

# DEVELOPER'S GUIDE

## FACEBOOK

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## INTRODUCTION

### **Architecture:**

The Facebook (User management system Project) will be a simple C language Project without the use of any Graphics. This Project will be made on Code Blocks and the compiler will be the GCC Compiler. This project can be used in various Libraries. This system can perform operation that such as adding new user, deleting the user, list of users, modifying user's data. I will be using file handling to store the data. This project will help to keep the record of all the books in the library and it will be very easy to use. I have used many functions and other options to build this program.

This program is built on the code-Block Integrated Development Environment, as recommended by our teacher. All elements of the program are standard and portable. The compiler which I have used to compile the program is GNU GCC Compiler.

### **OVERVIEW;**

The name of the mini project which I have made is Facebook(FB). This project can be used on the low level. The main purpose of the software is to manage the data of the users. This program helps to keep the records of user's data. It contains features that helps to add new users, modify the data of user, delete the data of user, list of users in the database with their data.

These are the **functions used** in the mini project:

- I. **Void mainmenu(void)** – This function is used to display the main menu of this project. Scroll down to Output to view the main menu.
- II. **Void add(detail d)**– This function adds user in a file. For that, you need to mention all user detail. That can be accessed for later use.
- III. **Void delete(void)** – This function delete user's data from file. For that, you need to mention the name of the username. The record from the file is deleted.
- IV. **void modify(void)** -- This function delete user's data from file. For that, you need to mention the name of the username. The record from the file is modified.
- V. **void list(void)** – This function lists the data of the users from the fie. For that, you need to mention the category on which basis list should be formed(same name, same family name etc.). The record from the file is printed on the screen.

**void leave (void)** – This function terminates the application.

**detail new\_mem()** – This function asks for new user' details from the user.

**int numberuser(int)** – This function is return the number of user saved in the database file.

**bool login(string username, string password)** –this function is used to check if the login details entered by the users are correct or not. This function returns true when login details are matched else it returns false.

**detail list\_main (detail d)** – This function reads the user's data from the file and save it into a data structure variable, which is then returned by the function.

## **DETAILS**

In this section I will discuss all the functions which I have used in my programs in detail and I will also show you the algorithms that shows how these functions work.

In this mini social media platform, two data structures are defined: -

1. Dob data type : This structure has three members of all int type. The names of the members are date, month, year. (it created to save the user's date of birth).
2. Detail data type : This structure has members of different data types. The members name and their data type is as following.  
Char name, char family, int age, char gender, dob birth, char inviter.

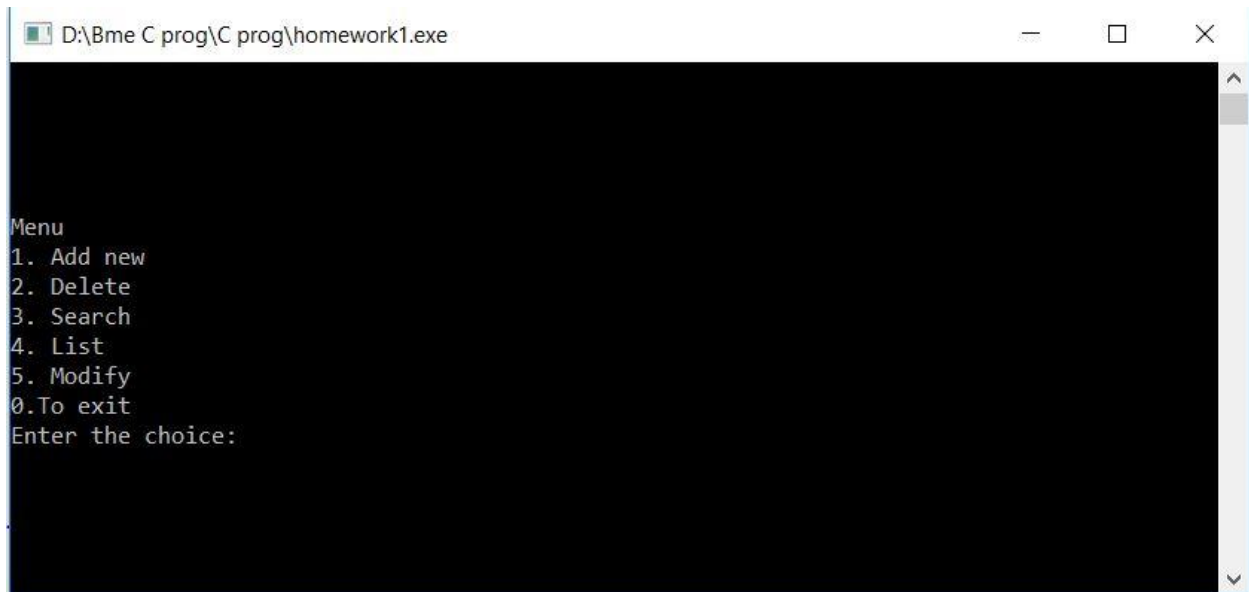
Total of 13 functions are defined and used in my program.

