Assignment02 (CLO2)

Object Oriented Programming 100 Marks

Submission deadline: 18th March, 2024 - 11.59 PM

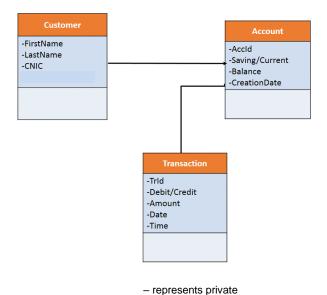
Submission Guidelines:

- You need to only submit your source file on google classroom within deadline.
- Late submissions upto **24 hours** are allowed with a penalty of **20%** on google classroom. After that **no** submission will be entertained
- Name the source file as "assign01-roll#.cpp". For example assig01-i200561.cpp
- > Don't share your code with anyone.
- Using ChatGPT for your assignment will not help you to secure good grades in this subject

Bank Accounts Management System

Write a program to implement a Bank Accounts Management System. Your program should read in the data files at the start, and write back all the data to the files at the end of the program.

You need to define the following classes with whatever relationship is shown in the diagram.



One design option can be to link these classes using Association. In such a case, add the CNIC data member to the Account class, and AccID data member to the Transaction class to link them up.

MENU:

After defining the classes, you program should offer the following menu to the user:

- 1. Add a customer
 - New customer details will be provided by the user
- 2. Add an account

To create a new account, CNIC and other details needs to be provided by the user, except the new AccId, and the current date.

3. Do a Transaction

If this option is selected, ask for the account number and other details. Fill in the Trld, Date and Time yourself. You may make Date and Time as one variable

4. Search an account

If this option is selected, search the account, and display the account information, its owner information, and all the transactions made so far for this account

Files I/O:

You need to deal with the following files:

- bank.txt (provided)
 - Contains info of 100 Customer and their Accounts
- Transaction file

This file will save the data for all the transactions. It is not provided, so you will need to create this yourself

IMPORTANT:

You need to create arrays for all classes of suitable size. Declare them within main() or globally.

You can add functions and even data members to the above classes according to your requirement.

Use header files to distribute your code into different files. Its recommended to have separate header file for each class

Deductions:

20 marks deduction for No file handling

20 marks deduction for keeping the class data members public