

# Programming term project report

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## PROJECT LAYOUT:

```
programming1_project/
├── accounts.txt
├── app.exe
└── executable
    ├── headers
    │   ├── Banksys.h
    │   ├── delete_multiple.h
    │   ├── query.h
    │   └── transactions.h
    ├── Main.c
    └── README.md
    └── src
        ├── acc.c
        ├── delete_multiple.c
        ├── query.c
        ├── transactions.c
        └── users.c
    └── transactions
        ├── 9700000000.txt
        ├── 9700000001.txt
        ├── 9700000003.txt
        ├── 9700000010.txt
        ├── 9700000011.txt
        └── 9700000012.txt
    └── users.txt
```

- headers contains all the header files.
- src contains source code for all functions.
- transactions contains text files that store the transactions.
- load,login and menu are called in main.c
- users.txt contains the given data.
- use gcc Main.c src/\*.c -o executable to compile the code.
- use ./executable to run the code.

## **LOGIN:**

Enter a username and password

```
***** Bank Log-in *****
Enter your username: aaa

Enter your password: 123a

Login Successful
```

## **MENU:**

Type a number between 1 and 14

```
*****
*      Welcome to The Bank System      *
*****
* Enter your choice (1-14):          *
* *
* 1. Add Account                   *
* 2. Delete Account                *
* 3. Modify Account               *
* 4. Search                        *
* 5. Advanced Search              *
* 6. Change Status                *
* 7. Withdraw                      *
* 8. Deposit                       *
* 9. Transfer                      *
* 10. Report                       *
* 11. Print                         *
* 12. Delete Multiple             *
* 13. Save                          *
* 14. Quit                         *
*****
Choice: 
```

**-Select the choice you want and follow the prompts-**

### **Notes:**

- Once you select an option you can't return to the menu without answering the prompts of that option.

- Pressing quit will not save first. If you want to save, you must press save then quit.

## A few sample runs:

### Eg 1: Advanced search

```
*****
*      Welcome to The Bank System      *
*****
* Enter your choice (1-14):          *
* *
* 1. Add Account                  *
* 2. Delete Account               *
* 3. Modify Account              *
* 4. Search                      *
* 5. Advanced Search             *
* 6. Change Status               *
* 7. Withdraw                    *
* 8. Deposit                     *
* 9. Transfer                    *
* 10. Report                     *
* 11. Print                      *
* 12. Delete Multiple            *
* 13. Save                       *
* 14. Quit                       *
*****
Choice: 5
enter a keyword: Michael
Search results:

account number: 9700000000
account first name: Michael
account last name: Jones
account address: m.jones@gmail.com
account balance: 1107.00
account mobile number: 01009700000
account month opened: 12
account year opened: 2007
account status: ACTIVE

account number: 9700000003
account first name: Michael
account last name: Robert
account address: michael@yahoo.com
account balance: 300.00
account mobile number: 01009700003
account month opened: 11
account year opened: 2008
account status: INACTIVE
```

## Eg 2: Adding an account

```
Login Successful
*****
*      Welcome to The Bank System      *
*****
* Enter your choice (1-14):          *
* *
* 1. Add Account                   *
* 2. Delete Account                *
* 3. Modify Account               *
* 4. Search                        *
* 5. Advanced Search              *
* 6. Change Status                *
* 7. Withdraw                      *
* 8. Deposit                       *
* 9. Transfer                      *
* 10. Report                       *
* 11. Print                         *
* 12. Delete Multiple              *
* 13. Save                          *
* 14. Quit                         *
*****
Choice: 1
Enter Account number (10 digits): 1234567890

Enter Account firstname: mohamed

Enter Account last name: abdelkader

Enter Email Address: mohamed@gmail.com

Enter Account balance: 1000000

Enter Account mobile number: 01281707432

Enter Account creation month (1-12): 12

Enter Account creation year: 2018

Success, new account added with index 13
```

### Eg 3: DELTEMULTIBLE

```
*****
*      Welcome to The Bank System      *
*****
* Enter your choice (1-14):          *
* *
* 1. Add Account                   *
* 2. Delete Account                *
* 3. Modify Account               *
* 4. Search                        *
* 5. Advanced Search              *
* 6. Change Status                *
* 7. Withdraw                      *
* 8. Deposit                       *
* 9. Transfer                      *
* 10. Report                       *
* 11. Print                         *
* 12. Delete Multiple             *
* 13. Save                          *
* 14. Quit                         *
*****
Choice: 12
enter 1 for delete by date or 2 for delete by
enter current year: 2025
enter current month: 12

Account 9700000008 successfully deleted.
successfully deleted 1 accounts
```

## Colours:

```
#define RESET  "\033[0m"
#define RED    "\033[1;31m"
#define GREEN  "\033[1;32m"
#define YELLOW "\033[1;33m"
#define BLUE   "\033[1;34m"
#define PURPLE "\033[1;35m"
#define CYAN   "\033[1;36m"
#define WHITE  "\033[1;37m"
```

-Macros for colour codes were defined

-example for how it's used:

```
printf(RED"account not found"RESET);
```

**Note:** Bubble sort algorithms are used for sorting.