

2. Share the folder with your team members:

- Click on the folder.
- Click the "Share" button in the upper-right corner.
- Enter your team members' email addresses and set their permissions to "Can edit."

Step 3: Create Subfolders

3. Inside the project folder, create subfolders for each major section of your project, such as "Research," "Images," "References," and "Presentation."

Step 4: Organize Tasks

4. In the "Research" subfolder, create a **Google Docs document** for each team member to write their respective sections of the project. Assign each team member a specific section, like "Causes," "Effects," "Innovations," and "Impact."

Step 5: Collaborative Document Editing

5. Each team member should:
 - Open their assigned Google Docs document.
 - Add their research and content to their document.
 - Comment and suggest edits in each other's documents to ensure consistency and accuracy.

Step 6: Collecting Visuals

6. In the "Images" subfolder, each team member should upload relevant images, graphs, and charts that complement their research. Ensure images are properly named for easy identification.

Step 7: Creating References

7. In the "References" subfolder, create a Google Sheets document for collecting and citing your sources. Each team member should add their sources and properly format citations.

Step 8: Presentation

8. In the "Presentation" subfolder, create a Google Slides presentation. Each team member can work on a specific section of the presentation and incorporate the content from their Google Docs documents.

Step 9: Regular Updates and Communication

9. Use the comment feature in Google Docs, Sheets, and Slides to communicate with team members, ask questions, and provide feedback.

Unit 6: Online Security and Privacy Control

Learning Outcomes: By the end of Unit Nine, Trainers will be able to:



- Understand the key principles of online security and privacy, including common threats and strategies to mitigate them.
- Manage digital identity and privacy settings across various platforms to ensure the security of personal information.
- Develop and apply best practices for maintaining online security and privacy in educational environments.



Discussion

- What is Security? Mention some potential threats to computers, devices and data.
- What is Privacy? And how we can control It?
- What is digital Identity? Mention Examples of a digital identity.
- What are the Reasons for Protecting Personal Information online?

6.1.Introduction to Security and Privacy

Security refers to the measures and practices that protect data, systems, and resources from unauthorized access, damage, disruption, or theft. It encompasses strategies and tools to ensure the confidentiality, integrity, and availability of information and resources, often involving authentication, encryption, firewalls, and other protective mechanisms (Smith & Johnson, 2022). Ensuring online security and privacy is essential for educators to protect both personal and institutional data. Understanding the risks and implementing best practices can help mitigate potential threats and create a secure digital environment.

6.1.1. Reasons for Protecting Personal Information

Nowadays, more and more people are using the Internet and mobile devices for online shopping, banking, business, communication and other activities. Some companies rely on various cloud services and other web-based services to run their day-to-day business. Making information easier to access through the Internet also exposes businesses to some security issues. Hackers are able to take advantage of vulnerabilities in the transmission of data online to gain unauthorized access to systems and networks. There have been many reports of data breaches and identity theft in the past few years. Cybercriminals often steal personal information such as banking records, credit card details, usernames and passwords for financial gain (Smith J. R., 2020).

Personal Information is most often used by companies to identify and authorize users who transact business on their websites. For example, an online shopping site may have a record of

a user's name, address, credit card details, etc (Brown & Johnson,, 2018). Hackers may steal this information in order to impersonate a user and then conduct fraudulent and unauthorized transactions and other fraudulent activities. Without adequate security and protection of personal information, users are exposed to Internet based crimes such as identity theft and fraud and loss of privacy. Companies which do not protect their user's personal information may lose customers' trust - and their business.

6.2. Threats to Computers, Devices and Data

Maintaining data security is a vital for individuals, small businesses and large corporations. Ensuring that data is kept secure is essential in avoiding disaster, both personally and professionally, but unfortunately it can be a difficult task due to malicious or unintentional behavior (Garcia & Martinez, 2020). There are many potential threats to computers, devices and data, including:

- Malware
- Unauthorized access
- Accidental damage
- Cybercrime
 - Social Engineering
 - Identify Theft

It is important to understand these threats so that you can plan appropriately to reduce the likelihood of them affecting you.

6.2.1. Malware

This is malicious software typically designed to install itself on a computer or device without consent in order to damage files or steal information (Garcia & Martinez, 2020). Malware is an umbrella term used to refer to viruses, worms, Trojans, spyware, adware, and other forms of malicious code. Installed without the user's consent, malware is designed to disrupt computer operation, collect sensitive information, or gain unauthorized access to a computer, device, or network.

The main types of malware include:

- **Virus:** An intrusive program that infects computer files and may cause damage.
- **Worm:** Self-replicating malware that uses a computer network to send copies of itself to other computers.
- **Trojan:** Destructive program that masquerades as an application.
- **Spyware:** Malware that collects information on user browser habits without their consent.
- **Ransomware:** A type of malware that encrypts files, demanding payment for their release.

Example: A hospital's computer system is attacked by ransomware, encrypting all patient records. The attackers demand a ransom to be paid in cryptocurrency to regain access to the critical data.

Example: You download a file from an untrusted website, which turns out to be malware. This malware then installs itself on your computer and starts to collect your personal information or encrypt your files for ransom.

6.2.2. Unauthorized access

Accessing computers, devices or data without permission, whether the intention is malicious or not, may have negative consequences such as the alteration, loss or theft of data (Mitchell & Turner, 2018).

Example: A cybercriminal gains unauthorized access to a company's computer system to steal customer data, such as credit card numbers or personal information.

6.2.3. Accidental damage

Damage from accidents such as breakages, fires or floods may result in the destruction, alteration or loss of computers, devices and data (Mitchell & Turner, 2018).

6.2.4. Cybercrime

An offence that involves using the Internet or a computer to carry out illegal activities, often for financial or personal gain. Examples include **identity theft** and **social engineering**.

A. Social Engineering

Social engineering is a way to manipulate or influence people with the goal to illegally obtain sensitive data (for example, passwords or credit card information) (Roberts & Parker, 2020). Social engineers research and learn about the personal environment of their target and fake their identity to obtain confidential information from the victim. In most cases, they infiltrate third-party computer systems to spy on sensitive data.

Methods of Social Engineering

- **Phone calls:** One of the most common methods social engineers use in their attacks is conducted via the phone. The attacker may impersonate a person of authority, a person representing a person of authority or a service provider to extract information from an unsuspecting user. For example, a person claiming to be the CEO of the company calls someone on the helpdesk, requesting for his password, which he claims to have forgotten.
- **Phishing:** A type of social engineering attack wherein the perpetrator sends an e-mail that appears to come from a legitimate source (for example, a banks) (Brown & Wilson, Social engineering techniques and countermeasures in the digital age. , , 2020). The e-mail usually

requests for verification of information, sometimes warning of dire consequences if the recipient fails to comply. A phishing e-mail usually includes links to fraudulent web pages that are made to look very similar to legitimate web pages, including logos and content.

- **Pharming** In a pharming scam, a victim's computer or server is infected with malicious code that re-directs them to bogus websites (Brown & Wilson, Social engineering techniques and countermeasures in the digital age. , , 2020). It is similar to Phishing in that it uses fake or spoofed websites to collect confidential data. However, in Pharming, the victim is re-directed to a bogus site even if they have entered the correct web address.
- One way a pharming attack is done is by using **DNS poisoning**. In a DNS poisoning attack, the domain name system table in a server is modified so that users are automatically redirected to fraudulent sites.
- **Shoulder Surfing:** This includes direct observation techniques, such as looking over someone's shoulder, to get information. It is commonly used to obtain passwords, ATM PINs and security codes.

Phishing examples:

1. Email phishing:

Example: You receive an email that appears to be from your bank, stating that there's been suspicious activity on your account. The email includes a link to a login page that looks like your bank's website.

Case: In 2017, a widespread phishing campaign targeted Gmail users. Attackers sent seemingly legitimate Google Docs invitations, leading recipients to a fake login page. Many individuals fell victim to this scheme.

2. Spear Phishing:

Example: An attacker researches a specific individual, perhaps an academic leader at a university, and sends an email pretending to be from a trusted colleague. The email requests confidential information.

Case: The 2016 spear-phishing attack on the Democratic National Committee (DNC) is a notable case. Hackers sent emails posing as colleagues to DNC members, leading to the compromise of sensitive political data

3. Vishing (Voice Phishing):

Example: You receive a phone call from a purported tech support agent who claims that your computer is infected. They ask you to install remote access software to "fix" the issue, granting them control of your device.

Case: The "Microsoft Tech Support" scam is a common example of vishing. Scammers impersonate Microsoft technicians, attempting to gain access to victims' computers or steal personal and financial information.

B. Identify Theft

Identity theft is when someone deliberately impersonates and uses another person's identity. This is usually done for financial gain or to obtain credit and/or other benefits using someone else's name: for example, when someone uses another person's identity to obtain a driver's license (Davis & Garcia, 2018). This type of fraud could have a devastating effect on the person whose identity has been assumed.

An initial implication of identity theft is the amount of time and money needed to re-establish your identity and credit history and to clear your name.

Methods of Identity Theft

- **Information Diving:** Also known as Dumpster Diving, it is a method of obtaining personal or private information by digging through a dumpster or trash bin for discarded documents or material such as utility bills or credit card statements (Davis & Garcia, 2018).
- **Skimming:** Identity thieves use skimming as a method of capturing a victim's personal data by using a small electronic device. A skimmer is a device that is usually attached to an ATM machine's card slot. A victim may unwittingly slide his card into the skimmer, which then reads and stores all the information from the card's magnetic strip (Davis & Garcia, 2018).
- **Pretexting:** This involves creating and using an invented scenario (the pretext) to engage a targeted victim. The pretext increases the chance the victim will reveal information or perform actions that would be unlikely in ordinary circumstances – for example, someone pretending to be from a company that provides you with a service might persuade you to share your bank account details with them.



Discussion

- Discuss Different kinds of attacks or threats you have experienced locally in your work environment or privately.

6.3. Methods to Protect Personal and Institutional Data



Discussion

- How we can protect our devices and data from unauthorized access?
- List different mechanisms you use to protect yourself online.

Protecting personal and institutional data is essential to ensure confidentiality, integrity, and availability. It involves implementing security measures to prevent unauthorized access, data breaches, and loss of sensitive information. Techniques include:

6.3.1. Use anti-virus software

Install and regularly update anti-malware software to protect against viruses, spyware, and ransomware. Anti-virus software is used to scan files to identify and eliminate malware. There are numerous free and paid anti-virus software packages available. Norton, McAfee, windows defender, Kaspersky, AVG and Avast Antivirus are the popular antiviruses. But the popularity and effectiveness of antivirus software can change over time, It is important to research the available options (Smith & Johnson, 2022). This are some tips when you use Anti- virus software:

- Use anti-virus software to detect viruses and stop them from being installed or removing them.
- Regularly update anti-virus, application and operating system software to detect new viruses, fix known problems and security risks.
- You can use antivirus software to scan external drives and downloaded software.

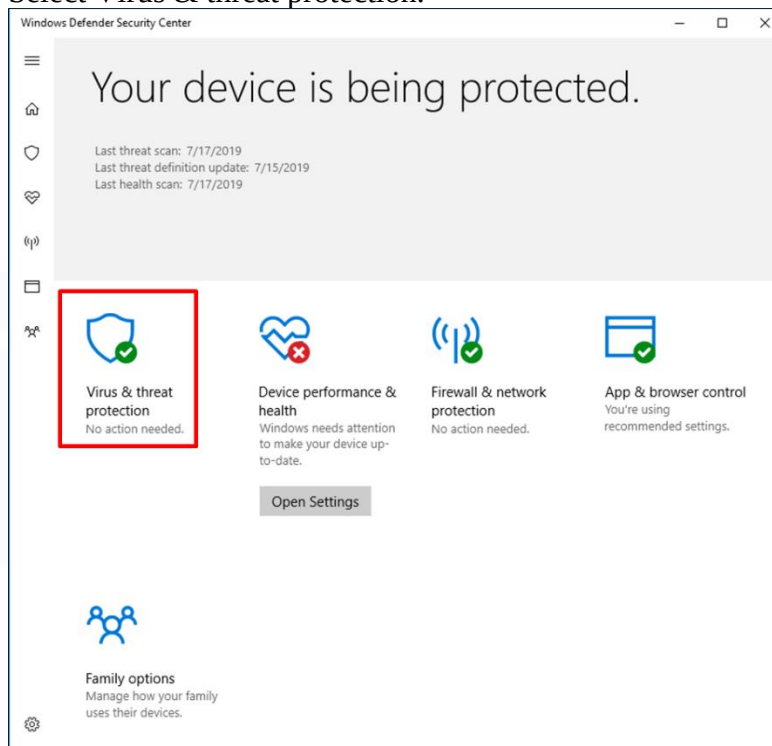
An example of anti-virus software is Windows Defender. Windows Defender software is provided with Windows 10. Windows Defender Security Center is a central location to view status and manage security features, such as firewall and antivirus. You can choose to perform different types of scans:

- **Quick scan** – This search for viruses in locations where they are most likely to occur.
- **Full scan** – This searches the entire computer for viruses but will be slower and may affect your computer's performance more when it is running.
- **Custom Scan** – This allows you to choose which files and location you want to check.

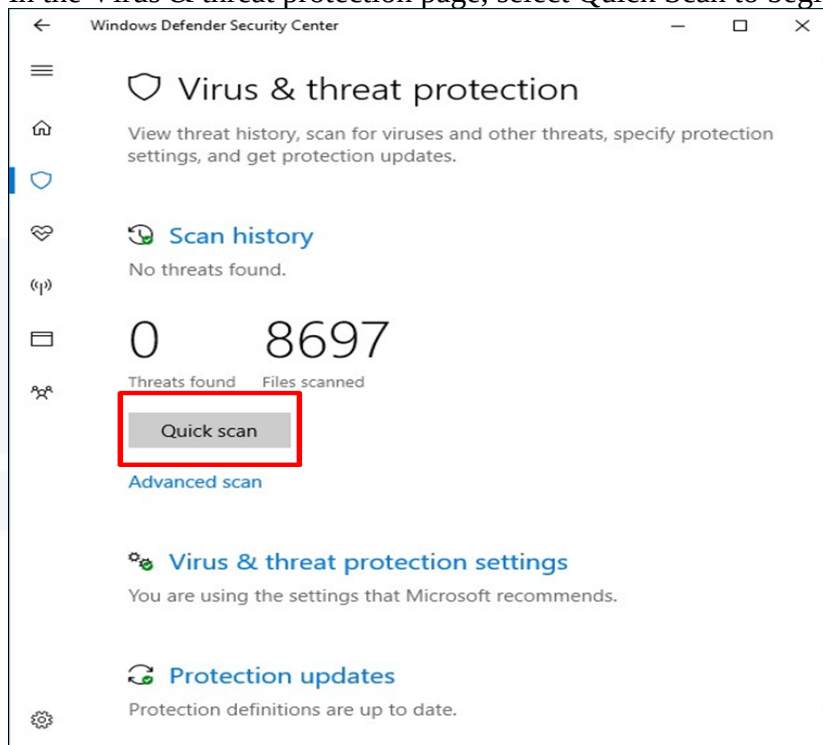


Steps: To perform a quick scan in Windows Defender Security Center:

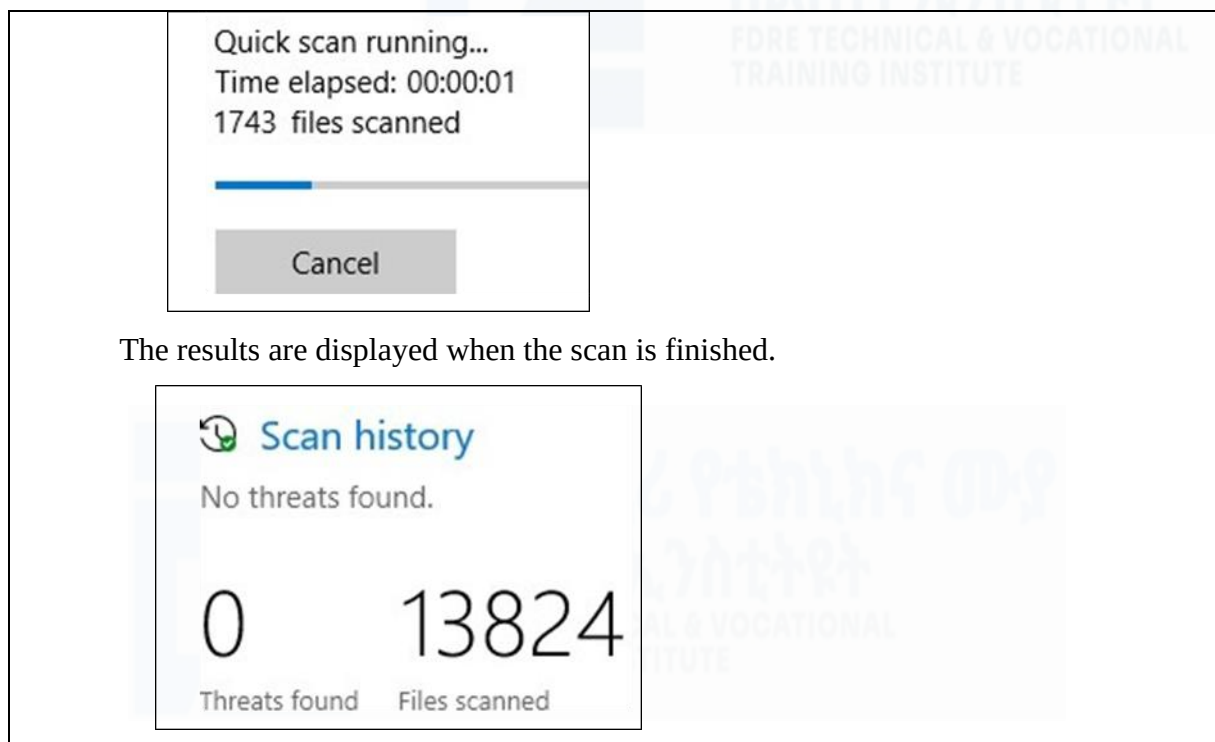
1. Open Windows Defender by clicking the search tool on the taskbar and entering Windows Defender.
2. Select Windows Defender Security Center.
3. Select Virus & threat protection.



4. In the Virus & threat protection page, select Quick Scan to begin a quick scan.



5. Windows Defender runs the quick scan.



6.3.2. Regularly update Software

Software developers often release software updates to address problems or fix security vulnerabilities in their products. These updates help prevent or fix problems or enhance and improve how your computer works. Therefore, it is important to regularly check for updates to your software, such as your anti-virus, application and operating system software.

Issues associated with failing to keep your software up to date may include (Smith & Johnson, 2022):

- Vulnerability to viruses, spyware and other malware.
- Software crashing, freezing, or performing poorly.

As well as resolving security issues, software updates not only improve security but may also contain improvements and new features.



Steps: To Change Windows Update Settings in Windows 10

To turn on Automatic Updates yourself, follow these steps:

1. Configuring Automatic Updates in Windows 10
2. Select the Start button
3. Select Settings
4. Select Update & security
5. Select Windows Update
6. Select Check for Updates (Updates will download and install if they are available)
7. The following options are available:

- **Automatic (recommended)**

This option lets you select the day and the time that updates are automatically downloaded and installed. This can be every day, or it can be on a specific day and time.

- **Download updates for me, but let me choose when to install them**

This option automatically downloads updates, but requires user interaction to install them.

- **Notify me but don't automatically download or install them**

This option notifies you that there are updates available. It requires user interaction to download them and install them.

- **Turn off Automatic Updates**

This option disables Automatic Updates. It provides a link to the Windows Update Web site where you can manually select, download, and install updates.

6.3.3. Use Strong passwords



Discussion

- How strong is your password?
- Do you think using the same password for every platform a good practice?

Use strong passwords to prevent unauthorized access. Passwords should be of adequate length and character mix, kept private and changed regularly. Password policies are guidelines or requirements on the creation and use of passwords. These passwords can be required for access to computer systems, applications, shared files, networks, online forums, online shopping accounts and services, cloud storage, social media and email accounts etc.

The following are some guidelines for password policies (Smith & Johnson, The role of strong passwords in protecting personal information: A comprehensive analysis. , 2020):

- **Create passwords with adequate length:** While the word adequate may seem quite vague in this context, it is important to generate a password that is usually over 8 characters to reduce the chances of someone figuring it out. Many websites have minimum password length requirements.
- **Create passwords with adequate character mix:** Passwords that use a mix of caps characters and numbers are stronger than passwords that only use lowercase letters. Like password length, having a password that has character mix, like starting with a capital letter and including numbers, can be a requirement put in place by certain websites. For example, a password such as “fireworks” can be made stronger by varying the character style. If you capitalize the first letter, and swap the i and o with the numbers 1 and 0 you get “F1rew0rks” which is less likely to be solved.

- **Avoid using passwords that include your personal information**, such as your name, birthdate, or spouse name.
- **Avoid words found in the dictionary.**
- **Do not share passwords:** This may seem an obvious point, but disclosing your password to other people, even if they are trusted colleagues, friends or family, is not recommended. If you need to share a password, make sure it is with someone who will not take advantage of your trust or end up revealing it to a third party.
- **Change regularly:** It is recommended that you change your passwords from time-to-time. This can help prevent someone who has gained knowledge of your password from monitoring your activities over an extended period of time.



Activity 6: To test how secure your password is

Title: Secure password testing

Objective: To test how our passwords are strong

Instructions:

- Go to <http://howsecureismypassword.net/> to test how secure your password is:
- Tested it with different sample passwords of your own or write “password”.



