

PhoneBook Manager

- Introduction

The PhoneBook Manager is a C project which has features like Add, Search, Delete, update contacts in a file for future use. It can store details such as First name, last name, phone number & E-mail as provided by the user.

- High Level Requirements

- Must perform operations such as:

- Addition of a contact
 - Deletion of a contact
 - Update a contact
 - Search for a contact

- Low Level Requirements

- Low level requirements must have

- Save a new contact
 - Search contact wrt first name, last name, phone number,
email id
 - Display appropriate message if contact not found

- SWOT

- Strengths

- Easily upgradeable by adding additional information
 - Easy to understand application and use
 - Easy method to search for a contact having particular
information

- Weakness

- No backup of contacts
 - Privacy concerns

- Opportunities

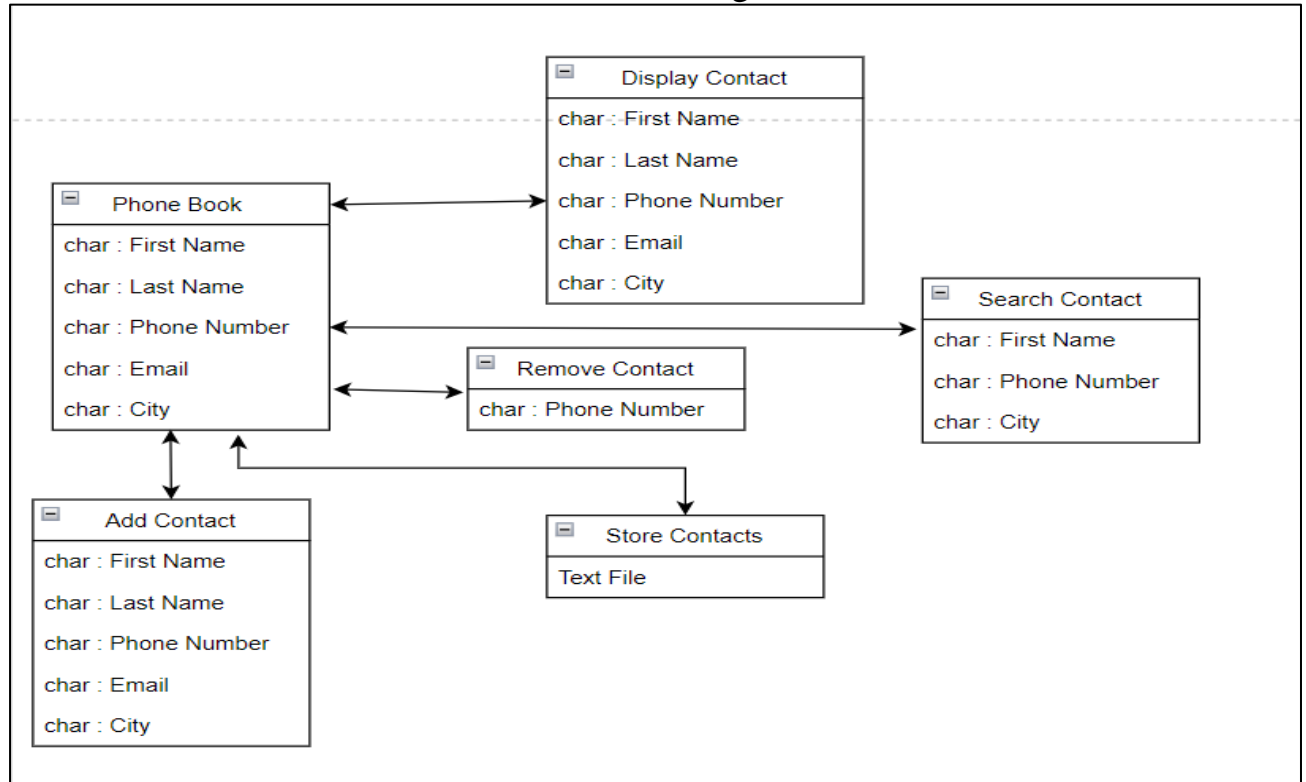
- Used in day to day life by everyone
 - Can be used as a method to not just store contacts but also
various other information