The main function/Important function of my program are following;

- Add user's detail
- Delete user
- List users, and
- Modify user's data

## 1.1 Add User

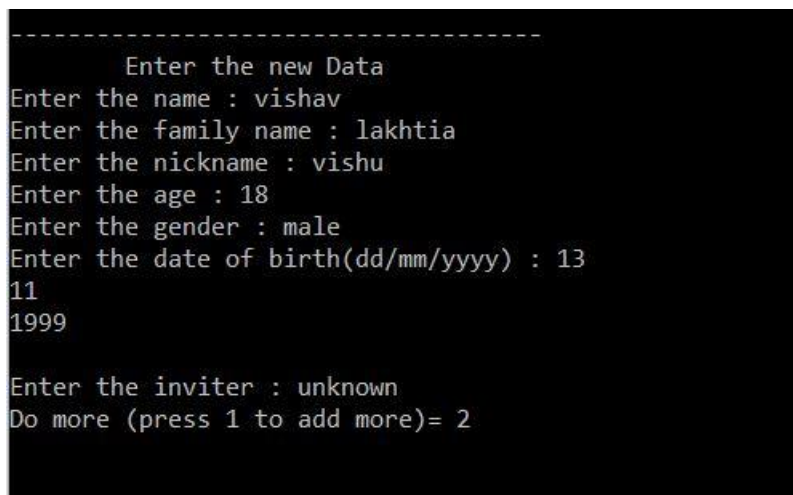
When we enter the correct username and the password the following window will appear



When this window appear we will have to enter the option which we want to perform.

Suppose we click 1 in “Enter the Choice”

The following window will appear;



Then we have to enter all the details of the users which we want to add such as; Given name, family name, age, gender, date of birth, Inviter.

Then program will ask user to press 1 if he want to add another otherwise press any other number key.

### Algorithm

This function takes a parameter of data type detail (introduced using structure).

Then this function opens the file in the append mode to add data at end of list.

Using in-built fprintf function it adds the data and close the file.

## 1.2 Delete User

To delete the press 2 in the main menu, To delete the user we need to enter the given name of user whose data has to deleted.

if that users exist in the file, his details will be deleted otherwise it will print error showing no user found.

Algorithm: -

In this function, first number of users in the file are calculated. Then a dynamic array of detail data type is created of size equals to number of users.

Then all users are copied in this new array using while loop.

