

Contact Book Management System

You are requested to develop a contact book application. The program keeps the following information about a contact: First name, last name, telephone number, email and address (region, city, sub city, werda, and houseNo) using the design discussed in the class.

In general, the application allows adding, editing, removing, searching and displaying contact info.

Your program must be a menu driven with the following menu structure:

Main Switch Board

1. Edit
2. View
3. Exit

Edit Sub Menu //when the user selects 1 on main switch board

1. Add Contact
2. Modify Contact
3. Remove Contact
4. Back to Main Switch Board
5. Exit

View Sub Menu //when the user selects 2 on main switch board

1. View All Contact
2. View By Search
3. Back to Main Switch Board
4. Exit

Other requirements

1. If the contact book is full when adding contact, it must be resized by 10 additional space and the contact must be added
2. The search can be by name or phone. The search is prefix search (start with). Returns the result through the result int array which

contains the index positions/ If target starts with digit search will be by phone otherwise by name

3. On modify contact, if the target search results to multiple contacts, the user must select the contact to be edited and then, the user must be allowed to modify whatever fields of the target contact he/she wants until satisfied then replace the old contact
4. On removing contact, if the target search results to multiple contacts, the user must select the contact to be removed and then remove it
5. Your main class must be break down into several methods each assuming a single responsibility. Some of the module you may need:
6. mainMenu
 - welcome: Displays a welcome message when the program starts
 - goodbye: Displays a goodbye message when the program ends
 - mainMenu: Displays the main menu: (view, edit, exit) and allow the user to choose and returns the user choice
 - viewSubMenu: Displays the view sub menu: (view all, view by search, back to main, exit) and allow the user to choose and returns the user choice
 - editSubMenu: Displays the edit sub menu: (add, modify, remove, back to main, exit) and allow the user to choose and returns the user choice
 - getNewAddress : this gets an address from the user and return
 - getNewContact: this gets a contact from the user(it will call getNewAddress) and return
 - getSearchKey: this get and returns the search string(make it generic so that you can use it for modify, view and remove)
 - selectContact: used to display the contacts in the search result contacts array and allow the user to select the contact to edit or remove. And returns the selected contact
 - getEditedContact: this allows the user to edit the contact and returns the edited contact.
 - ...

Important

- The assignment is to be done with a group of two students
- Submission Date: 7/4/2021 before 8:00 Pm
- Defense dates: To be announced
- Deadline must be respected

- Project must be done according to the specification
- Each member must participate
- While engaging in general discussion regarding the solution is encouraged, giving and receiving major sections of code will be considering cheating. All parties (giving or receiving) will be punished. This includes copying from Internet.