

Assignment 1 – Classes

Problem Description:

You are required to design a program for a banking system. The program should interactively deal with the ATM user and provide different banking services.

Code Structure:

You are required to construct a class named **ATM**; this class has the following members:

Variables: (Note: for string variable **use only C-style strings**)

Account name: holds the name of this account owner, which is of maximum 100 letters.

Card number: the card number of this account, which consists of 10 numbers

Amount: the amount of money in the account

Functions:

create_new_acc(): this member function is used to create a new account, entering the name and the card number

Deposit(): this function adds the deposited amount to the money in the account + 1% of the deposited amount added

Withdrawal(): this function withdraw money from the money in the account + 3% deduced from the account

Transfer(): this function transfers money from a sending account to a receiving account, deducing 1.5% from both accounts

Print_acc_data(): prints the account name, card number, and amount of money

Constants and Equations:

- The maximum number of accounts is 100 accounts
- When depositing, an extra 1% of the depositing amount is added to the account
- When withdrawing, an extra 3% of the withdrawn amount is deduced from the account
- When transfer, each user has 1.5% deduced from each account
- The program should interactively deal with the ATM user, until the user requests to terminate the program (see the program flow in the video and this [link](#), you are required to exactly follow the data printed and how they're printed, marks might be deduced to not following that)
- About half of the mark will be given when dealing with different corner cases (ie: entering card number of other than 10 numbers, etc..)
- Illustration video [link](#)

Submission instructions:

- 1- The task is assigned to groups of 3 students.
- 2- Submit a single .cpp file that contains your whole code including everything mentioned.
- 3- Use exactly the same functions and variable names.
- 4- Name your file exactly as “Section_BN_Section_BN_Section_BN.cpp”. (Example: three students, the first one section 1 and BN 23 and the second one section 2 and BN 3, and the third one section 4 and BN 35 then your file name should be 1_23_2_03_4_35.cpp)
- 5- Copied codes will be given ZERO.
- 6- Deadline: Friday 3 June – 11:59 PM (Any delayed submissions will be given ZERO)