

FLORIDA INTERNATIONAL UNIVERSITY

# **FIU Online Banking System**

Final Project, EEL 2880-U03

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## **Introduction:**

Banking Systems are something that are used on a daily basis and something so practical but at the same time so complicated. When working with transactions you are also working with thousands of dollars moving around from accounts, banks, countries and even continents. Money that in less than a minute moves across the whole country; learning about this topic is very interesting and important, the data that is worked with is something that is actually tangible, something that influences and affects people's lives. It is not easy nor fast task. Online Banking is extremely important for the University's students since money usage is a constant issue on campus. Also, there is always ways to improve this kind of financial structures or systems, so creating one for the institute that is implanting all the knowledge in us seemed a very good topic to work on.

## **Project Description:**

FIU Online Banking program is able to not only complete transactions between users but also to check balances, get help, withdraw, deposit, and transfer money just like any other online bank account. All of these functions with the help of file handling, which will be used to store the data of the users, read all data from that particular file and storing structures in a file, making it all easier to the user.

### **1. Welcome/Login Page:**

The Program starts with a welcoming message and the name of the banking system " FIU BANKING", and it encourages you to enter a username and password, if these do not exist it will indicate so and guide you to create a new account with a Panther ID#, a username

of your liking, a password, and the initial deposit to start the account. The account balance will be initialized with the balance of the initial deposit.

## **2. Menu:**

After signing into your account, a main menu will display with the following options, each option represents a function:

- i. Transfer money - This function is used to transfer money to another account by username.
- ii. Check Balance - This function will display current balance in the account.
- iii. Deposit/Withdrawal – this function will allow you to deposit or withdraw money from your account.
- iv. Get Help - This function is used to get help with the account.
- v. Sign out - This function is used to log out of the account.

Once an option is selected the output console will be cleared and you will be redirected to your selection.

## **3. If Transfer Money is selected:**

When Option 1 is selected, the user is redirected to the Transfer Money page, in here the user will be asked to enter the recipients username, if an account with the username typed does not exist an error message will be displayed and the main menu will again appear in the screen; when an existing username is typed in, the user will also need to insert the amount wished to be transferred, again if the amount exceeds the users current balance, an error message will be displayed. After both variables are entered correctly a success message will show and the main menu will be displayed again for the user to choose.

**4. If Check Balance is selected:**

When Option 2 is selected the console will redirect you to the Balance Dashboard where the user will be able to see their current balance, after this the main menu will be shown again.

**5. If Deposit/Withdrawal is selected:**

Option 3 will guide you to a new page where the user will have to choose between deposit or withdrawal, after an option is chosen, the amount wished to be deposited or withdrawn will be asked. A success message will be displayed with the amount deposit or withdrawn and the total balance remaining on the account.

**6. If Get Help is selected:**

Option 4 will display a menu of frequently asked questions, if the user is looking for any of the answers, they can select an option and the answer message will show up, if not it will show other ways of contacting help and go back to the main menu.

**7. If Sign Out is selected:**

If Option 5 is selected on any occasion, the FIU Online Banking program will be terminated and show a goodbye greeting message.