6.3.4. Use Encryption

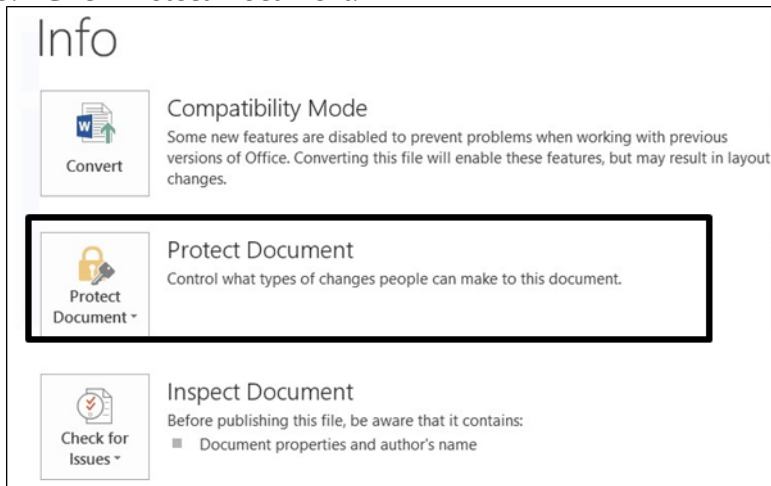
Encryption is a process that encodes data or information so that only authorized users can read the information (Smith & Johnson, 2022). In the event that the data is intercepted by an unauthorized user, the interceptor will need to decrypt the data first before he is able to read it. Encryption is used to protect data as it's passed over a network. It is often used to prevent illegal access to or reproduction of information. It is better to Encrypt sensitive data both in transit and at rest to prevent unauthorized access.

Decryption is the process of changing encrypted data back into its original form, so that it can be read. Decryption uses a key, or algorithm, to “unlock” the encrypted data. A common use of encryption is when data is sent through a secure web connection.

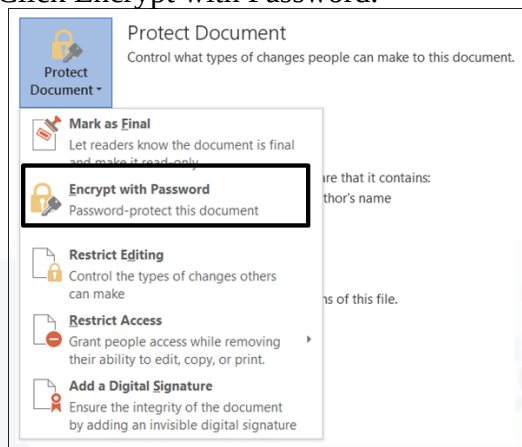


Steps: To encrypt Microsoft Word document with password

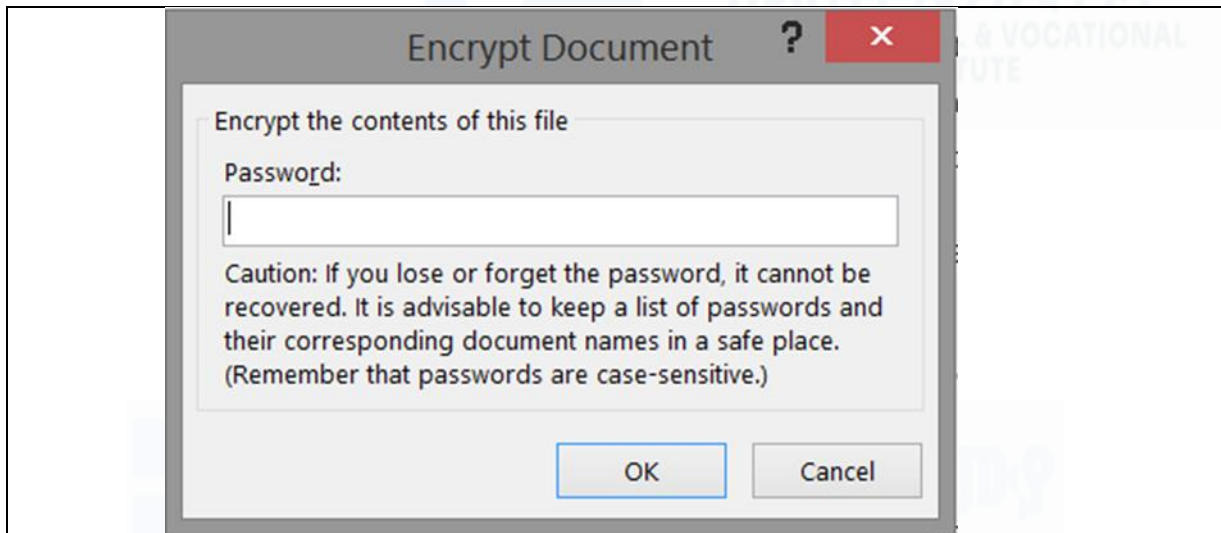
1. On Microsoft word Click the FILE tab.
2. Click Info.
3. Click Protect Document.



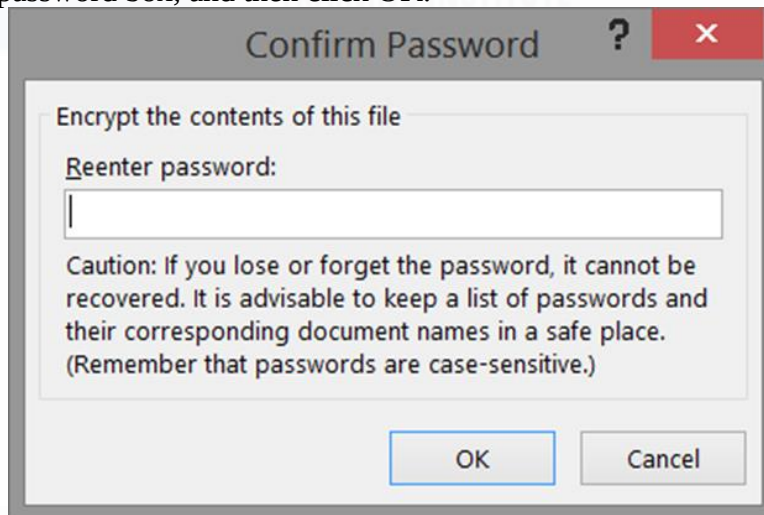
4. Click Encrypt with Password.



5. In the Encrypt Document dialog box, type a password in the Password box.



6. Click OK.
7. In the Confirm Password dialog box, type the password again in the Reenter password box, and then click OK.



8. Save the file.

6.3.5. Regularly Back Up Data to Remote Location:

Regularly back up data to a remote location to keep it safe in the event of problems such as network, hardware or software problems, theft or accidental damage (Jones & Patel, 2018). It is important to make regular backups as your files can be lost or destroyed accidentally; the hard disk may also develop problems. Thus, backups must be made to an external device such as CDs, DVDs, external hard disks or USB drives.

Another option is to back up data on the Internet, using a “cloud” storage solution features (e.g., Google Drive, Microsoft OneDrive). By frequently backing up to a Web-based location, the risk of data loss because of fire, theft, file corruption, or other disaster is virtually eliminated. Viewed

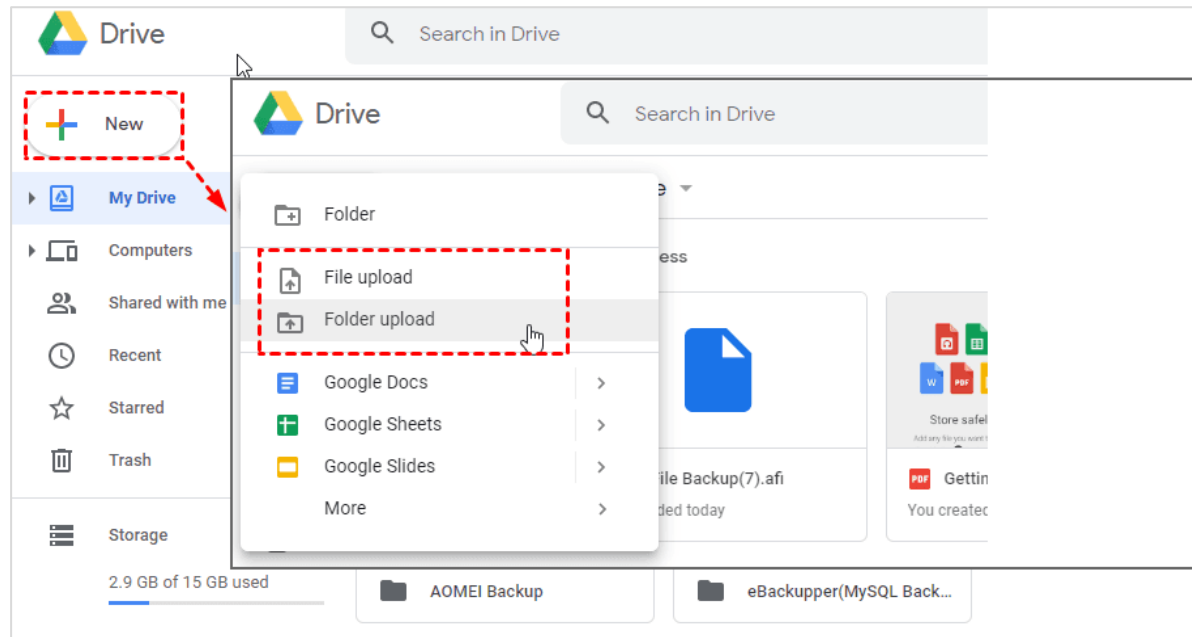
through a Web browser, remote files and folders appear as if they are saved on an external local hard drive.



Steps: Back Up Data to a google cloud

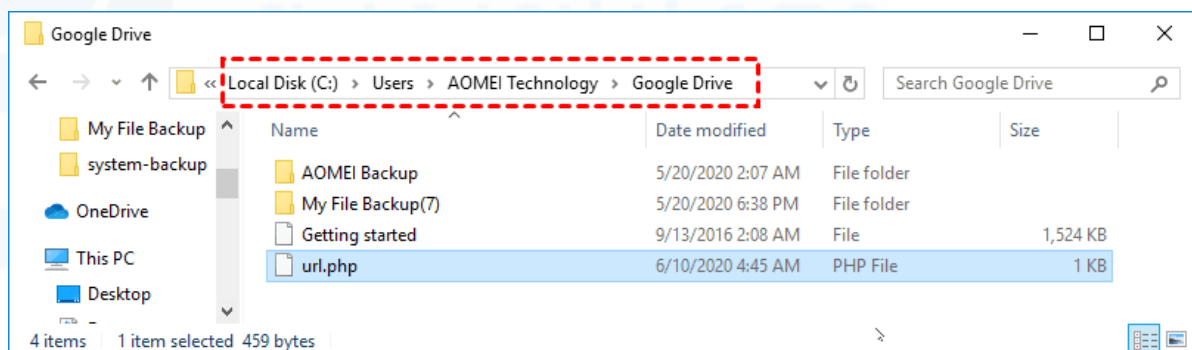
Way 1: Google Drive web page

Open Google Drive web page, log in your account. Then click + **New** button -> **File Upload** or **Folder Upload** to sync files to Google Drive manually.



Way 2: Google Drive folder

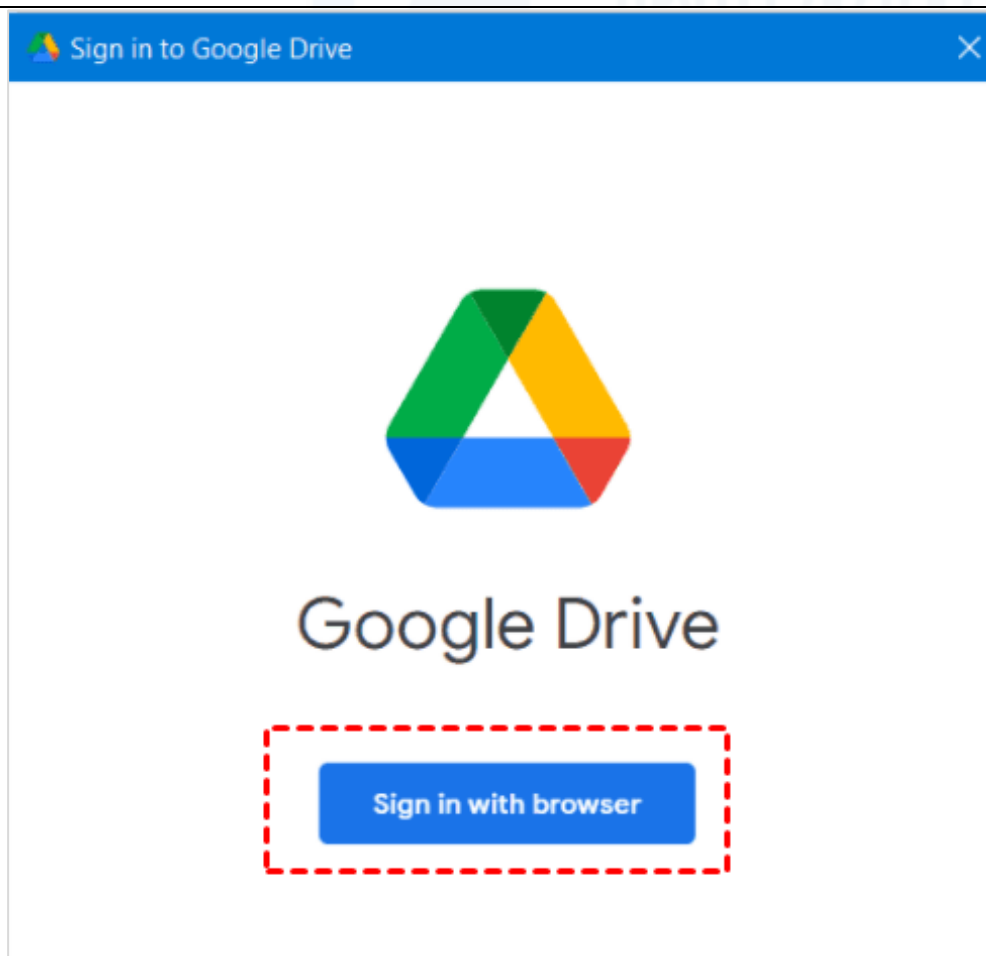
You could **Drag and Drop** files or folders to Google Drive folder on the desktop. And then all the data will be synced to Google Drive automatically.



Way 3: Sync files via Google Drive for desktop

See below detailed steps to sync files to Google Drive automatically:

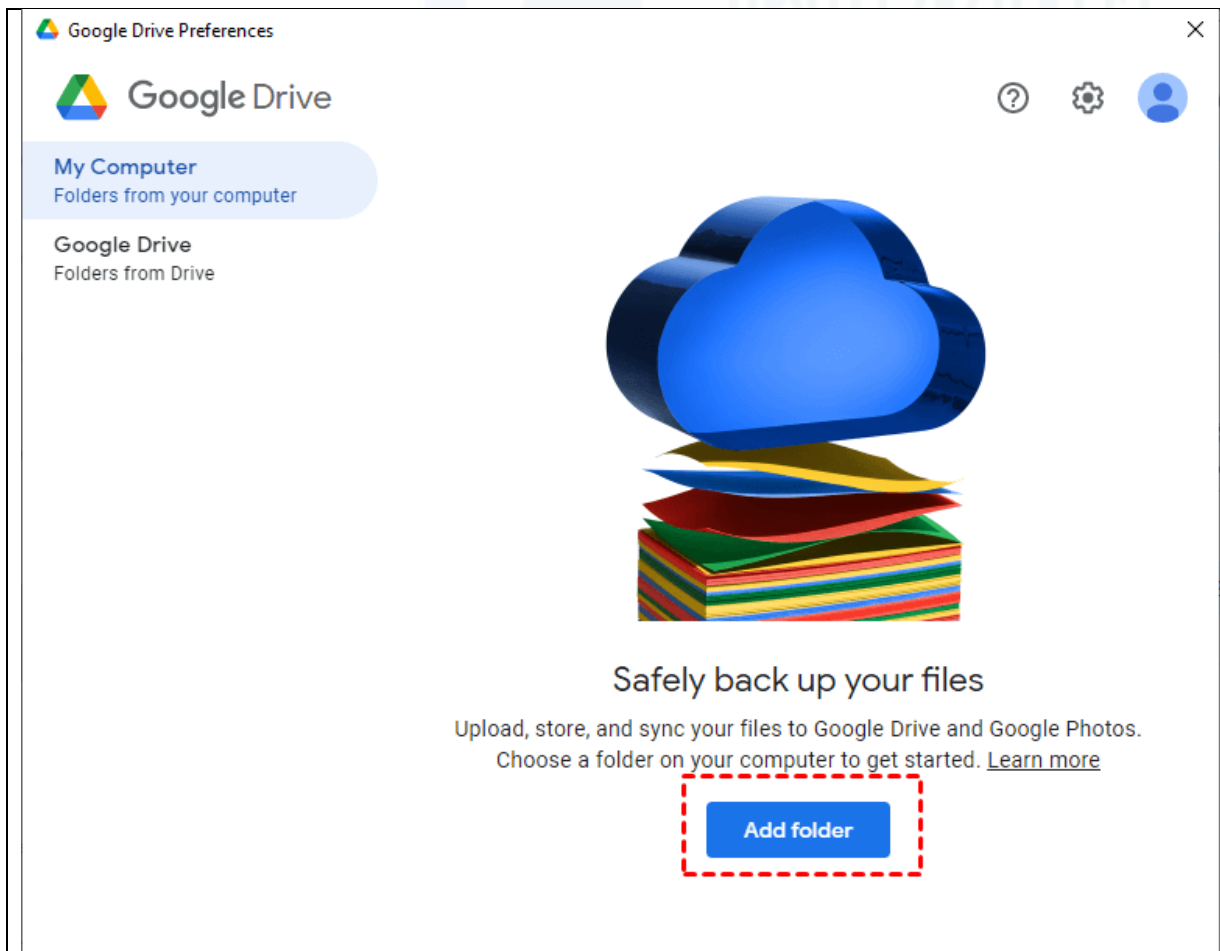
1. [Download](#) and install Google Drive for desktop on your computer. Then, log in your Google drive.



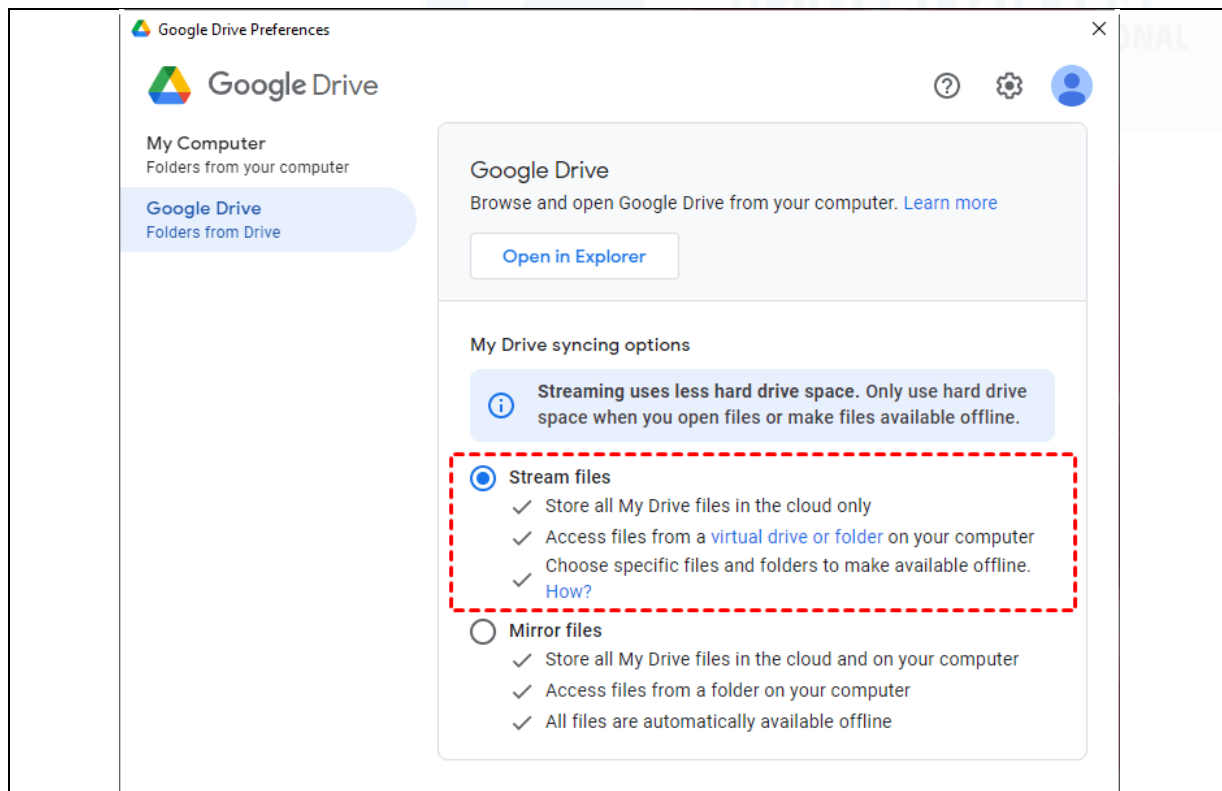
2. Open Google Drive for desktop app. Then click on the Drive for desktop icon in the taskbar, hit the Settings button and choose **Preferences**.

3. You'll see two parts on this app: My Computer and Google Drive.

At My Computer section, click **Add folder** to continuously sync files from computer to Google Drive. Then choose **Sync with Google Drive** or **Back up to Google Photos** based on your need. Click **Save** to begin file synchronization.



At the Google Drive section, you can choose the way to sync files from Google Drive to the computer (Google Drive folder). There are two ways available: **Stream files** and **Mirror files**. Stream files is recommended to save space on your computer hard drive. Confirm your settings and click **Save**. It may require a restart to make the changes take effect.



However, there is something you may pay attention to the Google Drive folder and the Google Drive for desktop app.

- For Google Drive folder, **it cannot sync local files outside this folder**. So, it requires human intervention and you need to drag and drop files to this folder manually and repeatedly. It's troublesome.
- Google Drive for desktop tool only supports syncing files from computer to Google Drive and vice versa. If you are running out of 15GB free storage space and want to sync files to external hard **drive** or other storage devices, you need a third-party file sync tool.

