Cairo University

Faculty of Computers and Information

**CS213**

**Programming 2**

**Assignment 3**

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**Report for**

**FCI Bank System Program**

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**Banking System**

This is FCI-Bank System Program and it can create an new account for the client and he can choose between 2 account types (Basic or saving account) and he can deposit and withdraw any amount he needs anytime , Also this program allows you to view a list of the recorded client and the information of this account.

Here we have 4 classes…  
The first one is **Client class:** we can use it to create a new client account and takes the client's information like his name,address,id,phone number Also choosing whether the account is basic or Saving.

The second class is **BankAccount** this consider the parent class.  
The basic account makes the client able to use it as he want,he can withdraw or deposit money while it doesn't required a specific amount in the two procedural.

The Third class is **SavingBankAccount** this is different from the basic account but it inherits from it, it considered the second type.

In this type the user cann't withdraw or deposit as desired,it requires

a specific amount of money, if the account balance is 1000 he can not withdraw any amount of money and he cannot deposit any amount of money so if he want to deposit money the least amount he could deposit is 100 or more per the only 1 time.  
  
The Forth class is **BankApplication** which used to add the account and have the ID Genrator Function to give a new ID to the added account for the Client Information by which he can Reuse it to enter his account.

**BankApplication** class has the Program interface for the user   
When the user start to use our program many cases (options) will be listed on the screen to choose between them :

1. **Create a new account**

In this option the user can create a new account when he press 1 he will ask about the name, address , phone number ,type of his account like basic or saving and his starting balance it is depend on the type of account he choose

1. **List Clients and Accounts**

When the user press number 2 he can list the clients and their data and their accounts

1. **Withdraw money**

When the user press number 4 he can do a withdraw operation which depend on the client’s account type then the program will ask about the amount of money the client want to withdraw

1. **Deposit money**

The last option is deposit money the user can do this operation by pressing number 2 and then the program will ask about the amount of money that the client want to deposit and it is also depend on the client’s account type to deposit

1. **Exit the Program**