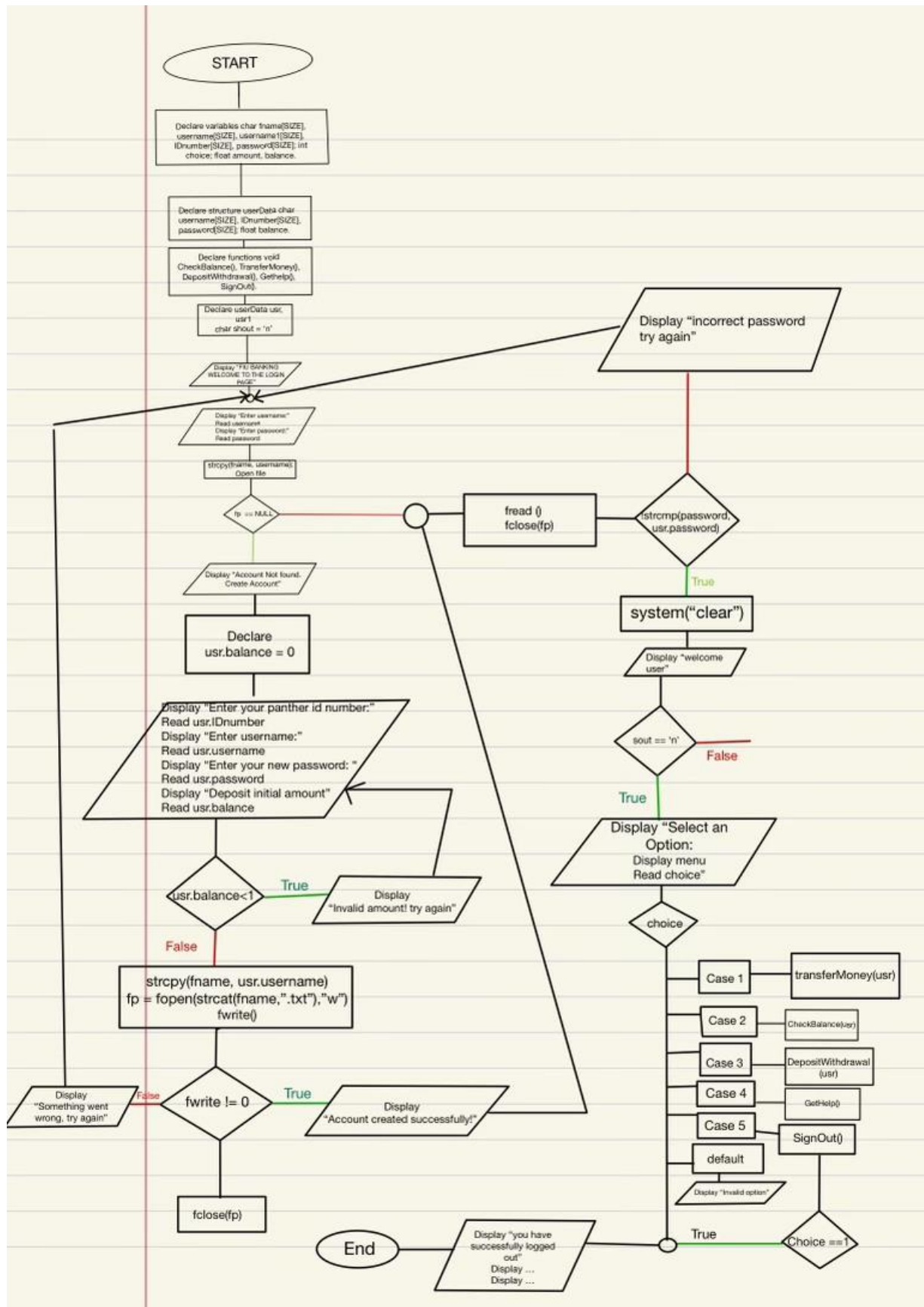
**Instruction Manual.**

The FIU Online Banking system is a very easy and traditional system to use for any kind of user. To get started the user will need to input the username and password, if an error message is displayed, go ahead, and create an account. Input your Panther ID, new username, new password, and the balance to deposit to get started the account with. Make sure to enter the correct

password, as well as an amount that is greater than 0 for the deposit, or it will display an error message and lead you to try again.

To continue, read the menu and choose an option from 1-5 and input your choice. For Option 1, the user needs to enter an existent username who they wish to make the transaction to, the amount wished and click ENTER. If error message is displayed the amount entered was greater than the balance on the account, choose option 1 again. For Option 2, a message is displayed, the user does not need to input anything. In Option 3, the user will need to enter a digit 0 or 1 to choose between deposit and withdrawal, after selecting one the amount wished to be deposited or withdrawn have to be input, decimal numbers can be used. Option 4 will only need the input of an integer number to choose from the questions asked. Option 5 will exit the program if entered and there is no need of input. The program is terminated.

### **Flowchart of the program**



## **Conclusion**

The FIU Online Banking Program can be successfully implemented on a daily basis and can become a deeper and more functional program. It was such a challenge to organize each step when working with such an extensive program, so connected in every part inside, making sure that the balances between the function would coordinate and being able to make all the functions work with each other, where some components have to go in and out of the functions to be store and modified on others were the biggest challenge to face during the project to the team. Banking systems as mentioned before are very complex and there is so much more under a transaction than just adding and subtracting, it is something that we realized as we were working on the FIU OB.

Many things can be improved to the program created, with more time and dedication the program can be perfected to a point where no errors can be seen, and it can work just like any other big company professional system. More messages to help the user go through and a better way to store information can exist. But overall, the program created by our team with the basics of C programming shows a complete working program which contains all C programming techniques covered in class and demonstrates an existing real-life application.