6.3.6. Securing equipment

Storing all equipment in a secure location. Some tips for keeping devices secure include:

- Using laptop or tablet trolleys.
- Locking them securely in safe storage facilities.
- Using password controls.
- Setting up remote tracking, locking, and wiping to be used in the event of loss or theft.

Mobile devices such as tablets and laptops are particularly easy to steal in a school environment because they are easy to carry and hide, and because devices are used by a number of different people it can be difficult to keep track of them.

6.3.7. Setting up security policies

ICT policies are usually implemented in a workplace to ensure safe and appropriate use of Internet services and connections. A company may issue a document to be signed by employees to comply with their regulations. When using ICT in an educational environment it is good practice to set some rules for how it can be used by staff and students in order to protect everyone from potential risks. A good starting point is to create a document called an acceptable use policy (AUP).

An acceptable use policy (AUP) is a document that outlines what the school determines is acceptable in terms of behavior when using computers and the Internet (Smith & Johnson, Design and implementation of an acceptable use policy for corporate networks, 2020). It typically applies to students and staff. You should check if there is an existing AUP for your school system that you can use. If not, there are many examples of AUPs available online that you can use as a starting point for creating your own AUP.

In general, AUPs typically cover the appropriate use of e-mail, Internet, social media, network equipment, data, computers and mobile devices. They can also cover a wide range of ICT issues, including:

- Internet safety
- Data security
- Data protection
- Accessibility
- Health and safety

Your AUP should be created with input from parents, students, teachers, and school management. It should be communicated to all students, staff and parents, and you should continually review and update your AUP to take account of continuous advances in technology.



Tips: Useful links: For further understanding of the Methods to Protect Personal and Institutional Data, click the video links below

Disable / Enable Automatic Update

CLICK HERE 

Password Protect a Word Document

CLICK HERE 

Automatically Backup Files To Google Drive

CLICK HERE 

6.4. Digital Identity, Digital Footprint and Managing Privacy Settings

What is Digital Identity?

Digital identity refers to the collection of information about an individual that exists online. This includes personal data, professional details, online behaviors, and the way an individual interacts with digital platforms. Digital identity is formed through various online activities such as social media interactions, online purchases, email communications, and the use of online services.

6.4.1. Components of Digital Identity:

1. **Personal Information:** Name, date of birth, address, and other identifying details.
2. **Professional Information:** Employment history, professional affiliations, LinkedIn profiles, and other work-related data.
3. **Online Behaviors:** Browsing history, social media activity, and online transactions.
4. **Credentials:** Usernames, passwords, and authentication tokens used to access online accounts.

6.4.2. What is a Digital Footprint?

A digital footprint is the trail of data that individuals leave behind when they use the internet. It includes all the information that can be traced back to a person as a result of their online activities. It includes your online activities, such as social media posts, emails, search history, and online purchases. This information can be accessed and analyzed by individuals, organizations, or even governments. Digital footprints can be categorized into two types: active and passive.

Example: Every time a TVET trainer posts a comment on a professional networking site, likes a page, or shares an article, they are contributing to their digital footprint.

Protecting Online Reputation

Your online reputation is how you are perceived based on your digital footprint. It's essential to maintain a positive online image, especially for professionals like TVET trainers.

Example: A TVET trainer who shares inappropriate content or engages in online arguments might damage their professional reputation. Conversely, a trainer who shares valuable insights and builds a strong online presence can enhance their reputation.

Types of Digital Footprint:

1. Active Digital Footprint:

- This is the data that individuals intentionally leave online, such as social media posts, comments on blogs, and online reviews.
- Examples include uploading photos, tweeting, and sharing content on Facebook.

2. Passive Digital Footprint:

- This is the data that is collected without the individual's explicit knowledge, often by websites and apps that track user behavior.
- Examples include browsing history, location data, and online purchases.

6.4.3. Impact of Digital Footprint:

- **Privacy Concerns:** A large digital footprint can make individuals more vulnerable to privacy breaches, data mining, and cyberattacks.
- **Reputation Management:** Everything that a person shares or that is shared about them online contributes to their public image and can have long-lasting effects.
- **Data Control:** Managing a digital footprint involves controlling what information is shared online and being aware of how it is used by others.

6.5. Managing Digital Identity and Footprint using Privacy settings

Privacy is the right to control information about oneself. It involves determining who can access, collect, use, and disclose personal information. In the digital age, privacy encompasses protecting personal data from unauthorized access, collection, and misuse. Social media platforms collect and use user data. To protect your privacy, it's crucial to manage your settings effectively.

Example: A TVET trainer can adjust their Facebook privacy settings to control who can see their posts, limit information shared with third-party apps, and review the data Facebook collects about them.

Protecting Digital Identity:

- **Strong Passwords:** Use complex, unique passwords for different accounts and change them regularly.
- **Two-Factor Authentication:** Enable two-factor authentication (2FA) to add an extra layer of security.
- **Privacy Settings:** Adjust privacy settings on social media and other platforms to limit who can see your information.
- **Monitoring:** Regularly check online profiles, credit reports, and bank statements for any unusual activity.

Tips: Minimizing Digital Footprint:

- **Be Selective with Sharing:** Think carefully before posting personal information, photos, or opinions online.

- **Delete Old Accounts:** Close or delete accounts that are no longer in use to reduce the amount of data available online.
- **Use Incognito Mode:** When browsing, use private or incognito mode to prevent the storage of cookies and browsing history.

Managing Privacy Settings on different Browsers and Social Medias

On different Browsers, you can set:

- **Cookies:** Configure cookie settings to manage how websites store and access data on your device. You can choose to block all cookies, allow cookies from visited sites, or create exceptions.
- **Clear Browsing Data:** Regularly clear your browsing history, cookies, cache, and site data to maintain privacy and free up storage space.
- **Pop-ups:** Block pop-up windows to prevent unwanted ads and potential security threats.
- **Tracking:** Some browsers offer "Do Not Track" settings, which send a signal to websites requesting they not track your online activities. However, compliance is voluntary.
- **Incognito or Private Browsing:** These modes prevent your browsing history from being saved on your device, but they don't guarantee complete anonymity.
- **Safe Browsing:** Enable safe browsing to receive warnings when visiting potentially harmful or deceptive websites.
- **Password Manager:** Use a built-in or third-party password manager to securely store and autofill your login credentials.
- **Autofill:** Configure autofill settings for forms and payment information while ensuring the security of your data.

On different Social Medias, you can set:

- **Audience Controls:** Most platforms allow you to choose who can see your posts (public, friends, only you).
- **Tagging:** Control who can tag you in photos or posts.
- **Location Services:** Be mindful of sharing your location. Many apps allow you to turn off location services.
- **Ad Settings:** Limit ad tracking by adjusting ad preferences.
- **Data Sharing:** Review which apps and websites have access to your social media data and revoke unnecessary permissions.

- **Privacy Checkups:** Many platforms offer privacy checkups to help you review and adjust your settings.

6.6. Browser Privacy settings

There are some important web browser settings to consider. Customizing these settings according to your preferences and security requirements can help you optimize your browsing experience while safeguarding your privacy and data. Important web browser settings can enhance your online experience, improve security, and protect your privacy. Here are some key web browser settings to consider:

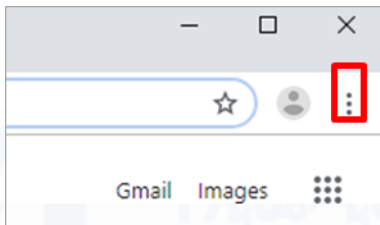
6.6.1. Managing Cookies

A cookie is a text file stored on a user's computer that monitors their web habits (Jones & Patel, 2018). Cookies are small pieces of data that are sent by websites to your browser when you are browsing. They have different functions, including recording of browsing activity. Their use raises privacy concerns, but they can also make navigating the Web easier. Note that allowing sites to save and read cookie data is the recommended setting in Google Chrome and is the default setting.

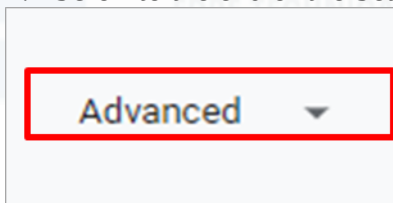


Steps: To allow / block cookies:

1. Click the **Google Chrome** icon  on the taskbar to open the web browser.
2. Click the More button



3. Select **Settings**
4. Scroll to the end of the Settings page and click **Advanced**.



5. Under **Privacy and Security**, click **Site Settings**.
6. Click **Cookies** in the Site Settings window.
7. To block Cookies, turn the Allow sites to save and read cookie data (recommended) slider to Off.



8. To allow cookies, turn the Blocked slider to On. Allow sites to save and read cookie data (recommended) is displayed.

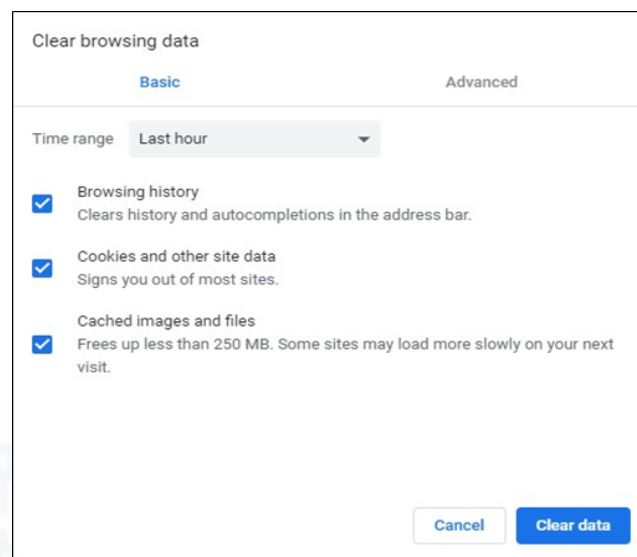


9. Click X to close the Settings tab.

6.6.2. Managing Browsing Data

Most web browsers automatically remember visited websites. The list of visited websites is stored in your browser history. To view your history in Google Chrome, open the more icon and mouse over History, a list of the website visited by the browser will display in a sub menu.

In addition to history, your web browser also automatically saves temporary Internet files. This data may help your browser to load previously visited webpages more quickly. However, if there is a lot of saved data this may slow down the performance of your browser.



Web browsers can remember passwords and personal information such as email addresses, phone numbers etc. This can be very useful as it can speed up the process of completing forms and signing in to online accounts. Google Chrome asks if you want to save passwords, however by default, it remembers data when you fill out forms. You may not want your web browser to remember your personal information, especially on a shared computer.

Save password?

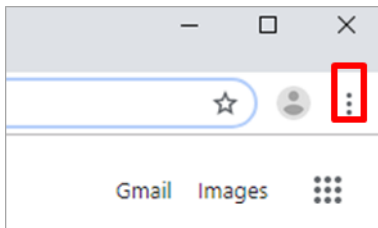
Username

Password

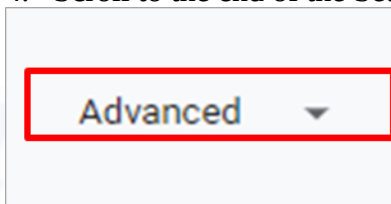


Steps: To delete your browser history, temporary Internet files, saved form data and saved passwords:

1. Click the **Google Chrome** icon  on the taskbar to open the web browser.
2. Click the More button



3. Select **Settings**
4. Scroll to the end of the Settings page and click **Advanced**.



5. Under **Privacy and Security**, click **Clear Browsing Data**.
6. To delete browsing history; if necessary, check the Browsing History checkbox in the Clear browsing data dialog box.

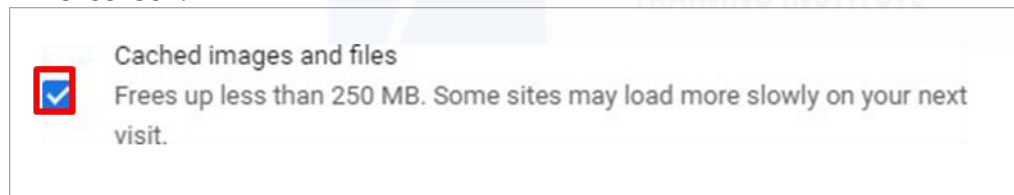
Clear browsing data

☒ Basic ☐ Advanced

Time range

☒ Browsing history
Clears history and autocompletions in the address bar.

7. To delete temporary Internet files, if necessary, check the Cached images and files checkbox.



8. Select the time range from the Time range drop-down list. For example, select All Time.

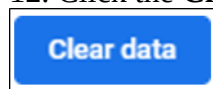


9. To delete saved form data and saved passwords, click the **Advanced tab**, near the top of the dialog box.

10. To delete saved form data, **check the Auto-fill form data checkbox**.

11. To delete saved passwords, check the **Passwords** and other sign in data checkbox. Select the time range from the Time range drop-down list. For example, select All Time to fully clear passwords and data.

12. Click the **Clear data button**.



13. The browsing history, temporary internet files, all saved passwords and form data history are cleared for the time range set.

14. Click **X** to close the Settings tab.

6.6.3. Managing Pop-Ups

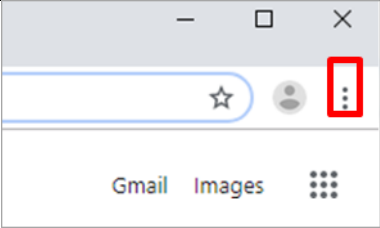
Pop-ups are new unrequested browser windows that open automatically over the current web page. They usually contain advertisements. Such pop-ups may relate to gaming or explicit content and are generally both unnecessary and unwanted. Some pop-ups may be dangerous to your computer; others are not harmful at all. Blocking pop-ups is recommended. In the Google Chrome browser, pop-ups are blocked by default. You may, however, add and remove specific web pages to a list of allowed or blocked websites.



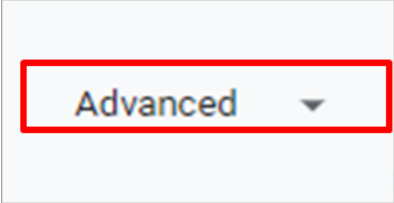
Steps: To delete your browser history, temporary Internet files, saved form data and saved passwords:



1. Click the **Google Chrome** icon on the taskbar to open the web browser.
2. Click the More button



3. Select **Settings**
4. Scroll to the end of the Settings page and click **Advanced**.



5. Under **Privacy and Security**, click **Site Settings**.
6. In the Site Settings window, under **Permissions**, click **Pop-ups and redirects**.
7. To block Pop-ups, turn **the Blocked slider** to **Off** in the Pop-ups and redirects options.



8. To allow Pop-ups, turn the Blocked slider to **On**.



9. Click **X** to close the Settings tab

6.7.Social media Privacy Control



Discussion

- Do you know what your current privacy settings are on each social media Platform?
- Do you think everything what you will do on those platforms should be public?

Privacy settings refer to the configurable options within various digital platforms, applications, devices, or services that allow users to control and manage the visibility and accessibility of their personal information, data, and online activities (Johnson & Smith, 2022). These settings enable users to make informed decisions about who can access their data, what information is shared, and how it is used. An important way of protecting yourself when using a social network is to apply appropriate privacy settings. These settings will typically allow you to control who sees your profile and who you interact with. For example, Facebook allows us to manage the privacy of our postings and links to apps.



Steps: To Adjust your privacy settings on Facebook.

1. Click your profile picture in the top right of Facebook.
2. Select Settings & privacy, then click Settings.
3. Click Privacy in the left column.

In the following activity you will Review Facebook privacy policies and manage your privacy settings in the Privacy Center.



Activity 7: Review and manage your privacy settings on Facebook:

Title: Review and manage your privacy settings on Facebook

Objective: To review the deferent privacy settings on Facebook

Instructions:

- Walk through Privacy Checkup to make sure you're sharing your information with who you want.
- Customize your Ad preferences to see ads that are more relevant to you.
- Manage some of the content you share on Facebook, like posts, photos and videos, from the Manage Activity section of your activity log.
- Learn how to manage what others can see about you.

6.7.1. Two-Factor Authentication (2FA):

Two-Factor Authentication (2FA) is a security process that requires users to provide two different authentication factors to verify their identity. These factors typically include something the user knows (e.g., a password) and something the user has (e.g., a mobile device or security token). 2FA adds an extra layer of security to prevent unauthorized access even if the password is compromised. Different social media platforms offers 2FA to enhance the security of your account. Here are the steps to set up 2FA using Telegram:



Activity 8: Two-Factor Authentication Setup with Telegram:

Activity Title: Two-Factor Authentication Setup with Telegram

Objective: To guide users through the process of setting up Two-Factor Authentication (2FA) on their Telegram accounts for enhanced security.

Activity Steps:

1. Accessing Account Settings:

- open the Telegram app on their mobile devices.
- Navigate to the menu by tapping on the three horizontal lines in the top-left corner.

2. Opening Account Settings:

- In the menu, select "Settings."

3. Locating Privacy and Security:

- Within "Settings," find and tap on "Privacy and Security."

4. Initiating Two-Step Verification:

- In "Privacy and Security," locate and tap on "Two-Step Verification."

5. Setting a Password:

- tap on "Set Additional Password" to create 2FA password.
- Emphasize the importance of choosing a strong and memorable password.

6. Adding a Hint (Optional):

- add a hint for their 2FA password. However, not make it too explicit.

7. Adding a Recovery Email (Optional):

- add a recovery email for account recovery if you forget your 2FA password.

8. Verifying the Password:

- enter the newly created password to verify it.

9. Confirmation and Completion:

- Once the password is verified, confirm that 2FA is successfully set up on their Telegram account.

10. Testing the Two-Step Verification:

- log out of your Telegram account and attempt to log back in. They should experience the 2FA process by entering the password they just set.



Tips: Useful links: For further understanding of the Methods to manage your privacy settings, click the video links below

Enable Two-Factor Authentication on Telegram

CLICK HERE 

**How to Manage your Browser Privacy & Security Settings
in Google Chrome**

CLICK HERE 

How to Change Your Facebook Privacy Settings

CLICK HERE 

Unit 7: Digital Content Creation

Learning Outcomes: By the end of Unit Six, Trainers will be able to:



- Understand the fundamentals of digital content creation
- Use various digital tools to create high-quality educational content across different media formats.
- Implement best practices for editing and reviewing digital content to ensure accuracy and engagement.



Discussion

- How is your experience in creating digital content?
- What tools have you used to create digital contents?

7.1. Introduction:

Digital content refers to any type of content that exists in a digital format. This includes text, images, videos, audio, and other multimedia that are created, stored, and distributed using digital technology. Digital content can be accessed and consumed on various electronic devices such as computers, smartphones, tablets, and other internet-enabled devices. Some common examples of digital content include:

- **Text:** Articles, blog posts, eBooks, social media updates, email newsletters, and online forums.
- **Images:** Photographs, illustrations, infographics, memes, and digital artwork.
- **Videos:** Movies, TV shows, online videos (e.g., YouTube), video blogs (vlogs), webinars, and live streams.
- **Audio:** Music, podcasts, audiobooks, and sound effects.
- **Multimedia:** Interactive content such as online courses, virtual reality experiences, and video games.

Digital content is widely used in various fields such as education, entertainment, marketing, journalism, and communication. It can be easily shared, edited, and distributed across multiple platforms, making it a versatile and essential part of the modern digital landscape.

7.2.Objectives:

Learning about digital content creation has several objectives that can be beneficial for individuals and organizations. These objectives include:

1. *Effective Communication*: Understanding how to create digital content helps in conveying messages clearly and engagingly across various platforms such as social media, blogs, and websites.
2. *Enhanced Creativity*: Learning the tools and techniques for creating digital content fosters creativity and innovation, allowing creators to express ideas in unique and compelling ways.
3. *Technical Proficiency*: Acquiring skills in digital content creation involves learning to use various software and tools (e.g., graphic design software, video editing programs, content management systems), which are valuable in many professional fields.
4. *Marketing and Branding*: Digital content is crucial for marketing strategies. Learning how to create appealing and effective content can help in building brand identity, increasing visibility, and engaging with target audiences.
5. *Collaboration and Project Management*: Digital content creation often requires working in teams and managing projects. Learning these skills can improve collaboration and project management abilities.

Overall, learning about digital content creation equips individuals with a versatile set of skills that are applicable in various personal and professional contexts, making it a valuable area of study.

7.3.Digital content preparation

Creating digital content for educational purposes involves several steps to ensure the content is engaging, informative, and effective for learning. Here's a step-by-step guide:

1. Define Objectives and Audience
 - Identify Learning Goals: Clearly define what you want your learners to achieve.
 - Understand Your Audience: Know the demographics, prior knowledge, learning preferences, and needs of your target audience.
2. Plan and Structure Your Content
 - Content Outline: Create a detailed outline of the topics and subtopics you will cover.
 - Storyboard: Develop a storyboard to visualize the content flow and structure, especially for video or interactive content.
3. Choose the Appropriate Format
 - Text: Articles, blog posts, eBooks, and online courses.
 - Images: Infographics, diagrams, and visual aids.
 - Videos: Tutorials, lectures, animations, and demonstrations.

- Audio: Podcasts, audiobooks, and recorded lectures.
- Interactive Elements: Quizzes, simulations, and interactive modules.

4. Gather and Create Content

- Research: Collect accurate and relevant information from credible sources.
- Create Original Content: Write scripts, draft text, design visuals, and record audio/video as needed.
- Cite Sources: Properly reference any external content to avoid plagiarism.

5. Use Appropriate Tools and Software

- Content Creation Tools: Use software like Microsoft Word, Google Docs, Adobe Creative Suite, Canva, and others.
- Video and Audio Tools: Tools like Adobe Premiere Pro, Final Cut Pro, Audacity, and Camtasia.
- Interactive Content Tools: Platforms like Articulate Storyline, Adobe Captivate, and H5P.

