

Lecture 3: Software Concepts

- Software definition
- Categories of software

Software definition

- When user interact with computer the first perception comes to mind is of hardware part of computer
- BUT computer hardware must be programmed to produce useful information
- The programmes which are usually planned and step-by-step instruction are what we termed as software
- Software is a computer program in form of step-by-step instructions that makes computer components to work together to produce desirable result to its user

Categories of software

- There are two main categories of computer software
 - System software
 - Application software
- System software is a set of programs through which the computer manages its own components e.g. CPU, memory, storage, input/output devices
- System software, which must be found in every computer, is sometimes called operating system
- It is the one which determine the operational behavior of computer e.g. how file created and managed

Categories of software

- Much of system software activities are hidden from user e.g. after issue printing command, user cannot see how software instruct printer to print a document
- Some computer can support multiple system software to be installed into their computer, but most of them support singly system software to run at a time
- Examples of system software (operating system) are MS-DOS (for **M**icrosoft **D**isk **O**perating **S**ystem), System 7 for Macintoshes
- Most system software nowadays characterized with
 - **Graphical user interface**
 - **Icons**
 - **Pull down menu**
 - **pointer**

Categories of software

- Application software is a software that applied on top of system software to solve a particular problem or perform a particular task
- There are two types of application software
 - Custom software
 - Packaged software
- Custom software are application software that specifically tailored/produced to perform a certain task specified by certain user
- Custom software cannot be used/sold to another user for different purposes from the intended one

Categories of software

- Custom software usually tailored by programmer after receive a special order from specific user
- Custom software cannot be sold at the software vendor shops unless ordered-user decide to release it

Categories of software

- Packaged software, sometimes known as commercial software, are application software tailored to generalize various user needs
- One copy of packaged software can be used by various different user to perform various related activities
- They called packaged software because in most cases they sold out while packaged into a container (box/folder)
- Usually inside container you will find a diskette/CD-ROM with respective software and documentation of how to use it

Categories of software

- Examples of packaged software are
 - **Word processing:**
a software that let user to create, edit, format, store, and print text. This features make word processing different from plain typing
 - **Spreadsheets:**
a software that used to organize and analyze business data comprised with worksheet divided into columns and rows
 - **Database management:**
a software that can store data, update it, manipulate it and create report in a variety of forms.