- Threats

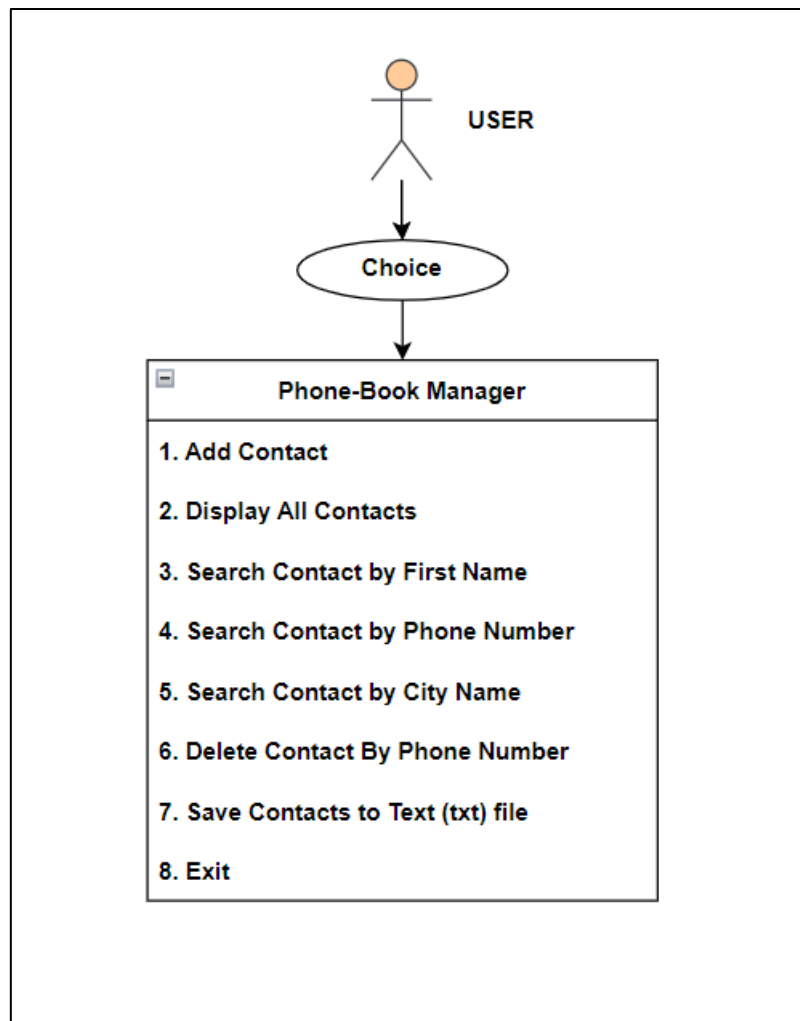
- Very basic design with no GUI. Hence would not attract
young generation to make use of it.
 - Many other similar applications available.

- ## 4W's & 1H
 - Who
 - A user who wants to store information digitally.
 - What
 - This is a utility application to add, delete, search, edit phone contacts developed with C Language.
 - When
 - Phonebook manager can be used to store information instantly in any digital device
 - Where
 - User can belong to any background who can use this utility to store key information.
 - How
 - Developed using C Language.

- Structural Diagram



- Behavioural Diagram



- High Level Test Plan

High level test plan

Test ID	Description	Exp I/P	Exp O/P	Actual Out	Type Of Test
H_01	Display Main Menu	None	Options to choose operations to be performed	Options to choose operations to be performed	Requirement based
H_02	Exit the Program when user is done with operations	8	Exited	Exited	Requirement based

- Low Level Test Plan

Low level test plan					
Test ID	Description	Exp I/P	Exp O/P	Actual Out	Type Of Test
L_01	Add a new Contact	1	Options to Enter First name, last name, Phone Number, Email id & City	Options to Enter First name, last name, Phone Number, Email id & City	Requirement based
L_02	Diaplay All Contacts	2	To Display all contacts	Displayed all contacts	Requirement based
L_03	Search Contact with First Name	3	To Display Required contacts	Displayed Required contact	Requirement based
L_04	Search Contact with Phone Number	4	To Display Required contacts	Displayed Required contact	Requirement based
L_05	Search Contact with City	5	To Display Required contacts	Displayed Required contact	Requirement based
L_06	Search Contact with First name, phone number or City which does not exist	3/4/5	Contact Not Found	Contact Not Found	Requirement based
L_07	Delete Contact with Specific Phone Number if it exists	6	Contact Deleted Succesfully	Contact Deleted Succesfully	Requirement based
L_08	Delete Contact with Specific Phone Number if it does not exist	6	Contact Does Not exist	Contact Does Not exist	Requirement based
L_09	Save Contacts to file	7	Contacts saved	Contacts saved	Requirement based