6. Publish and Distribute

- Content Management Systems (CMS): Use platforms like WordPress, Moodle, or Google Classroom to publish your content.
- Social Media and Email: Share your content through social media channels and email newsletters.

7. Evaluate and Update

- Assess Effectiveness: Use quizzes, assignments, and feedback to evaluate how well learners are meeting the objectives.
- Continuous Improvement: Regularly update and improve the content based on feedback and new developments in the subject area.

Following these steps can help ensure that the digital educational content you create is effective, engaging, and beneficial for learners.

7.4. What do we need to create digital content?

Creating digital content requires a combination of skills, tools, and resources. Here's a comprehensive list of what you might need:

Skills and Knowledge

1. Content Creation Skills:

- *Writing*: Clear, engaging, and informative writing skills.
- *Graphic Design*: Ability to create visuals, infographics, and other graphic elements.

- *Video Production*: Skills in shooting, editing, and producing videos.
 - *Audio Production*: Skills in recording and editing audio content.
2. **Technical Skills**: Familiarity with content creation software and tools.
 3. **Subject Matter Expertise**: Deep knowledge of the topic you are creating content about.

Tools and Software

1. **Writing and Editing**: word processors like Microsoft Word and Google Docs, editing tools like Grammarly, Hemingway Editor.
2. **Graphic Design**: designing tools like Adobe Photoshop, Adobe Illustrator, Canva, GIMP and infographic tools like Piktochart, Venngage.
3. **Video Production**: video editing software like Adobe Premiere Pro, Final Cut Pro
4. **Audio Production**: audio editing software like Audacity, Adobe Audition, GarageBand.
5. **Interactive Content**: E-learning tools like Articulate Storyline, Adobe Captivate, H5P and quiz and survey tools like Google Forms, SurveyMonkey.

Hardware

1. **Computer**: A reliable computer with sufficient processing power and memory for handling content creation tasks.
2. **Camera**: A good quality camera for shooting videos or taking photos.
3. **Microphone**: A high-quality microphone for recording clear audio.
4. **Lighting**: Proper lighting equipment for video shoots.

Having a combination of these skills, tools, and resources will enable you to create high-quality digital content efficiently and effectively.

Note: It doesn't mean that you have to know all the listed skills and don't have to know all editing tools.

Let us try to discuss about selected tools. With these tools, we will see how to prepare digital content.

7.5. Articulate Storyline 360

Articulate Storyline 360 is a powerful e-learning authoring tool used to create interactive and engaging online courses. It is part of the Articulate 360 suite of applications and is widely used by instructional designers, educators, and corporate trainers. Articulate Storyline 360 is a comprehensive tool that can significantly enhance the quality and effectiveness of your e-learning content. Whether you're creating training for corporate employees, educational content for students, or instructional material for any other audience, Storyline 360 provides the tools you need to build engaging and interactive learning experiences.

Here are some key features of Articulate Storyline 360:

Key Features

1. Intuitive Interface:

- Slide-Based Design: Similar to PowerPoint, making it easy for new users to get started.
- Drag-and-Drop: Allows for easy creation of interactive elements.

2. Interactivity:

- Triggers: Create actions based on learner interactions (e.g., clicking a button, hovering over an object).
- States: Define different visual appearances for objects based on interactions.
- Layers: Add multiple layers to a slide to create complex interactions without cluttering the main slide.

3. Assessment and Quizzes:

- Question Types: Multiple-choice, drag-and-drop, fill-in-the-blank, and more.
- Feedback: Provide immediate feedback for learners.
- Question Banks: Randomize questions for each learner.

4. Media Integration:

- Multimedia: Insert images, audio, video, and animations.
- Screen Recording: Record screen activity for software tutorials or demonstrations.
- Web Objects: Embed web-based content directly into your slides.

5. Responsive Design:

- Mobile-Friendly: Content automatically adjusts to fit any screen size.
- Responsive Player: The player adapts to different devices, ensuring a consistent learning experience.

6. Customizable Themes and Templates:

- Themes: Use built-in themes or create custom ones.
- Templates: Access a library of pre-built slide templates to speed up development.

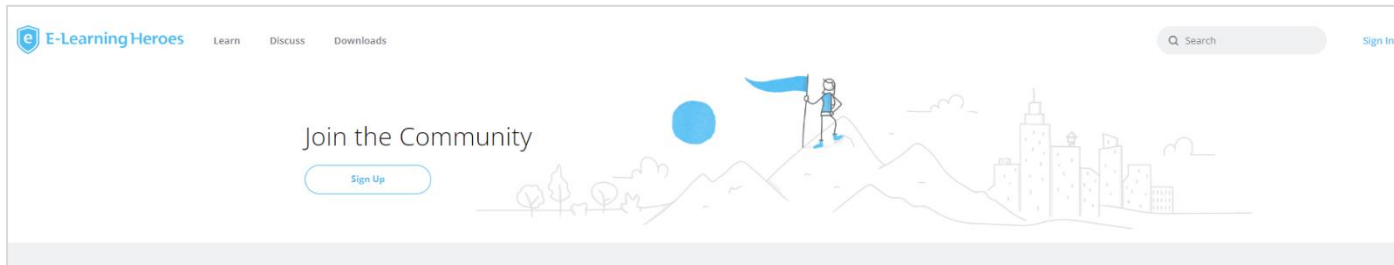
Getting Started

Creating digital content with Articulate Storyline 360 involves several steps from installation to publishing. Here's a detailed guide on getting started:



Activity 9: Create Digital Content using Articulate

1. Subscribe to Articulate 360. The Articulate 360 desktop app gives you quick access to all the authoring tools and resources in your subscription. However for this lesson we will work on the online application. Go to <https://community.articulate.com/> to sign up or Sign in with your subscription.



If you choose to Sign up for free, use <https://id.articulate.com/> . Here we have additional option, “start a free trial”. As a starter, let us choose “start a free trial” and continue to join the community.

The screenshot shows the login page for Articulate 360. The page is split into two main sections. The left section has a blue background with a yellow sun icon and the text 'It's good to see you' in white. The right section is white and contains the 'articulāte 360' logo. Below the logo, there is a 'Sign In' section with a link to 'or start a free trial'. There is an 'Email' input field, a 'Remember me' checkbox, and a line of text stating 'By signing in, you are agreeing to our applicable terms'. At the bottom of the right section is a large blue 'Continue' button.

Fill the necessary data requested on the page. Select the agreement check box and click on “Start free trial”

articulāte 360

Create courses learners love

Articulate 360 simplifies online course creation from start to finish. With easy-to-use tools, stunning templates, and expert resources, anyone can author stunning workplace training quickly.

The industry-leading course creation platform includes:

- Two award-winning e-learning authoring apps
- 12+ million course assets like photos, templates, and more
- An easy-to-use project review app
- A frictionless LMS to distribute training faster
- Exclusive live and on-demand training with industry experts

Articulate is proud to deliver online course creation solutions to all 100 of the Fortune 100 companies and all 20 of the 20 top-ranked U.S. universities.

Start your free 30-day trial today – no credit card, no obligation – and experience course creation done right with Articulate 360.

Start Free Trial

Email *

Password * ⓘ

First Name * Last Name *

Organization *
FTI

Country *
Ethiopia

Phone *

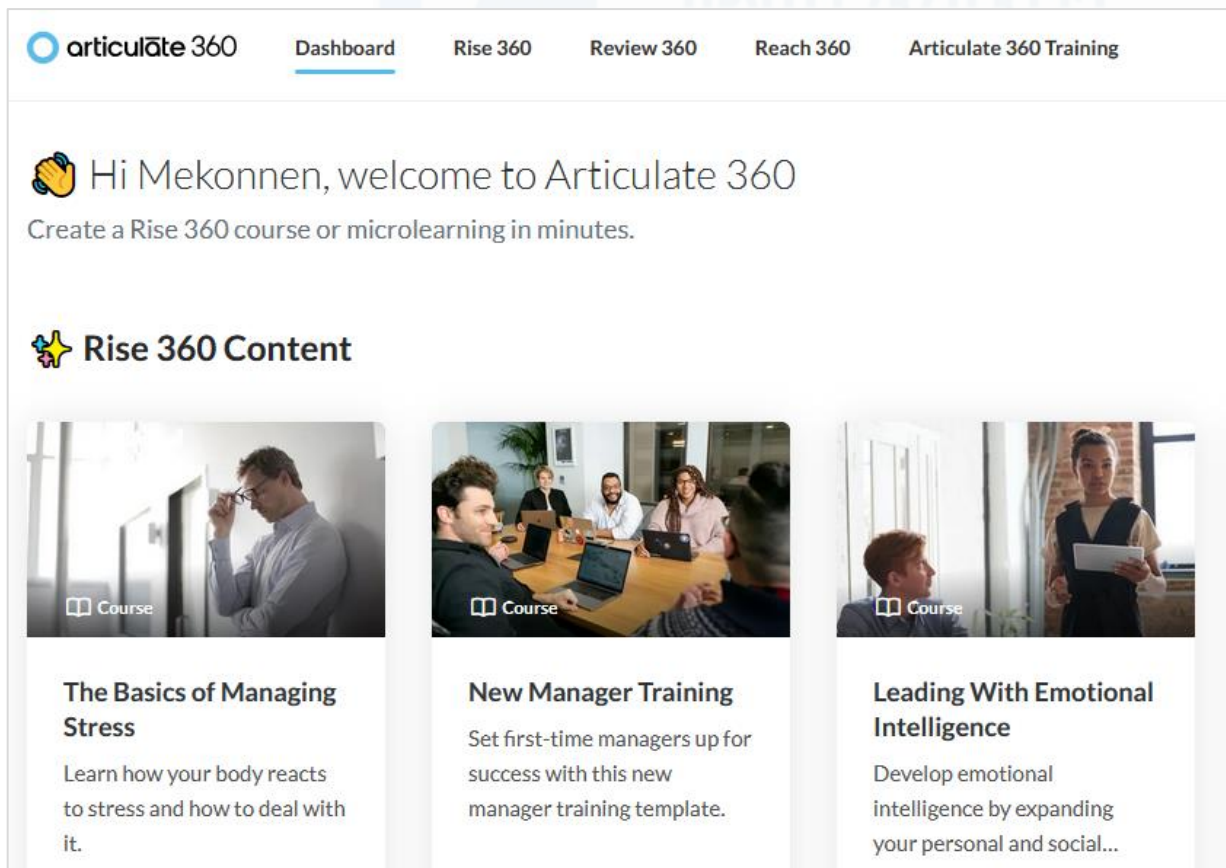
☒ By clicking, you are agreeing to our applicable [terms](#) and [privacy notice](#), including our [cookie policy](#).

Start Free Trial

Articulate will announce your success in signing up and give you information to check your email to get started. The free trial works only for 30 days. Following the email sent by articulate, login to the community by filling in some questions from the articulate community. Once after log in, download the desktop version, if you need to work on the desktop app. The “download desktop app” option is located at the bottom right side of the dashboard.

- Once after we sign up to the community, let us continue to content creation by signing in. this document shows you how to work on Articulate online. However you can download and install Articulate desktop app on your computer and work on that also.

After login, your dashboard will be opened. (<https://360.articulate.com/>) and it looks like the image below.



3. Let us start to create content. To do that click on “Rise 360”. Next click on “create new” button which is located on the left side of your window and choose Course. Now you will see templates. Choose one to continue working or if you don’t need them click on “Blank course”.
4. Start editing your template by clicking on it. Simply delete the text on the template and replace it with your own. As you can see on the image, my content has header and introduction. Now I will continue with sub topics by clicking on “edit content”.

Digital content creation

Author Hidden ▾

Digital content refers to any type of content that exists in a digital format. This includes text, images, videos, audio, and other multimedia that are created, stored, and distributed using digital technology.

Why Customer Feedback Is Valuable

Lesson

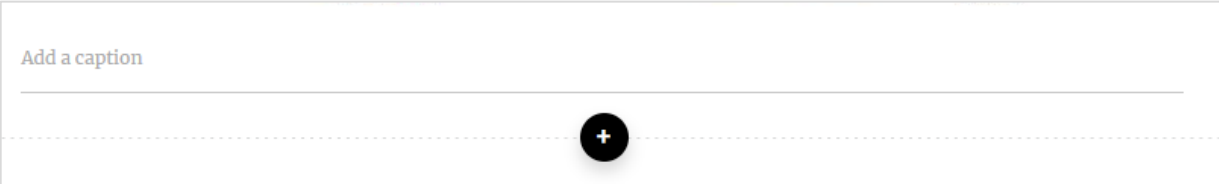
EDIT CONTENT

How to Solicit Useful Feedback

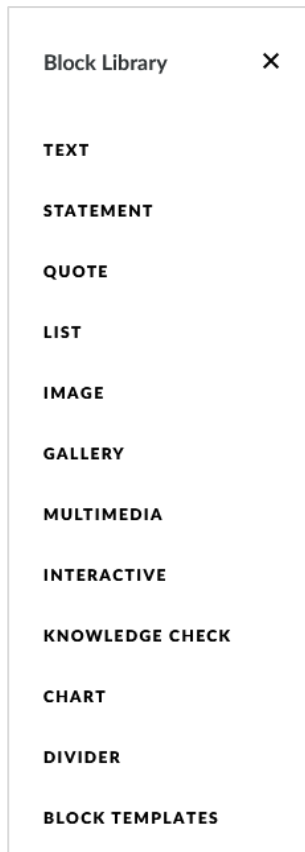
Lesson

EDIT CONTENT

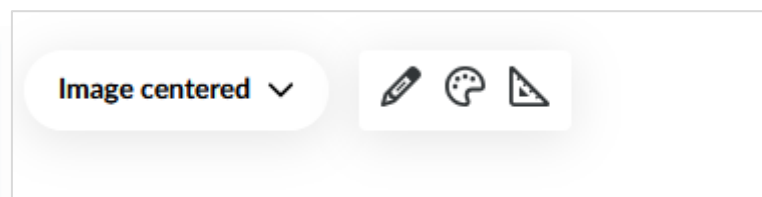
5. Under edit content delete texts of the template and replace them with your own. You can add images, text, quotes, gallery, multimedia, interactive and others also. To add each of them move you mouse cursor up or down on the content until you find addition sign.



Clicking on the addition sign will open block library with options on the left side. Choose the type of content you like to enter to your template.



6. Let us add image, choose image option from the options and choose how you want to put your image on the template. Once after you did that, the image will be inserted to the content. Now we need to change the image, so hover your mouse on the image and you will see the following.

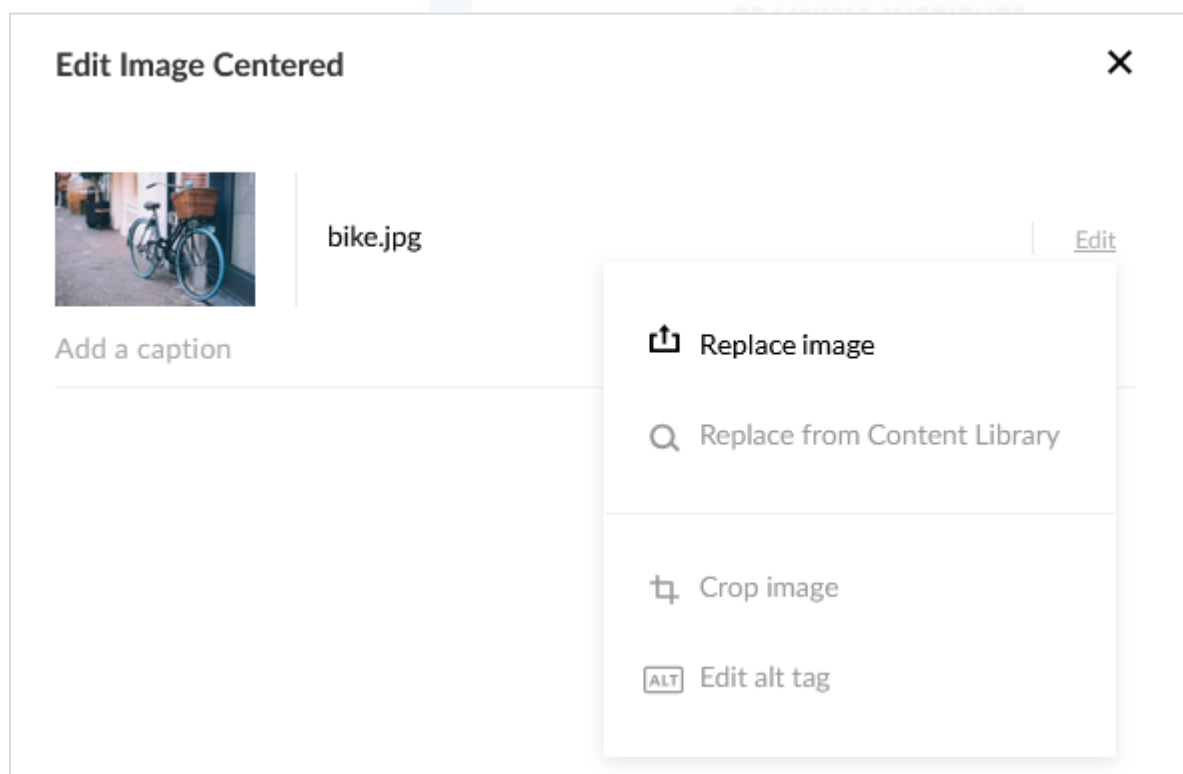


From the options click on the pencil sign and image editor will be opened. Then you can replace the image with your own. Look the image below.

7. Use preview option to see how you content suit with different displays like large screen, tablets or smartphone screens.

Please try all the options and try to create your own interactive content for a course.

8. Once after you finish editing your content, the next step is to publish or share your content. To use it on LMS, you can use publish option. There is also share possibility to share the link of your digital content using several Medias including Learning management Systems.



Tips: Useful links: For further understanding of Articulate Storyboard 360, use the video links below

Learn Articulate Rise 360

CLICK HERE 

Articulate Rise 360: complete guide

CLICK HERE 

7.6. Where can we use interactive contents?

Interactive content created using Articulate Storyline 360 can be used in a variety of environments and platforms to enhance learning and engagement. Here are some common places where you can use these interactive contents:

1. Learning Management Systems (LMS)

- *Corporate Training:* Deliver employee onboarding, compliance training, professional development, and skills training.
- *Educational Institutions:* Use for online courses, blended learning, and supplementary materials for classroom instruction.

- *Popular LMS Platforms:* Moodle, Canvas, Blackboard, TalentLMS, LearnDash, Schoology.

2. Company Intranet

- Host training modules and informational resources for internal employees.
- Provide access to policy updates, product training, and procedural instructions.

3. Websites and Web Portals

- Embed interactive content in your website to engage visitors and provide interactive tutorials, demos, or educational content.
- Use web portals for customer training and support.

4. Online Courses and e-Learning Platforms

- *MOOCs (Massive Open Online Courses):* Platforms like Coursera, Udemy, edX, and Khan Academy.
- *Corporate e-Learning Platforms:* LinkedIn Learning, Pluralsight.

By leveraging these environments and platforms, you can maximize the reach and impact of your interactive content created with Articulate Storyline 360, providing engaging and effective learning experiences for your audience.

As discussed before, articulate 360 is not the only tool to create interactive content. There are others also. You can choose your favorite tool to create interactive content.

Unit 8: Using LMS for Digital Content Delivery

Learning Outcomes: By the end of Unit Seven, Trainers will be able to:



- Understand the role and importance of Learning Management Systems in digital content delivery.
- Know how to work on selected LMS.
- Utilize the key features of LMS platforms to create, manage, and deliver educational content effectively.



Discussion

- What is LMS and what are the key features of LSMs ?
- How is your previous experience in using LMS?
- Please mention some LMSs you used or you know.

8.1. Introduction

A Learning Management System (LMS) is a software application designed to administer, document, track, report, automate, and deliver educational courses, training programs, or learning and development programs. LMSs are widely used in various educational settings, from schools and universities to corporate training and online learning platforms.

8.2.Key Features of an LMS

1. Course Management:

- *Creation and Organization:* Tools for creating and organizing courses, lessons, and modules.
- *Content Delivery:* Methods to deliver educational content, including text, video, audio, and interactive elements.

2. User Management:

- *Roles and Permissions:* Different roles for administrators, instructors, and students with specific permissions.
- *Enrollment and Tracking:* Automated enrollment processes and tracking of student progress and performance.

3. Assessment and Evaluation:

- *Quizzes and Tests:* Tools for creating and administering quizzes, tests, and assessments.

- *Grading and Feedback:* Automated grading systems and options for providing feedback to students.

4. Communication and Collaboration:

- *Discussion Forums:* Platforms for student discussions and peer interactions.
- *Messaging and Notifications:* Built-in messaging systems and notification tools to keep users informed.

5. Analytics and Reporting:

- *Progress Tracking:* Detailed tracking of student progress, completion rates, and performance metrics.
- *Reports:* Generation of various reports for instructors and administrators to analyze the effectiveness of the courses.

6. Integration and Accessibility:

- *Third-Party Integrations:* Integration with other software and tools, such as video conferencing apps, content management systems, and external databases.
- *Mobile Access:* Mobile-friendly interfaces or dedicated mobile apps for learning on the go.

8.3. Popular Learning Management Systems

1. Moodle

Description: Open-source LMS widely used in educational institutions.

Features: Customizable interface, a wide range of plugins, and robust community support.

2. Canvas

Description: Cloud-based LMS known for its user-friendly interface and extensive features.

Features: Course management, mobile apps, integration with other educational tools.

3. Blackboard

Description: Comprehensive LMS often used in higher education.

Features: Course creation, content management, assessment tools, analytics.

4. Google Classroom

Description: Free LMS offered by Google for educational institutions.

Features: Integration with Google Workspace, easy assignment creation, and communication tools.