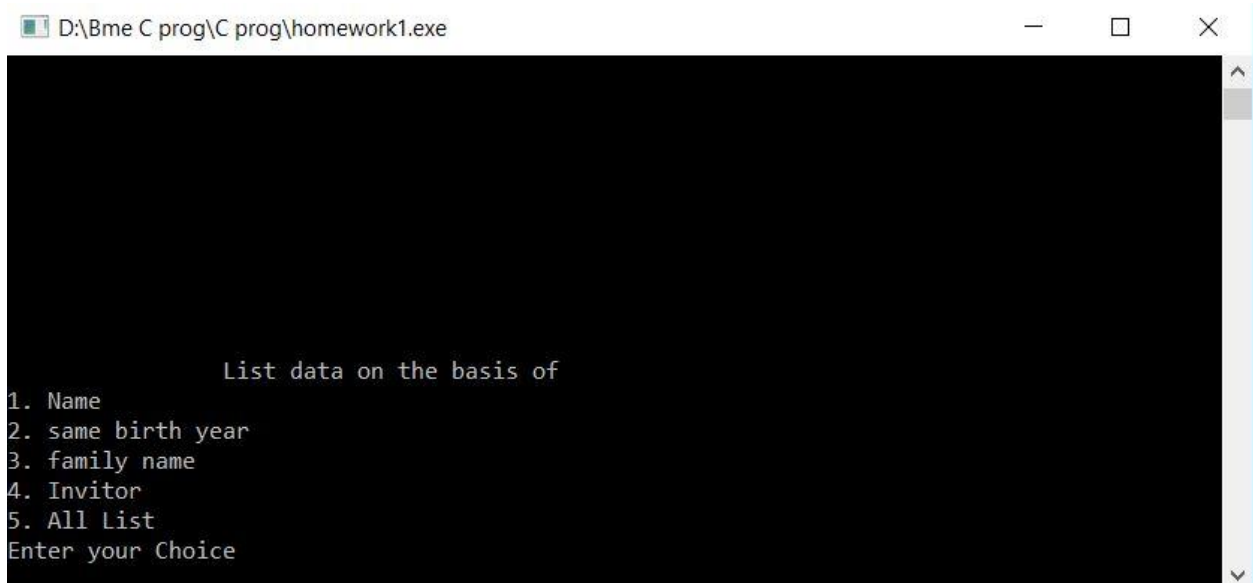
Then, Users is asked to enter the name of the user, to delete it. User's name is searched in the array using for loop. Inside loop condition is there to check it the entered name matches any saved name in the list. Then delete that user.

Users data is deleted by overwriting at that particular the data of next user. Then the size of array is decreased. After that, file is opened in the write mode(this

mode deletes the previous data and enter the new data.) and new array is written in the file.

### 1.3 List Users

We can create list of users either by the book name, by the family name, same birth year or by the inviter.



```
D:\Bme C prog\C prog\homework1.exe

List data on the basis of
1. Name
2. same birth year
3. family name
4. Invitor
5. All List
Enter your Choice
```

#### a) List by name:

To use this, we need to provide name of the user to list all user with same name.

After entering the name, program will read the file and will match the name with each user's given name, then it will print that particular user's details on the console.

#### b) List by family name

To use this, we need to provide the family name of the users.



After entering the family name the program will search for that in user's database file. Users having same family name will be listed on the screen.

### **c) List by birth year:**

To use this, we need to provide birth year, then users with same birth date will be listed.

After entering the birth year, program will read the file and will match the birth year with each user's birth year, then it will print that particular user's details on the console.

### **d) List by Inviter:**

To use this, we need to provide the name of inviter.

After entering the inviter name, the program will search for that in user's database file. Users having same Inviter will be listed on the screen.

### **e) List by all users in the database:**

Selecting this option will generate the list of users present in the database of the software

## **1.5 Modify User's data**

This feature of the program, allows to modify the data of user. For this option we have to provide the name of the user. Program will find that particular name in the file. If the name matched, then program asks to enter the new detail of the user which is then updated, else it will print message saying "No data found".

I have also used many other small functions like;

- `lines()` – to print 10 blank lines.
- `menu()` – it displays the main menu to the screen.
- `Display Menu()` – it displays the list menu to the screen.
- `Listchoice(int choice)` – it display the message on the basis of choice made in display menu.
- `Leave()` – it display a greeting message on the screen with details of the deveplor.

These small function are only to perform small task. For e.g. to check if the user entered the correct user ID or to get data and print it on the screen or to check the password or if we want to end our program.

THANKS.....