- Working

```

aashishkalra@Aashishkalra:/mnt/d/M1_PhoneBookManager_Utility/3_Implementation$ make Run
gcc src/demo.c src/unity.c src/main.c src/test_demo.c -Iinc -o inux
./inux

Error: Cannot load the Contact Manager file

PhoneBook_Manager Utility Main menu

1. Add a new Contact
2. Display All Contacts
3. Search Contact by First Name
4. Search Contact by Phone Number
5. Search Contact by City
6. Delete a Contact by Phone Number
7. Save Data to a File
8. Exit

Enter your choice:

```

- Add New Contact

```
PhoneBook_Manager Utility Main menu

1. Add a new Contact
2. Display All Contacts
3. Search Contact by First Name
4. Search Contact by Phone Number
5. Search Contact by City
6. Delete a Contact by Phone Number
7. Save Data to a File
8. Exit
```

Enter your choice:

1

First Name: Aashish

Last Name: Kalra

Phone Number: 123

Email Id: ash@ash.com

City: Bangalore

Contact sucessfully added.

```
PhoneBook_Manager Utility Main menu

1. Add a new Contact
2. Display All Contacts
3. Search Contact by First Name
4. Search Contact by Phone Number
5. Search Contact by City
6. Delete a Contact by Phone Number
7. Save Data to a File
8. Exit
```

Enter your choice:

█

- Display All contacts

```
PhoneBook_Manager Utility Main menu

1. Add a new Contact
2. Display All Contacts
3. Search Contact by First Name
4. Search Contact by Phone Number
5. Search Contact by City
6. Delete a Contact by Phone Number
7. Save Data to a File
8. Exit
```

Enter your choice:

2

First Name: Aashish

Last Name : Kalra

Mobile No : 123

Email Id : ash@ash.com

City : Bangalore

```
PhoneBook_Manager Utility Main menu

1. Add a new Contact
2. Display All Contacts
3. Search Contact by First Name
4. Search Contact by Phone Number
5. Search Contact by City
6. Delete a Contact by Phone Number
7. Save Data to a File
8. Exit
```

Enter your choice:

█

- Search contacts

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PhoneBook_Manager Utility Main menu

1. Add a new Contact
2. Display All Contacts
3. Search Contact by First Name
4. Search Contact by Phone Number
5. Search Contact by City
6. Delete a Contact by Phone Number
7. Save Data to a File
8. Exit

Enter your choice:
3
Please enter the First Name of contact to search:
Aashish

First Name: Aashish

Last Name : Kalra

Mobile No : 123

Email Id : ash@ash.com

City : Bangalore

PhoneBook_Manager Utility Main menu

1. Add a new Contact
2. Display All Contacts
3. Search Contact by First Name
4. Search Contact by Phone Number
5. Search Contact by City
6. Delete a Contact by Phone Number
7. Save Data to a File
8. Exit

Enter your choice:
█
```

- Delete Contact

```
1. Add a new Contact
2. Display All Contacts
3. Search Contact by First Name
4. Search Contact by Phone Number
5. Search Contact by City
6. Delete a Contact by Phone Number
7. Save Data to a File
8. Exit

Enter your choice:
6
Please enter the Phone Number of the contact to delete:
123
1 contact deleted

PhoneBook_Manager Utility Main menu

1. Add a new Contact
2. Display All Contacts
3. Search Contact by First Name
4. Search Contact by Phone Number
5. Search Contact by City
6. Delete a Contact by Phone Number
7. Save Data to a File
8. Exit

Enter your choice:
2

No Existing Contacts

PhoneBook_Manager Utility Main menu

1. Add a new Contact
2. Display All Contacts
3. Search Contact by First Name
4. Search Contact by Phone Number
5. Search Contact by City
6. Delete a Contact by Phone Number
7. Save Data to a File
8. Exit

Enter your choice:
█
```

- Save Contacts to file

Enter your choice:

1

First Name: a

Last Name: b

Phone Number: 123

Email Id: a

City: a

Contact sucessfully added.

PhoneBook_Manager Utility Main menu

1. Add a new Contact
2. Display All Contacts
3. Search Contact by First Name
4. Search Contact by Phone Number
5. Search Contact by City
6. Delete a Contact by Phone Number
7. Save Data to a File
8. Exit

Enter your choice:

7

PhoneBook Manager saved to file successfully!

PhoneBook_Manager Utility Main menu

1. Add a new Contact
2. Display All Contacts
3. Search Contact by First Name
4. Search Contact by Phone Number
5. Search Contact by City
6. Delete a Contact by Phone Number
7. Save Data to a File
8. Exit

Enter your choice:

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