LMS works for grade schools, higher institutes, short-term Training, Vocational training, and Corporate training. A Learning Management System (LMS) is a crucial tool in modern education and training environments. By centralizing course management, content delivery, assessment, and communication, LMSs enhance the learning experience for students and streamline administrative tasks for educators and trainers.

Once after we prepare a digital content for trainings, one of the best way to deliver it to students or trainees is using LMSs. As we have seen previously, there are several LMSs in use throughout the world. With the next topic, we will try to see and understand how we can work on a selected LMS environment to put our digital content.

8.4.Working on Moodle

Moodle (Modular Object-Oriented Dynamic Learning Environment) is an open-source Learning Management System (LMS) that provides educators, administrators, and learners with a single robust, secure, and integrated system to create personalized learning environments. It is widely used in schools, universities, and workplaces worldwide due to its flexibility, scalability, and extensive feature set.

8.4.1. Key Features of Moodle

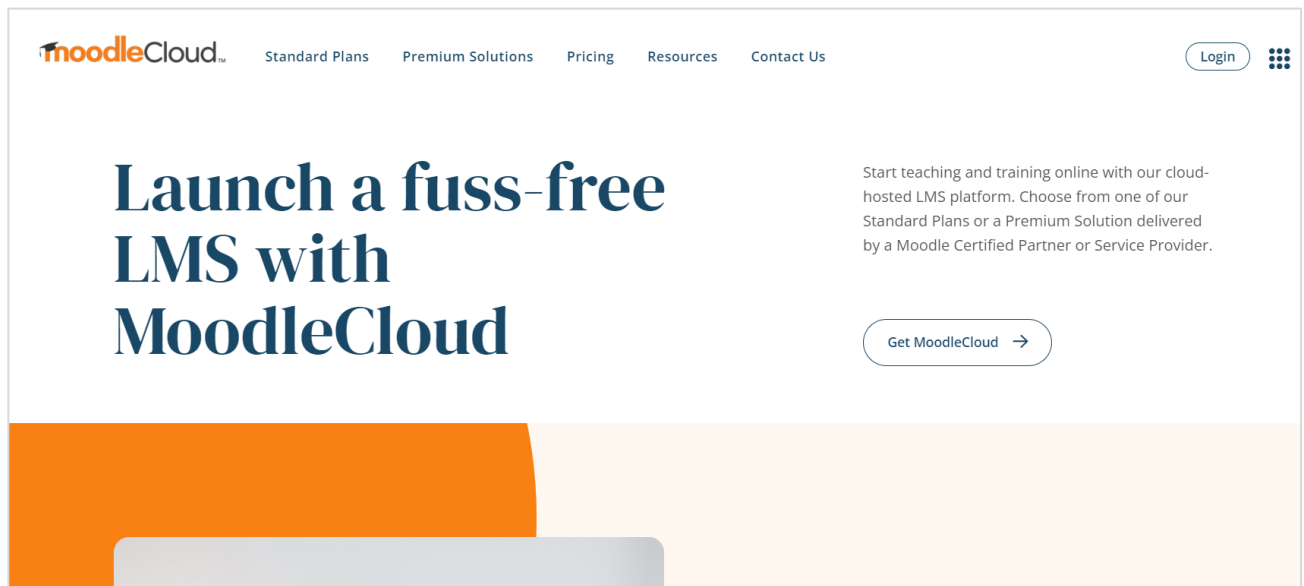
- *Course Management*: includes Course Creation and organization
- *User Management*: includes roles and permission like teachers students, and administrators, and enrollment methods
- *Content Delivery*: includes resource management like upload and share resources (including documents and videos)
- *Assessment and Evaluation*: includes quizzes and assignments (it creates diverse assessments with automatic grading and feedback options) and comprehensive gradebook to track and manage student grades and performance.
- *Communication and Collaboration*: includes Forums (discussion boards for student interaction), private messaging between users and chat (Real-time chat functionality)
- *Customization and Integration*: includes themes and plugins to customize the look and functionality with a wide range of themes and plugins. And Integrate with other systems like Google Apps, Microsoft Office 365, and external databases.
- *Analytics and Reporting*: includes logs and reports (Detailed logs of user activity and various reports on course progress and user engagement) and Learning Analytics Tools to analyze and improve learning outcomes.

Setting up Moodle: this activity will show us how to deliver digital content using Moodle LMS.



Activity 10: Working on Moodle

1. Create Moodle account. Go to www.moodlecloud.com. The home page looks like the image below.



2. Use the login here link to login to your Moodle site, if you already have. If you don't have Moodle site, let us create using the interface below. To create new free site, click on the login button and at the bottom of the login form there is a link says "free trial".

Already a MoodleCloud customer? [Log in here](#)

Your site

* Choose a site name
 .moodlecloud.com

* Create a password

Server region ⓘ

* How will you use your site?

Your plan

Free trial

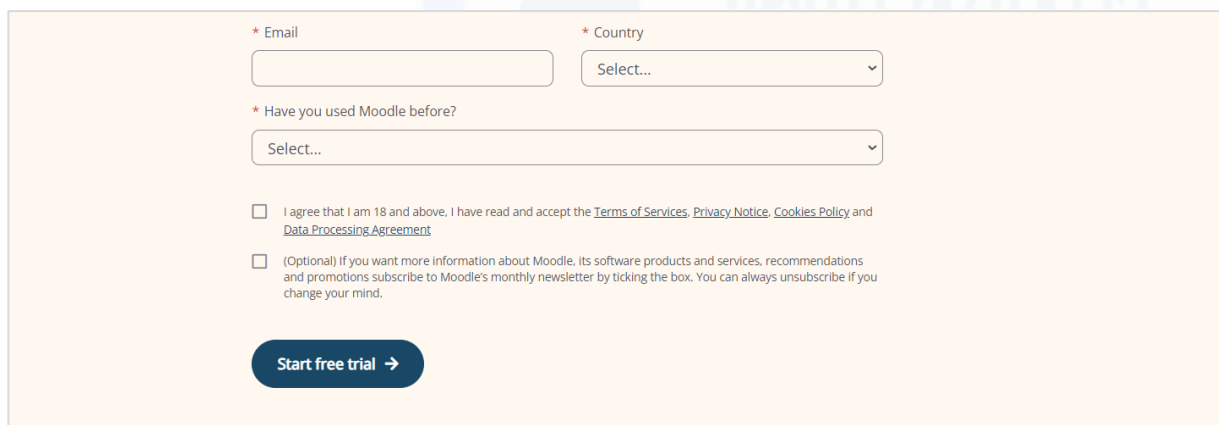
- 50 users
- 250 MB storage
- 28 days

- ✓ No credit card required
- ✓ Unlimited courses and activities
- ✓ Built-in video conferencing for 100 concurrent users

Your details

* First name

* Last name



* Email

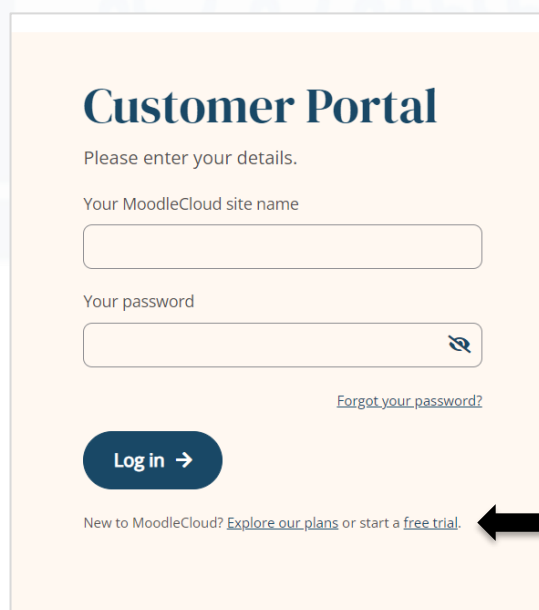
* Country

* Have you used Moodle before?

☐ I agree that I am 18 and above, I have read and accept the [Terms of Services](#), [Privacy Notice](#), [Cookies Policy](#) and [Data Processing Agreement](#)

☐ (Optional) If you want more information about Moodle, its software products and services, recommendations and promotions subscribe to Moodle's monthly newsletter by ticking the box. You can always unsubscribe if you change your mind.

[Start free trial →](#)



Customer Portal

Please enter your details.

Your MoodleCloud site name

Your password

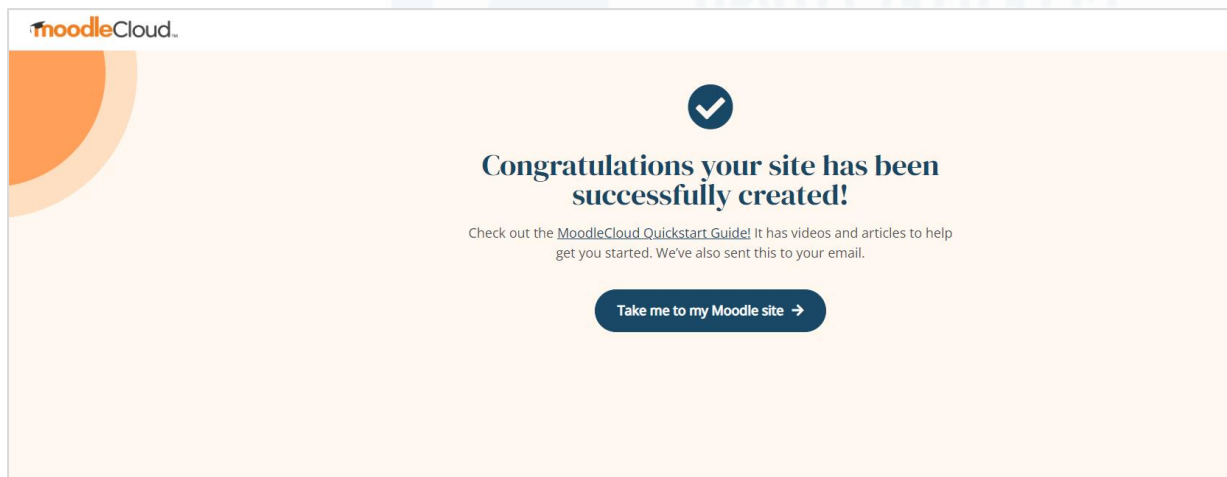
[Forgot your password?](#)

[Log in →](#)

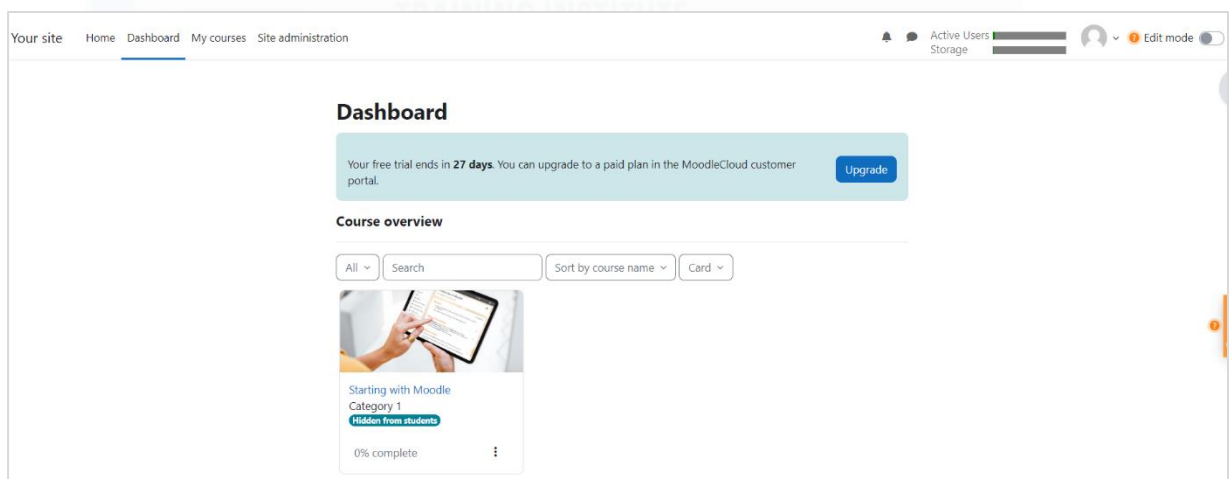
New to MoodleCloud? [Explore our plans](#) or start a [free trial](#).

So, enter the necessary information on the form, agree with the terms and services then click on “Start free trial”. While filling out the form, choose an easy and unique site name, enter a password for later login, select server region, and on “how will you use your site?” choose the Teaching Students option.

- After submission, the site will congratulate you for the success. There click on take me to my Moodle site. The new site will be opened by the site name you gave plus moodlecloud.com. With our example, since I use a site name fvti, the cloud name will be www.fvti.moodlecloud.com.



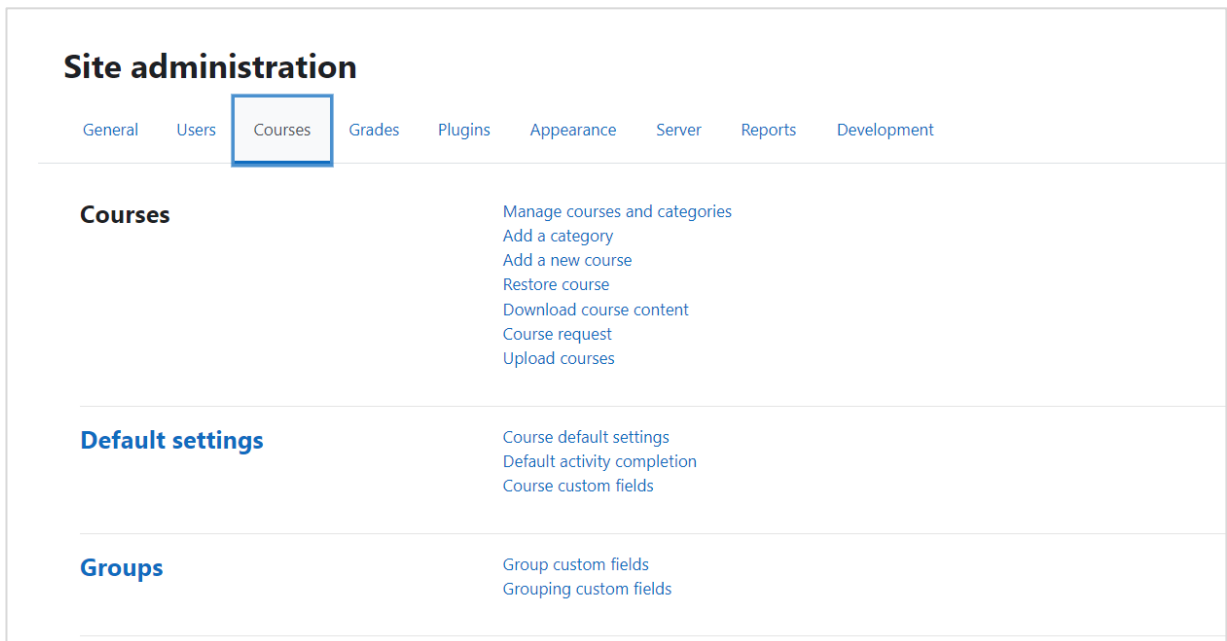
4. Moodle will give you a tour to understand the environment on how we can work on it. You may skip it if you already have the know-how.
5. Here is how <https://ftvti.moodlecloud.com/my/index.php> looks like.



Now we know how to create our own site on Moodle cloud. The next step is to understand how courses can be created and how we can share our digital content through the course.

Ok, let us move on to the course creation process.

1. Click on the “Site Administration” link on your site. By the way, site administration is a place where you can manage every activity on your site. There, among the options click on “Courses”.



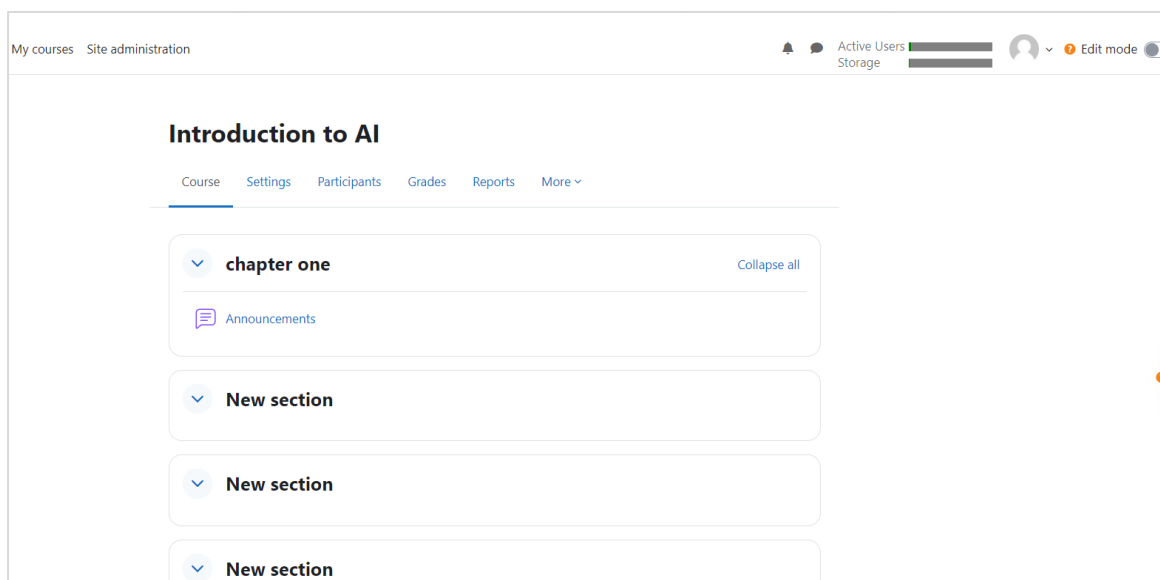
2. Then choose Add a new course option. This will give you a form to fill out about the course. This includes course name, course visibility, course start and end date, description, image,

The screenshot shows the 'Add a new course' form. At the top, there is a breadcrumb trail: 'Courses / Category 1 / Manage courses and categories / Add a new course'. Below this, the 'Category 1' section is active, with tabs for 'Category', 'Settings', 'Upload courses', and 'More'. The 'Add a new course' form is displayed, with a 'General' section expanded. The form includes the following fields: 'Course full name' (text input with value 'Introduction to AI'), 'Course short name' (text input with value 'AI-101'), 'Course category' (dropdown menu with value 'Category 1'), 'Course visibility' (dropdown menu with value 'Show'), and 'Course start date' (date picker with value '8 August 2024 00:00'). There is also an 'Expand all' link on the right side of the form.

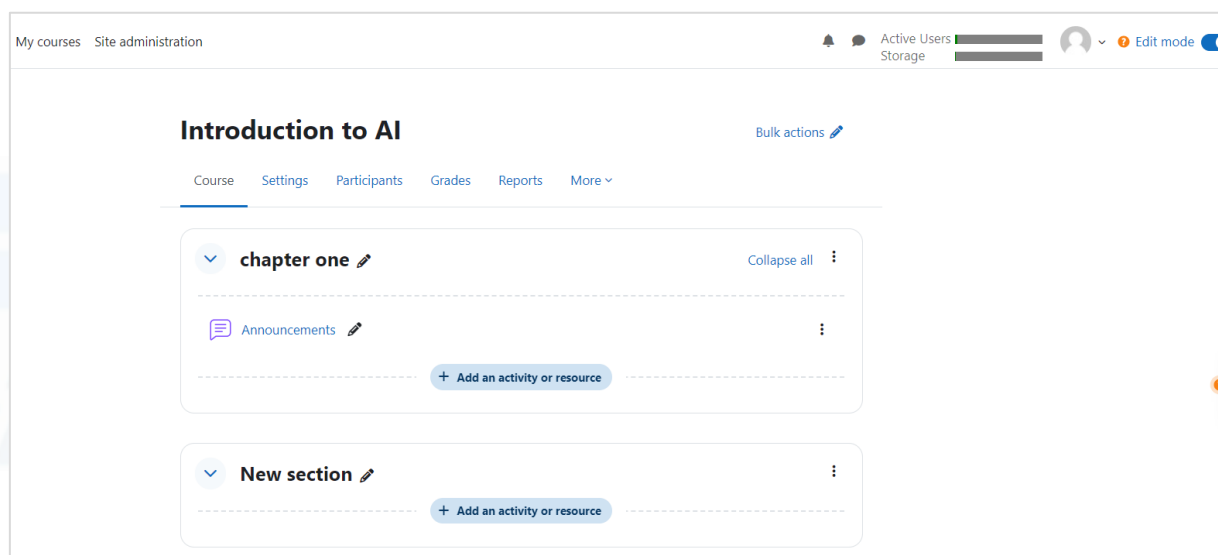
course format, and other necessary information. I recommend you check out those options

while creating different courses. Then click on save and display. Now we can move to the My Courses link to see the list of courses we created.

3. Click on the course name. Here you will see options to work on your course. Adding files, adding contents like video, adding assignment, quizzes, enrolling students to the course, editing the course, managing grades and other tasks can be done.

