
Phone Book System

It is required to write a program that will create and maintain a Phone Book System. Each entry of the database will include the Name, Phone Number, Address.

Your program should allow the user to execute the following commands: -

- 1- **ADD:** The system should prompt the user field by field for the data of a single record and add it to the database of phone book.
- 2- **QUERY: (Search)** The system should process a request by the user to look up information about a specific entry. The user must provide the **name**, and the system should provide all the information for all entries that starts with that name.
- 3- **PRINT: (Sort)** Print the entire database on the screen, in sorted order. Entries should be sorted according to the name.
- 4- **EDIT:** The user should be prompted for the name of the person to be edited. Then the user should be prompted to enter the new information (name, phone number, address).

Notes: -

- The program should check for errors and print appropriate messages (e.g., trying to delete an entry that is not in the database, or trying to search for a name that doesn't exist).
- Every task of the above tasks should be a separate function.
- You should do a menu to enable an easy access for all of these functions.

Bonus: -

- The program should validate all of entered data.
 - Validate a number in the mobile number, age and the id.
 - Validate a string in the name.
- Implement a Delete function, that will prompt the user to enter a name to delete from the phonebook.
- Any extra features will be considered as bonus, so feel free to add any.

Important notes: -

- **Late submissions will not be accepted.**
- You should work in **groups of two**.
- Cheating Policy: All actual programming should be an independent effort. If any kind of cheating is discovered, penalties will apply to the participating students by zero in the project, so delivering a nonworking program is so much better than delivering a copy.

Deliverables: -

- Report that will contain description for your work, sample runs for the program, user manual (how to use the system), and main algorithms used (search algorithm, sort algorithm).
- **Deadline will be 20/06/2021** and Discussion date will be determined later.

Good luck :)