

# 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.