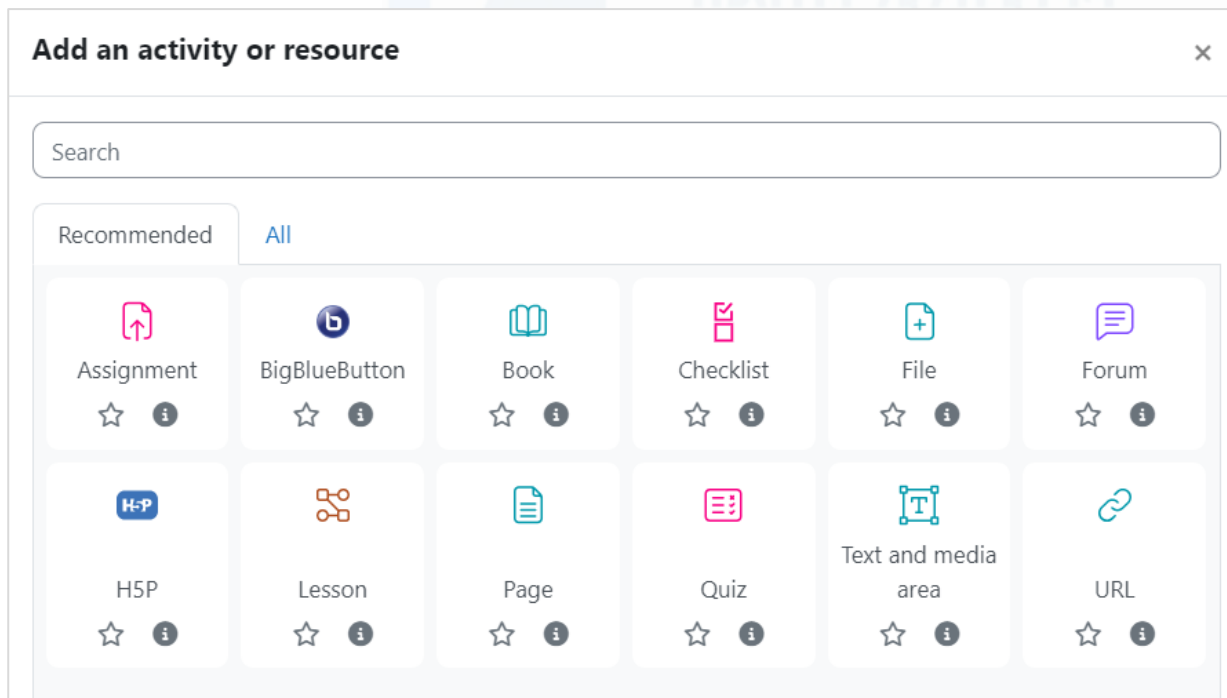


Here to commit any change on the site, you have to first change it to editing mode. To change to editing mode, click on the “edit mode” option on the right top of your page. A site with edit mode enabled looks like the following.



As you see, when the edit mode is enabled, the titles become ready for edition. In addition, there is an option called “add an activity or resource”. Now let us assume that we have a prepared video content for the first chapter and see how to upload it under chapter one.

4. To add video to your course, click on “Add an activity resource” option under any section you like to add your video.



Here are the options. Now either use “file” or “text and media area” to upload your video. Once after you choose your file, you can manage settings like its appearance, display option, subtitles (if it has), restriction, and other option. Check out the options on the site.

It is possible to upload video files, audio files, texts, assignments, power points, and other digital contents.



Tips: Useful links: For further understanding of Moodle cloud, click the video links below

Moodle for beginners

CLICK HERE 

8.5.Conclusion

Moodle is a powerful and flexible LMS that supports a wide range of educational activities and administrative tasks. Its open-source nature allows for extensive customization and integration, making it a popular choice for educational institutions and organizations looking to create effective and engaging learning environments. With its robust feature set and active community, Moodle continues to evolve to meet the changing needs of educators and learners.

Unit 9: Using Digital Technologies for Assessment, Feedback, and Analysis

Learning Outcomes: By the end of Unit Eight, Trainers will be able to:



- Under Utilize digital tools to create and administer assessments effectively.
- Implement strategies for providing timely and constructive feedback using digital platforms.
- Analyze assessment data using digital tools to monitor student progress and adjust instructional strategies accordingly.

9.1.Introduction

Using digital technologies for assessment can greatly enhance the efficiency, accuracy, and accessibility of evaluating student performance. These technologies offer various tools and methods for both formative and summative assessments, enabling educators to track progress, provide timely feedback, and personalize learning experiences.

Online Quizzes and Tests can be given using tools like Google Forms, Microsoft Forms, Moodle, Blackboard, and others. The basic futures of the assessment includes Automatic grading, immediate feedback, various question types (multiple-choice, short answer, matching, etc.) let us see how to give assessment using Moodle cloud and Google form.

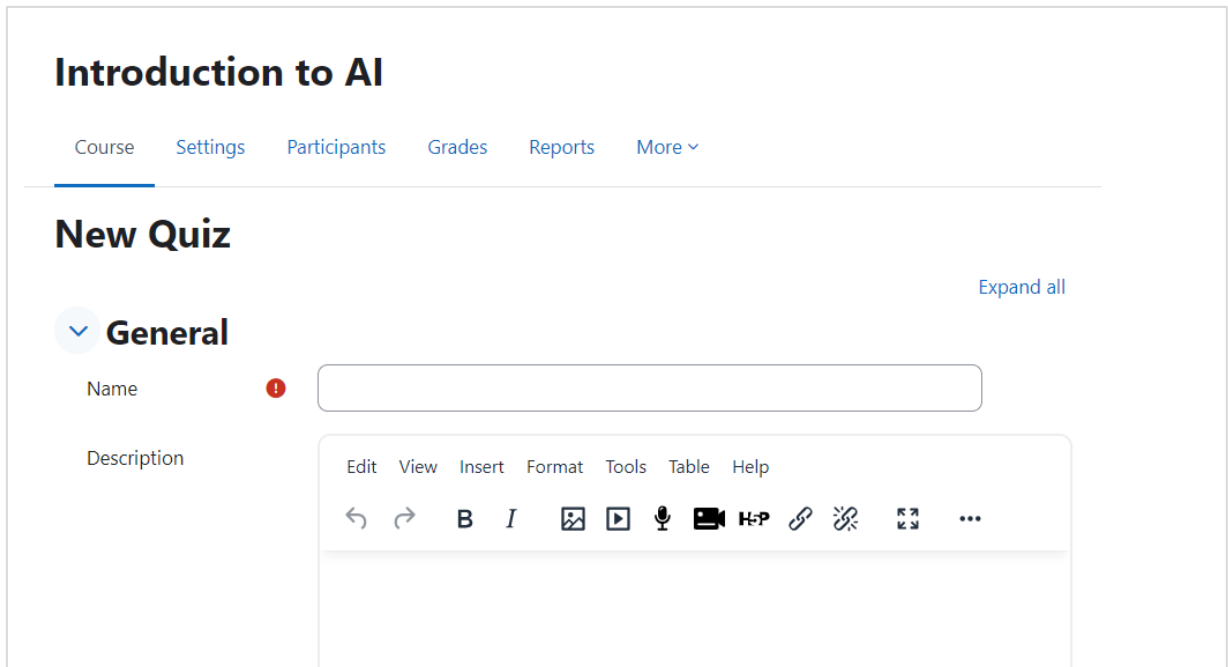
9.2. Using Moodle

Previously we started seeing Moodle for digital content delivery. Here we will use it for assessment purpose.



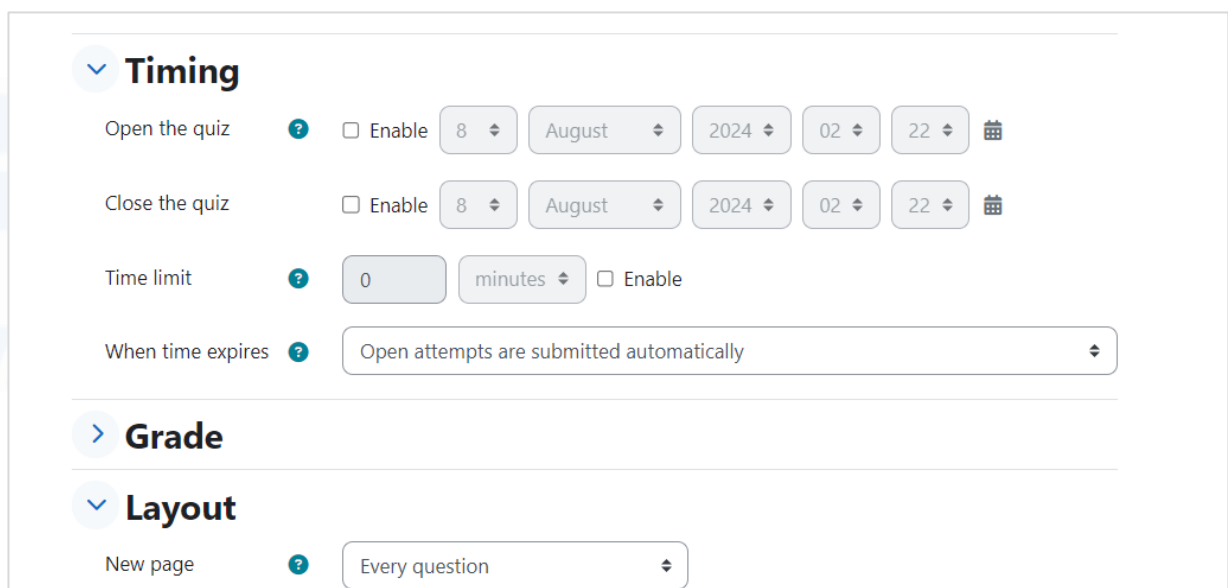
Activity 11: Assessment using Moodle

1. Let us continue from the previous lesson on Moodle. We already know how to open our course and switch to edit mode to upload digital content. With the same step, this time we will choose “Quiz” under “add activity or resource”. Give name for the quiz and description (optional). Once after we did this timing of the exam has to be set.



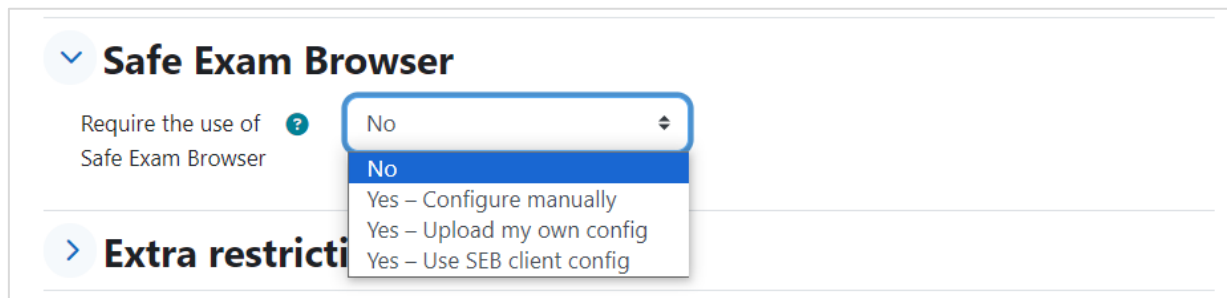
The screenshot shows the 'Introduction to AI' course page in Moodle. The 'Settings' tab is selected. Under the 'New Quiz' section, the 'General' tab is active. The 'Name' field is empty and has a red error icon. The 'Description' field is also empty and features a rich text editor with a toolbar containing options like Edit, View, Insert, Format, Tools, Table, and Help. An 'Expand all' link is visible on the right.

2. On the timing, set the start time (open the quiz), end time (Close the quiz) and the exam time (time limit) by enabling them first.



The screenshot shows the 'Timing' section of the 'New Quiz' form. The 'Timing' tab is active. The 'Open the quiz' section has an 'Enable' checkbox, a time field set to '8', a date field set to 'August 2024 02 22', and a calendar icon. The 'Close the quiz' section has an 'Enable' checkbox, a time field set to '8', a date field set to 'August 2024 02 22', and a calendar icon. The 'Time limit' section has a time field set to '0', a unit dropdown set to 'minutes', and an 'Enable' checkbox. The 'When time expires' dropdown is set to 'Open attempts are submitted automatically'. Below the 'Timing' section are the 'Grade' and 'Layout' sections. The 'Layout' section has a 'New page' dropdown set to 'Every question'.

3. The layout will help to decide the number of questions on a page. You can choose among the options. The next important option you need to focus on is using safe browser or not. It is up to you to decide to use it or not. The option is there on the platform.



Safe Exam Browser

Require the use of Safe Exam Browser ?

No

No

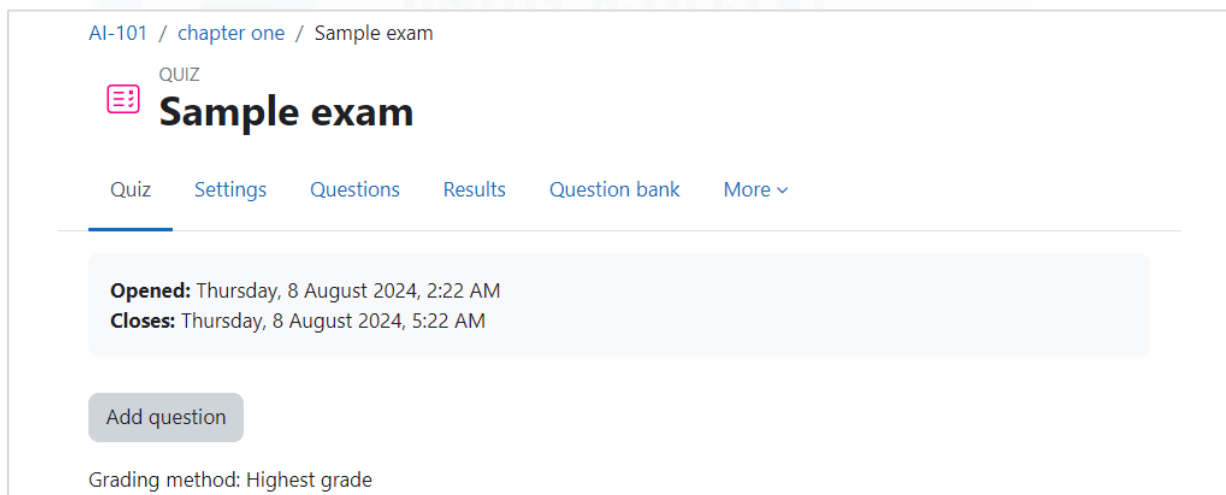
Yes – Configure manually

Yes – Upload my own config

Yes – Use SEB client config

Extra restricti

4. Once after we set the exam, the next process is to enter questions. The interface looks like the image below.



AI-101 / chapter one / Sample exam

QUIZ

Sample exam

Quiz Settings Questions Results Question bank More ▾

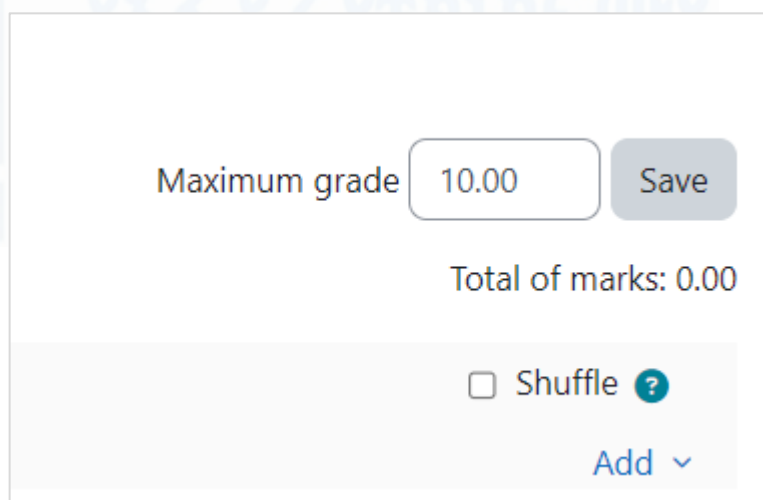
Opened: Thursday, 8 August 2024, 2:22 AM

Closes: Thursday, 8 August 2024, 5:22 AM

Add question

Grading method: Highest grade

5. To add your question click on “Add question”. Here set your total result, save it and click on add button. Under Add button, there are options to add new question or to add from exam bank. For now, let us choose new question.



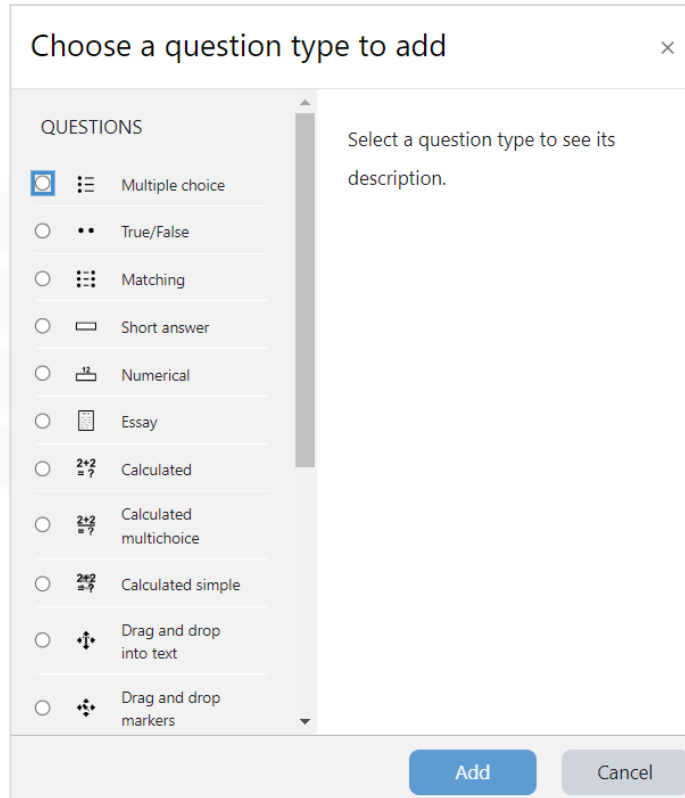
Maximum grade 10.00 Save

Total of marks: 0.00

☐ Shuffle ?

Add ▾

6. Here are the options for the type of question we need to add to the exam. Choose the type of question you need and continue to insert your question. Repeat the process until you finish inserting all questions.



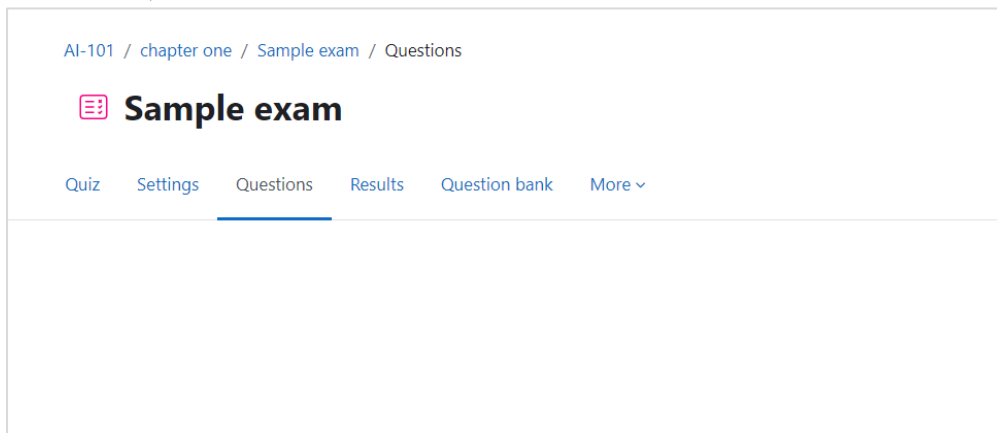
The screenshot shows a dialog box titled "Choose a question type to add" with a close button (X) in the top right corner. On the left, under the heading "QUESTIONS", there is a list of question types, each with a radio button and an icon: "Multiple choice" (selected, with a blue square icon), "True/False" (with a double-dot icon), "Matching" (with a grid icon), "Short answer" (with a text box icon), "Numerical" (with a calculator icon), "Essay" (with a document icon), "Calculated" (with a math icon), "Calculated multichoice" (with a math icon), "Calculated simple" (with a math icon), "Drag and drop into text" (with a four-way arrow icon), and "Drag and drop markers" (with a four-way arrow icon). On the right side of the dialog, the text "Select a question type to see its description." is displayed. At the bottom right, there are two buttons: "Add" (in blue) and "Cancel" (in grey).

Let us see how trainees can find their feedback for assessments, assignments, and for any graded content (on the trainer side). In addition, we will see how Moodle shows us the analytics about the results of trainees.



Activity 12: Feedback and Analysis using Moodle

1. Using Moodle, to see the exam result of students, first we have to click on the course name, then go to the assessment you created.
2. On the tab, click on Results. This tab shows all the trainees that takes the assessment and



their result. Results are kept for each questions and at the end total result of each student appears.

As you can see on the feedback table, the output contains name of trainee, email address, started and completed time, the total time taken and result for each questions are displayed. The best

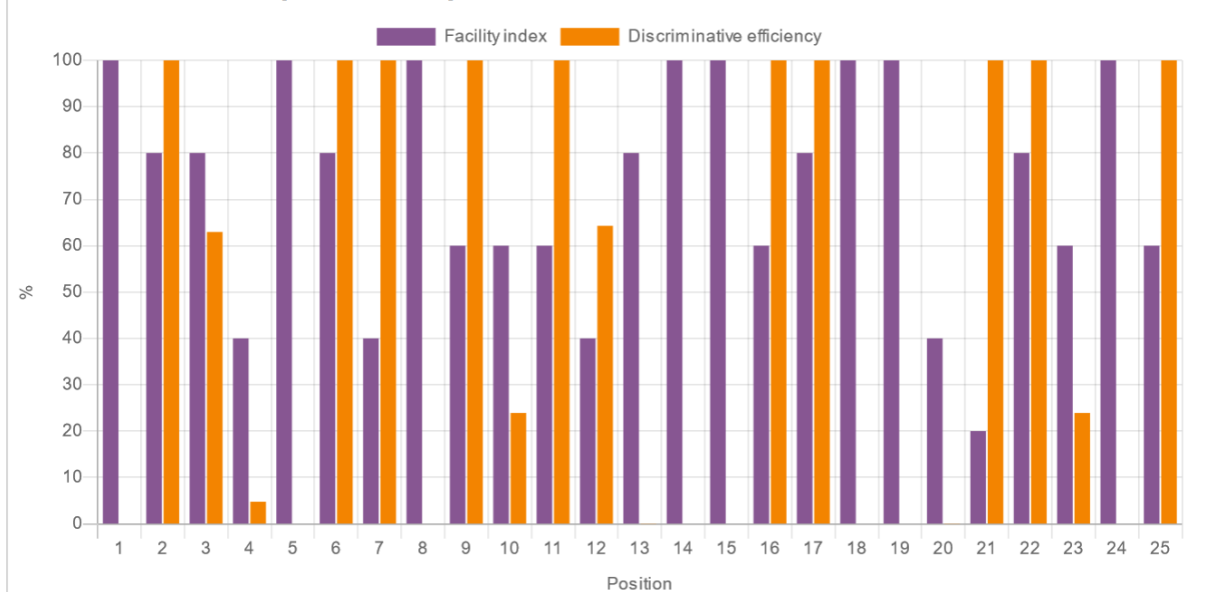
Download table data as		Comma separated values (.csv) ▾		Download													
☐	First name / Surname	Email address	State	Started on	Completed	Time taken	Grade/50.00	Q. 1 /2.00	Q. 2 /2.00	Q. 3 /2.00	Q. 4 /2.00	Q. 5 /2.00	Q. 6 /2.00	Q. 7 /2.00	Q. 8 /2.00	Q. 9 /2.00	Q. 10 /2.00
☐			Finished	30 June 2024 12:02 PM	30 June 2024 12:20 PM	17 mins 51 secs	38.00	✓ 2.00	✓ 2.00	✓ 2.00	✗ 0.00	✓ 2.00	✓ 2.00	✗ 0.00	✓ 2.00	✓ 2.00	✗ 0.00
☐			Finished	30 June 2024 12:03 PM	30 June 2024 12:35 PM	31 mins 21 secs	28.00	✓ 2.00	✓ 2.00	✗ 0.00	✓ 2.00	✓ 2.00	✓ 2.00	✗ 0.00	✓ 2.00	✗ 0.00	✗ 0.00
☐			Finished	30 June 2024 12:04 PM	30 June 2024 12:31 PM	27 mins 15 secs	42.00	✓ 2.00	✓ 2.00	✓ 2.00	✗ 0.00	✓ 2.00	✓ 2.00	✓ 2.00	✓ 2.00	✓ 2.00	✓ 2.00
☐			Finished	30 June 2024 12:04 PM	30 June 2024 12:38 PM	34 mins 27 secs	48.00	✓ 2.00	✓ 2.00	✓ 2.00	✓ 2.00	✓ 2.00	✓ 2.00	✓ 2.00	✓ 2.00	✓ 2.00	✓ 2.00

thing here is you can download the result table using an Excel file for further processing.

3. Moodle also provides analysis related to the questions and trainees. To see statically analysis, click on statistics of the assessment.

Quiz structure analysis										
Download table data as		Comma separated values (.csv)	Download							
Q#		Question name	Attempts	Facility index	Standard deviation	Random guess score	Intended weight	Effective weight	Discrimination index	Discriminative efficiency
1		Q1	5	100.00%	0.00%	25.00%	4.00%	0.00%		
2		Q2	5	80.00%	44.72%	25.00%	4.00%	6.15%	55.99%	100.00%
3		Q3	5	80.00%	44.72%	25.00%	4.00%	5.53%	42.71%	62.96%

Statistics for question positions



9.3. Using Google Form

Google Forms is a versatile tool that allows users to create surveys, quizzes, and forms for data collection and assessment purposes. It's part of the Google Workspace suite and is widely used in educational settings for creating and distributing quizzes, collecting feedback, and gathering data.

Key Features of Google Forms

1. Question Types

- **Multiple Choice:** Respondents choose one option from a list.
- **Checkboxes:** Multiple selections allowed.
- **Dropdown:** Select from a dropdown menu.
- **Short Answer:** Open-ended responses.
- **Paragraph:** Longer open-ended responses.
- **Linear Scale:** Rate on a scale (e.g., 1 to 5).
- **Multiple Choice Grid:** Choose options from a grid of rows and columns.
- **Checkbox Grid:** Select multiple options from a grid.
- **Date and Time:** Select date and/or time.

2. Customization

- **Themes:** Customize the look and feel with themes and colors.
- **Images and Videos:** Embed images and YouTube videos within questions.

3. Collaboration

- **Sharing:** Share the form with collaborators to edit together in real-time.
- **Link Sharing:** Distribute the form via a shareable link, email, or embedded on a website.

4. Responses and Analysis

- **Real-Time Responses:** View responses in real-time as they come in.
- **Summary of Responses:** Automatically generated charts and graphs for quick analysis.
- **Google Sheets Integration:** Export responses to Google Sheets for detailed analysis and reporting.

5. Quiz Features

- **Quiz Mode:** Turn a form into a quiz with auto-grading.
- **Answer Keys:** Set correct answers and assign point values.
- **Feedback:** Provide feedback for each question based on the answer.

9.3.1. Using Google Forms in Education

Quizzes and Exams:

- Create auto-graded quizzes to assess student understanding.
- Provide immediate feedback to students based on their answers.

Surveys and Feedback:

- Collect student feedback on courses, teaching methods, and resources.
- Conduct surveys to gather opinions and preferences.

Assignments and Homework:

- Use Forms to submit assignments and homework.
- Include sections for uploading files or images if needed.

Attendance and Registration:

- Track attendance for classes or events.
- Register participants for workshops, seminars, and extracurricular activities.

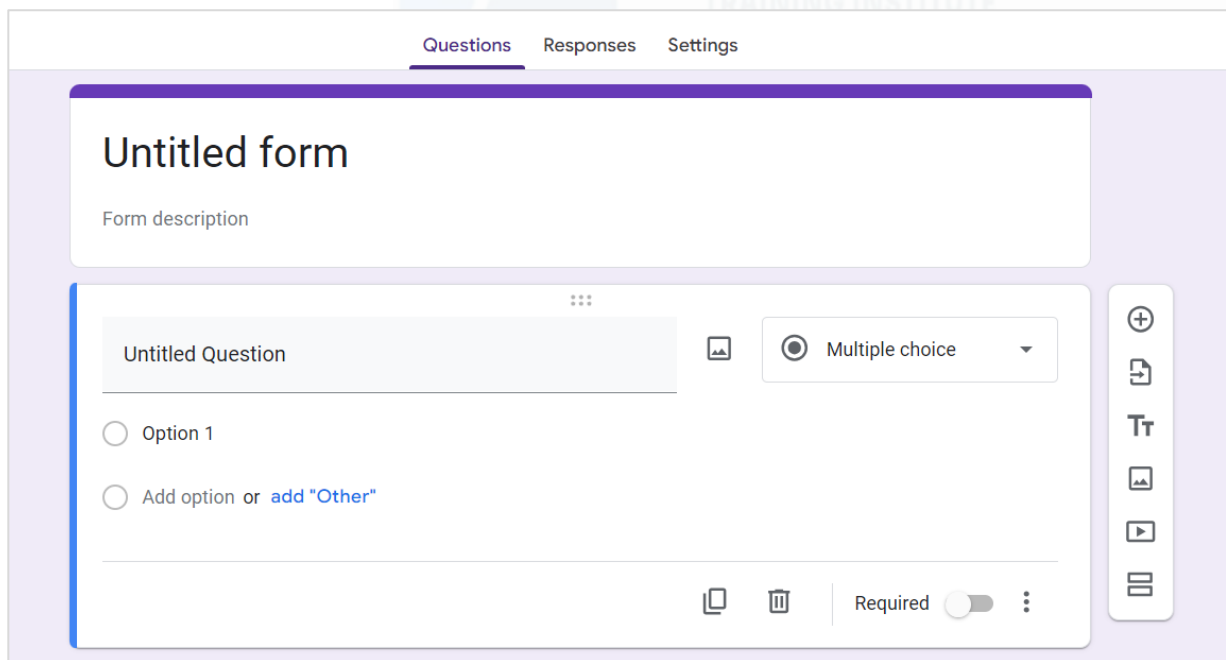
Formative Assessment:

- Use short quizzes and surveys to gauge understanding and adjust instruction accordingly.
- Employ exit tickets to gather quick feedback at the end of lessons.



Activity 13: Assessment using Google form

1. Let us open google form from google apps and click on blank form.



2. To add question, click on the + button to add a question. Then choose the question type from the dropdown menu and enter your question and options (if applicable).
3. Use the palette icon to change the theme and colors. Add sections by clicking the Add Section button to organize the form.
4. To configure your form to quiz setting, click on the setting option, and toggle on “Make this a quiz” then set options for grading and feedback.
5. Once after you finish entering the entire question, the next step is to share the link for student. Click the send button to share the form and choose to send via email, shareable link, or embed it on a website.
6. Use the response tab to view real-time responses.

Questions
Responses
Settings
Total points: 0

Settings

Make this a quiz

Assign point values, set answers, and automatically provide feedback

RELEASE GRADES

☐ Immediately after each submission
☒ Later, after manual review

Turns on Responses → Collect email addresses

RESPONDENT SETTINGS

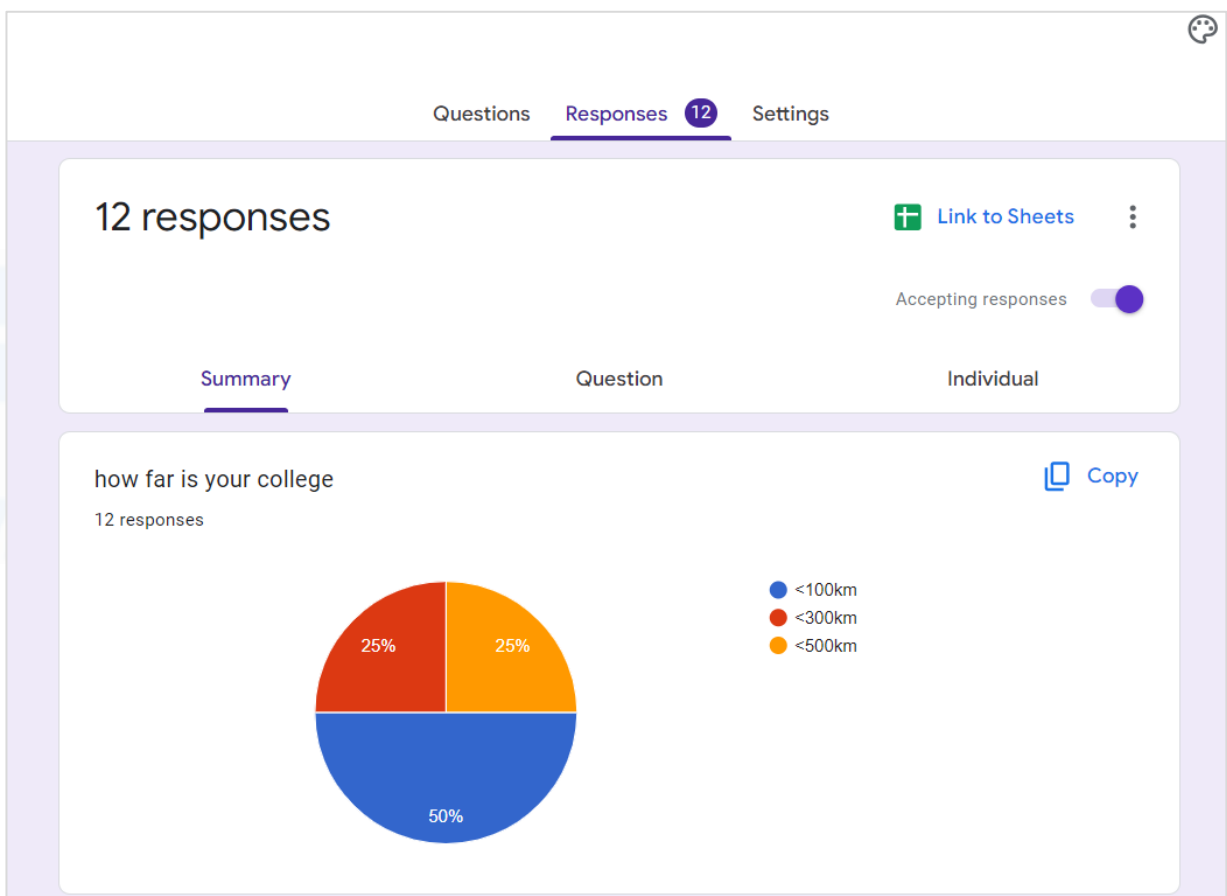
Missed questions

Respondents can see which questions were answered incorrectly

Correct answers

Respondents can see correct answers after grades are released

7. Responses and feedbacks are available on google form. Click on response tab and see the result of the assessment. The image below shows sample response collected from



participants. You have to know that google form can also be used to collect data from participants in addition to assessment process.

Under response, there are options like Summary, Question, and Individual. This allows you to see collective analysis or individual answer/response from trainees or participants. There is also a possibility to share the result and to link it to excel sheet.

9.4.Conclusion

Google Forms is a powerful tool for creating a variety of assessments and data collection instruments in education. Its ease of use, customization options, and integration with other Google tools make it an excellent choice for educators looking to streamline their assessment processes and gain valuable insights into student learning.

Unit 10: Using Generative AI

Learning Outcomes: By the end of Unit Nine, Trainers will be able to:



- Understand the basic concepts of Artificial Intelligence and its various types.
- Explain the role and capabilities of Generative AI in creating new digital content.
- Utilize Generative AI tools to enhance educational content and improve the teaching process.
- Evaluate the ethical considerations associated with the use of AI in education.



Discussion

- For what purpose have you used generative AIs?
- List some generative AIs you used before.

10.1. What is Artificial Intelligence?

Artificial Intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think, learn, and perform tasks that typically require human intelligence. These tasks include reasoning, problem-solving, understanding natural language, recognizing patterns, and making decisions. AI can be classified into various types based on its capabilities and functionalities.

10.1.1. Types of AI

Narrow AI (Weak AI): Designed to perform a specific task or a narrow range of tasks. *Examples:* Virtual assistants like Siri and Alexa, recommendation algorithms on Netflix and Amazon, and autonomous vehicles.

General AI (Strong AI): Hypothetical AI that possesses the ability to understand, learn, and apply intelligence to solve any problem like a human being. *Examples:* Currently, no AI system possesses this level of intelligence.

Super intelligent AI: An AI that surpasses human intelligence across all fields, including scientific creativity, general wisdom, and social skills. *Examples:* A theoretical concept not yet realized.

10.1.2. Applications of AI

Healthcare: Disease diagnosis, personalized medicine, robotic surgeries, drug discovery.

Finance: Fraud detection, algorithmic trading, credit scoring, personalized financial advice.

Transportation: Autonomous vehicles, traffic management systems, logistics optimization.

Education: Personalized learning, automated grading, virtual tutors.

Retail: Customer recommendations, inventory management, demand forecasting.

Entertainment: Content recommendations, AI-generated music and art, interactive gaming.

Future of AI

The future of AI holds great promise, with potential advancements in areas like human-AI collaboration, improved natural language understanding, more sophisticated autonomous systems, and breakthroughs in general AI. However, it also requires careful consideration of ethical implications, regulatory frameworks, and societal impacts to ensure beneficial outcomes for humanity.

10.2. What is Generative AI?

Generative AI refers to a class of artificial intelligence models that are capable of generating new content, such as text, images, music, or other data, based on patterns and examples from existing data. Unlike traditional AI, which typically focuses on recognizing patterns or making predictions, generative AI can create novel outputs that mimic the style and structure of the data it was trained on.

10.2.1. Applications of Generative AI

Text Generation:

Examples: GPT-3 and other large language models.

Use Cases: Writing assistance, content creation, chatbots, and translation.

Image Generation:

Examples: DALL-E, StyleGAN.

Use Cases: Art creation, image enhancement, photo editing, and design.

Music and Audio Generation:

Examples: OpenAI's Jukebox.

Use Cases: Composing music, generating sound effects, and creating audio landscapes.

Video Generation:

Examples: Deepfake technologies.

Use Cases: Film production, animation, and creating realistic avatars.

Code Generation:

Examples: GitHub Copilot.

Use Cases: Assisting software development by generating code snippets and providing programming suggestions.

10.2.2. Future of Generative AI

The future of generative AI holds vast potential for innovation across various industries, including entertainment, healthcare, education, and beyond. As these technologies advance, they

will likely become more integrated into everyday applications, driving new ways of creating and interacting with digital content. However, it is crucial to address the ethical and societal challenges to ensure that the development and deployment of generative AI are responsible and beneficial to society.

10.2.3. Generative AI for Education

Generative AI has the potential to significantly enhance education by creating personalized learning experiences, automating content creation, and providing intelligent tutoring. Here are some key applications and benefits of generative AI in education:

Applications of Generative AI in Education

1. Personalized Learning

- *Adaptive Content Creation:* Generative AI can create customized learning materials tailored to individual student needs and learning styles. For example, it can generate practice questions at the appropriate difficulty level based on a student's performance.
- *Intelligent Tutoring Systems:* AI-powered tutors can provide personalized feedback, explanations, and additional resources, adapting to each student's learning pace and progress.

2. Content Generation

- *Textbooks and Course Materials:* Generative AI can assist in creating and updating textbooks, course materials, and syllabi by generating content that covers the required topics in a coherent and comprehensive manner.
- *Interactive Simulations and Scenarios:* AI can generate interactive simulations and virtual environments for subjects like science, history, and languages, providing immersive learning experiences.

3. Assessment and Feedback

- *Automated Question Generation:* AI can generate various types of assessment questions, such as multiple-choice, short answer, and essay questions, ensuring a diverse and comprehensive evaluation of student knowledge.
- *Instant Feedback:* Generative AI can provide instant feedback on assignments and assessments, helping students understand their mistakes and learn from them more effectively.

4. Language Learning

- *Conversation Practice:* AI can simulate realistic conversations in different languages, helping students practice and improve their language skills in a natural and engaging way.

- *Translation and Explanation:* Generative AI can provide translations, explanations, and contextual usage examples for language learners.

5. Creative Writing and Projects

- *Writing Assistance:* AI can assist students in generating ideas, writing drafts, and refining their essays and creative writing projects.
- *Project Ideas:* AI can generate project ideas and outlines based on students' interests and curriculum requirements.

6. Virtual Teaching Assistants

- *24/7 Support:* AI-powered chatbots can provide students with round-the-clock assistance, answering questions related to course content, deadlines, and administrative tasks.
- *Administrative Tasks:* AI can help educators by automating administrative tasks such as grading, scheduling, and managing student records.



Use the following link to try some useful generative AIs.

<https://avaamo.ai/virtual-assistant-education/>

<https://chatgpt.com/>

<https://opexams.com/free-questions-generator/>

10.2.4. Benefits of Generative AI in Education

Enhanced Engagement: Interactive and adaptive content keeps students engaged and motivated by providing a more personalized and relevant learning experience.

Efficiency and Scalability: Automating content creation and assessment allows educators to focus more on teaching and mentoring, while also enabling the delivery of high-quality education to a larger number of students.

Accessibility: AI can create accessible learning materials, such as generating content in different languages or formats, making education more inclusive for students with diverse needs.

Continuous Improvement: AI can analyze student performance data to continuously improve and adapt learning materials, ensuring that content remains up-to-date and effective.

Support for Educators: Generative AI can assist educators in curriculum development, lesson planning, and providing personalized support to students, enhancing the overall teaching experience.

Examples of Generative AI in Education

Content Creation Tools: Platforms like Knewton and Smart Sparrow use AI to create personalized learning paths and adaptive courseware.

Language Learning Apps: Duolingo and Babbel use AI to generate language exercises and provide instant feedback to learners.

Virtual Tutors: Platforms like Squirrel AI and Querium offer AI-powered tutoring systems that adapt to student learning needs.

Automated Essay Scoring: Tools like Turnitin's Revision Assistant and Pearson's WriteToLearn provide AI-driven feedback on student writing.

Generative AI in education promises to revolutionize the way we teach and learn by making education more personalized, efficient, and accessible. However, it is essential to address the associated challenges to fully realize its potential and ensure it benefits all learners.



Additional links check them out!

<https://www.canva.com/ai-image-generator/>

<https://pixlr.com/image-generator/>

<https://elsaspeak.com/en/ai/>

10.2.5. Challenges and Considerations

Bias and Fairness

Ensuring that AI-generated content is free from biases and fairly represents diverse perspectives is crucial to avoid reinforcing existing inequalities in education.

Quality Control

Maintaining the quality and accuracy of AI-generated content is essential to ensure that students receive reliable and effective learning materials.

Privacy and Data Security

Protecting student data and ensuring privacy is a significant concern when using AI in educational settings.

Teacher Training

Educators need to be trained to effectively integrate AI tools into their teaching practices and leverage their full potential.



ATTENTION

While using generative AIs, please note the following points.

Misinformation and Deep fakes:

Generative AI can create highly realistic fake images, videos, and news, raising concerns about misinformation and trust.

Intellectual Property:

The use of existing data to generate new content can lead to questions about ownership and copyright.

Bias and Fairness:

Generative models can perpetuate and amplify biases present in the training data, leading to unfair or discriminatory outputs.

Job Displacement:

The automation of creative tasks through generative AI might influence jobs in fields like writing, design, and art.

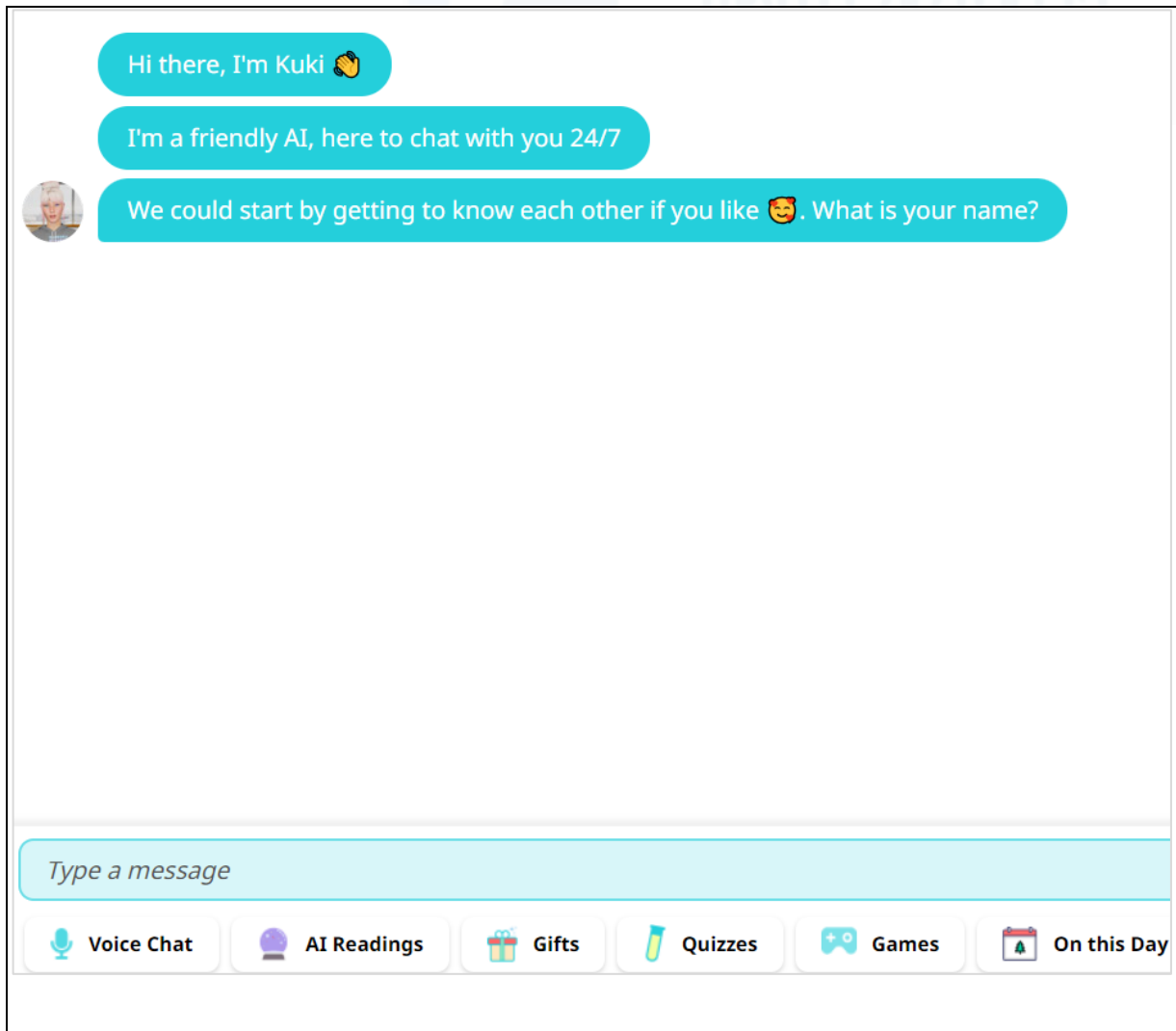
Let us try some activities on generative AI.



Activity 14: Using Mitsuku

Objective: Demonstrate the use of Generative AI. Let us work on mitsuku that is the world's best conversational chatbot. Mitsuku will then use its advanced natural language processing capabilities to understand your message and provide a relevant response

1. Use <https://chat.kuki.ai/> to open mitsuku chatbot
2. Sign in using your email
3. After login the chatbot will be opened and ready to get input.
4. Ask whatever you like in professional manner and the chatbot will respond



Let us try to work some activity on video generator AI.



Activity 15: Working with Video Generator AI

Objective: to exercise generative AI and create short video. For this activity, we are going to use pixverse AI site. Don't forget that there are several AIs which are used to generate video from the text input.

1. Use the link <https://app.pixverse.ai/home> to open video generator AI.
2. Choose text to video option. Here you need to write descriptive sentence on the prompt box.
3. Write if negative prompt is there (negative prompt means something that could be part of your request but you don't need to see it on the video)
4. Set duration and click on Create.

10.3. Generative AI and TVT

Generative AI can significantly enhance technical and vocational education by providing personalized learning experiences, creating realistic simulations, and automating content creation. Additional benefits of using generative AI in technical and vocational training includes:

1. Increased Accessibility

- **Remote Learning:** AI enables students to access high-quality vocational training remotely, making education more accessible to those in different geographic locations or with varying schedules.
- **Scalability:** AI-driven platforms can accommodate large numbers of students, making it easier to scale educational programs without compromising quality.

2. Enhanced Engagement

- **Interactive Learning:** AI-powered simulations and personalized learning paths can increase student engagement by making learning more interactive and relevant to their career goals.
- **Motivation and Retention:** Personalized feedback and adaptive challenges can keep students motivated and help them stay on track with their learning objectives.

3. Real-Time Skill Development

- **Immediate Feedback:** Instant feedback on practical tasks helps students learn and correct mistakes quickly, accelerating their skill development.
- **Practical Experience:** AI-generated scenarios and simulations provide hands-on experience that is crucial for mastering technical and vocational skills.

4. Alignment with Industry Standards

- **Up-to-Date Content:** Generative AI can ensure that educational materials are constantly updated to reflect the latest industry standards and technological advancements.
- **Industry-Specific Training:** AI can generate content and simulations tailored to specific industries, ensuring students acquire relevant and current skills.

Example: AI in Automotive Vocational Training

Personalized Learning Path:

Initial Assessment: Students begin with an assessment to gauge their existing knowledge and skills in automotive repair.

Custom Learning Path: Based on the assessment, AI generates a personalized learning path, focusing on areas where the student needs improvement, such as engine diagnostics or electrical systems.

Interactive Simulations:

Virtual Car Workshop: Students can interact with a virtual car workshop, practicing tasks like changing tires, diagnosing engine problems, and performing routine maintenance.

Realistic Scenarios: AI generates scenarios where students must diagnose and fix issues, providing a hands-on learning experience without the risk of damaging real vehicles.

Generative AI offers transformative potential for technical and vocational education by making learning more personalized, accessible, and aligned with industry needs. This not only enhances the learning experience for students but also ensures they are better prepared for their future careers.

Let us use chatGPT to create realistic case scenario.



Activity 16: Working with chatgpt to create realistic case

Objective: to exercise case scenario generation using chatGPT. ChatGPT is a conversational and the most efficient AI in use this time. This is as activity to show you how to use chatGPT. Please use to create different scenarios related with your field.

1. Open chatGPT using the link chatgpt.com.
2. It is recommended to sign in by your email for better communication with the AI.
3. Write your initial draft for the case scenario. For example:
Give me a case scenario about constructing a building with less cost and good quality.
4. Feed your request to chatgpt.

Conclusion

On this topic we primary focus on generative AIs. Now we know what generative AI is capable of. As a trainer, you are expected to use generative AI technology to simplify your training.

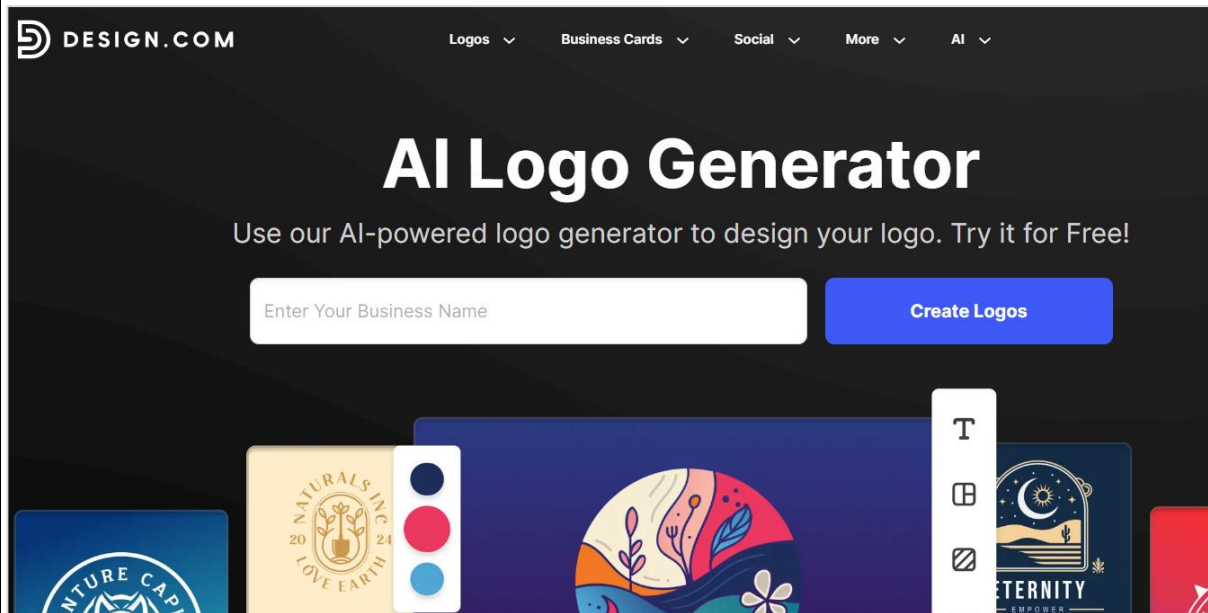
Let us try to work on logo designer AI.



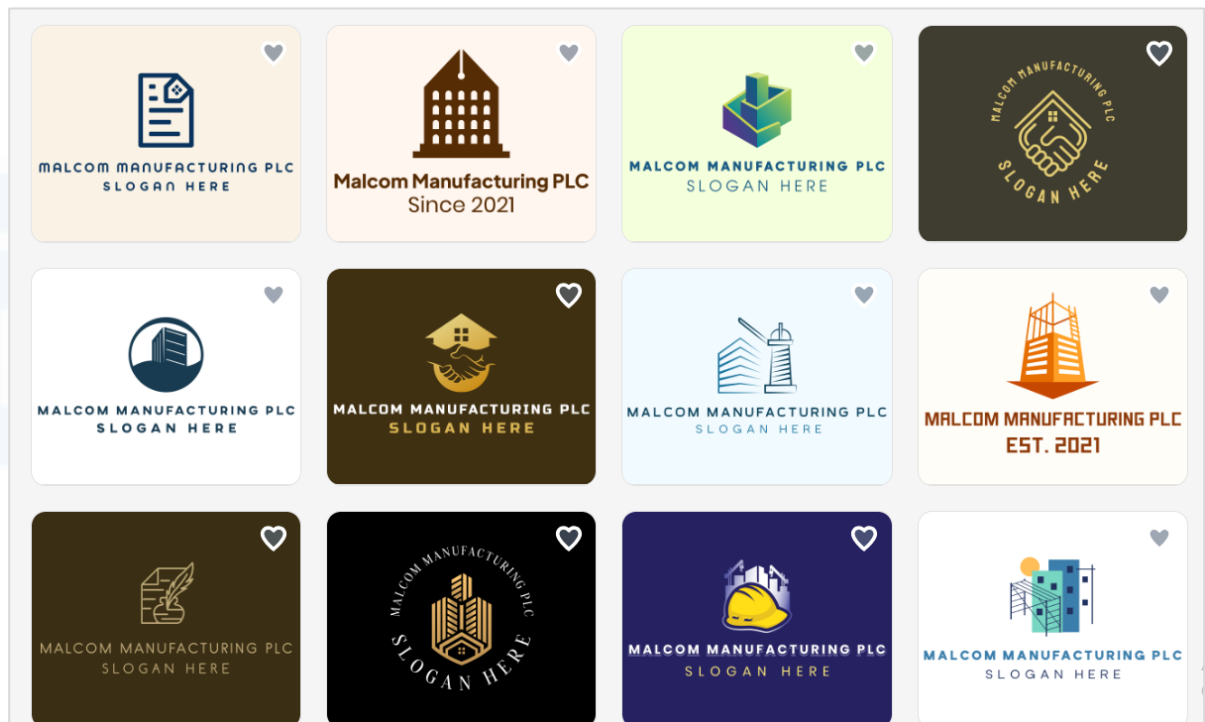
Activity 17: Working with logo designer AI

Objective: to exercise generative AI and create logo for a company. For this activity, we are going to use design.com AI site. Don't forget that there are several AIs which are used to create logo from the text input.

1. Use the link <https://www.design.com/> to open logo creator AI.
2. The page requests for company name.



3. Let me use a name "Malcom Manufacturing PLC".



4. Here are the possible logo suggestion created by the generator (these are not the only ones).

5. Click on your preferred one and it will open it by “edit” mode.
6. You can have modification on the editor.



Additional links check them out!

<https://gencraft.com/generate>

<https://www.logoai.com/logo-maker>

Unit 11: Using Assistive Tools

Learning Outcomes: By the end of Unit Ten, Trainers will be able to:



- Identify and describe various assistive tools and their applications in educational settings.
- Demonstrate the ability to set up and use assistive technologies to support
- Recognize the importance of accessibility in education and apply assistive technologies to enhance learning outcomes for all students.



Discussion

- What is the purpose of assistive tools?
- List assistive tools you used before and for what purpose.

11.1.Introduction

Assistive tools in computing are software and hardware designed to help individuals with disabilities interact with computers and digital devices more effectively. These tools enhance accessibility, allowing users to perform tasks they might find challenging due to physical, sensory, cognitive, or learning impairments.

Using computer-assistive tools in education can significantly enhance learning experiences for students with disabilities by providing them with the necessary support to access educational content, participate in classroom activities, and complete assignments.

Trainers can use assistive tools to help students with special needs. These tools are of different type and can be found on our computer integrated with the operating system. Here are some common types of computer assistive tools:

11.2.Types of Assistive Tools

- a. **Screen Readers:** Software that reads aloud text displayed on the screen.
 - *Example:* Narrator (built into Windows).
- b. **Screen Magnifiers:** Software that enlarges text and graphics on the screen to make them easier to see.
 - *Examples:* Windows Magnifier.
- c. **Speech Recognition Software:** Allows users to control their computer and input text using voice commands.
 - *Examples:* Windows Speech Recognition, Google Voice Typing.
- d. **Alternative Input Devices:** Devices that provide alternatives to standard keyboards and mice.

- *Examples:*
 - On-Screen Keyboards: Virtual keyboards that can be operated with a mouse or touch screen.
 - Eye-Tracking Devices: Allow users to control the computer with eye movements.
 - Head Pointers and Mouth Sticks: Used by individuals who cannot use their hands.
- e. **Text-to-Speech (TTS) Software**: Converts written text into spoken words.
 - *Examples*: NaturalReader, Kurzweil 3000, Balabolka.
- f. **Hearing Assistance**: Tools that help individuals with hearing impairments.
 - *Examples:*
 - Amplification Software: Enhances the volume of audio.
 - Real-Time Captioning: Provides on-screen text for spoken content (e.g., Google Live Transcribe).
- g. **Assistive Software for Cognitive Disabilities**: Tools that aid individuals with cognitive impairments in managing tasks and information.
 - *Examples:*
 - Time Management Apps: Visual timers, scheduling tools.
 - Task Management Tools: To-do lists, reminders (e.g., Todoist, Microsoft To Do).

Let us work on windows assistive tools:



Activity 18: Opening a speech recognition application

1. Click the Start button.
2. Scroll and click Windows Ease of Access.
3. Click Windows Speech Recognition.
4. Follow the instructions to set up the computer to recognize your voice.

Use the images below to follow the steps

W

Weather

Windows 10 Upgrade Assistant

Windows Accessories

Windows Administrative Tools

Windows Defender Security Center

Windows Ease of Access

Windows Live

Windows Live Mail

Windows Live Messenger

Windows Live Movie Maker

Windows Live Photo Gallery

Windows Media Player

Windows PowerShell

Windows System

WinRAR

Windows Ease of Access

Magnifier

Narrator

On-Screen Keyboard

Windows Speech Recognition

← Set up Speech Recognition

Welcome to Speech Recognition

Speech Recognition allows you to control your computer by voice.

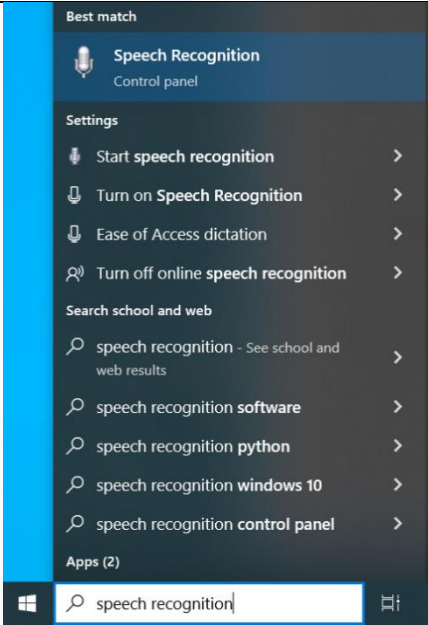
Using only your voice, you can start programs, open menus, click buttons and other objects on the screen, dictate text into documents, and write and send e-mails. Just about everything you do with your keyboard and mouse can be done with only your voice.

First, you will set up this computer to recognize your voice.

Note: You will be able to control your computer by voice once you have completed this setup wizard.

Next

Cancel



The screenshot shows the Windows search interface with 'speech recognition' entered in the search bar. The results are categorized into 'Best match', 'Settings', 'Search school and web', and 'Apps (2)'. Under 'Settings', there are four options: 'Start speech recognition', 'Turn on Speech Recognition', 'Ease of Access dictation', and 'Turn off online speech recognition'. Under 'Search school and web', there are five search results related to speech recognition. Under 'Apps (2)', there are two results: 'speech recognition' and 'speech recognition control panel'.

- Using the keyboard shortcut. Press Windows + Ctrl + S

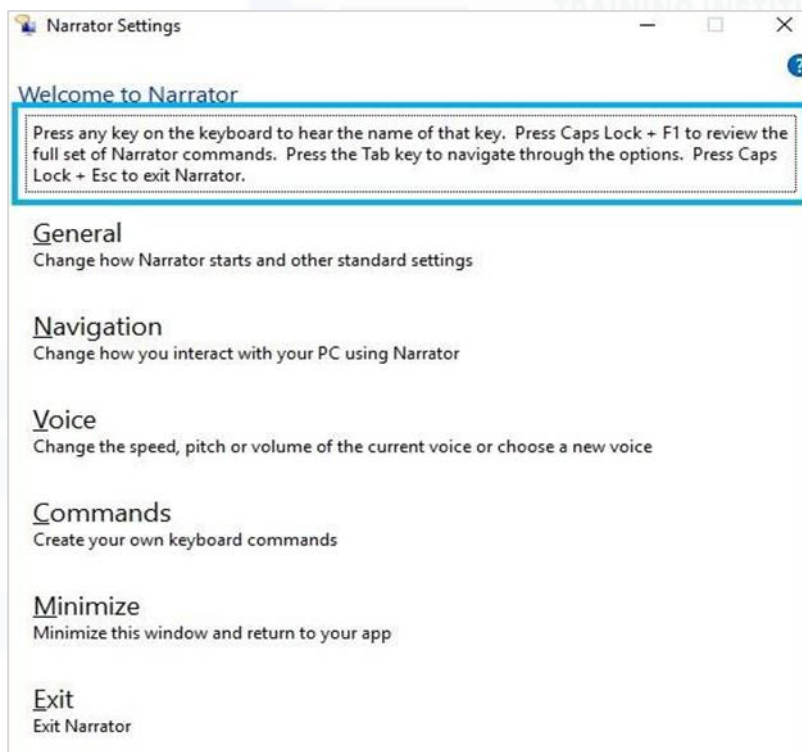


Activity 19: Using screen reader software

1. Click the Start button.
2. Scroll and click Windows Ease of Access.
3. Click Narrator.



The Narrator tool will display.



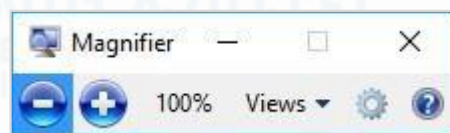
Note: Use the easy way to open your narrator by clicking on start and typing “Narrator”. You can also use this shortcut: Press `Ctrl + Windows + Enter` to start or stop Narrator.



Activity 20: Using a screen magnifier:

1. Click the Start button.
2. Scroll and click Windows Ease of Access.
3. Click Magnifier.

The magnifier tool will display.



Note: Use same way as we did before to open it or use the following shortcut. Press `Windows + + (plus)` to open the Magnifier, and `Windows + Esc` to close it.

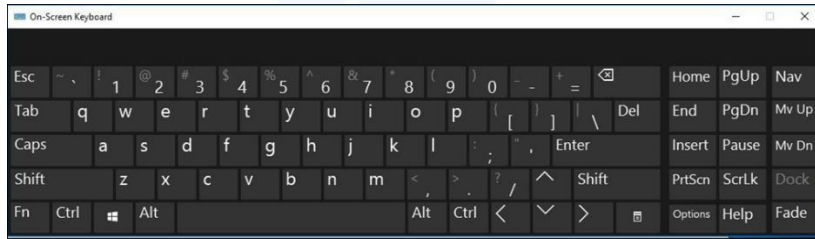


Activity 21: To use an on-screen keyboard

1. Click the Start button.
2. Click Windows Ease of Access.

3. Click On-Screen Keyboard.

The on-screen keyboard is displayed.



Note: You can use keyboard shortcut to open On-Screen Keyboard in addition to clicking on start and write its name.

Shortcut: Press Windows + Ctrl + O

11.3.Conclusion

Assistive tools are essential for making technology accessible to everyone, regardless of their physical, sensory, cognitive, or learning disabilities. By leveraging these tools, individuals can achieve greater independence and productivity in their personal, educational, and professional lives.



Activity 22: selecting the correct tool for your work

Title: selecting the correct tool for your work

Objective: To apply the lesson learned and to select the right tool for your work.

Instructions:

- On the table below in the first column list down works that need a digital intervention
- On the second column list down a set of digital tools that match the work you listed in the first column.

List of works that need a digital Tool	Digital Tool suitable for the job

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