

EE 3372/ECE 3350 – Software Design II

Fall 2023


Assignment – Classes

Write a program in C++ to simulate a bank account operation. Follow the below instructions:

- Create a C++ class name **BankAccount** to represent the Bank account's operations.
- This class should have the following features:
 - Private members:
 - **acctNum** (string or double): this is the account number.
 - **accOwner** (string): this is the name of the account holder.
 - **balance** (double): this is the account balance and should be hidden from direct access.
 - Public members:
 - **getAcctNum**: function method for inquiring about the account number. It should return this account number. The account number should not be modified.
 - **getAcctOwner**: function method for inquiring about the account holder's name. The account name should not be modified.
 - **getBalance**: function method to inquire about the account balance.
 - **Deposit**: function method to deposit money into the account. Should receive the amount to be deposited.
 - **Withdraw**: function method to withdraw money from the account, and this operation should not exceed the current account balance.
 - Program test:
 - Create objects of the class to demonstrate the correct use of all the function methods. Do not forget to formally initialize account values through Constructors.
 - Have a menu displaying the account activity options.
 - Perform deposits and withdrawals, displaying the updated balance after each transaction.
 - Make sure no private members are directly accessible outside the class.
 - Add comments to all your code.
- **DELIVERABLES** for this project:
 - You will be turning this homework in through Blackboard.
 - Submit the C++ source code of your program:
 - Save it by following this rule: **firstnameinitiallastname_functions.cpp**.
 - i.e. Peter Miner would be: pminer_functions.cpp
 - Points will be deducted if not using this format.
 - Upload this through Blackboard under the "Attach Files" area in the assignment.
 - **Type in** or copy/paste the source code:
 - Inside your Blackboard assignment, go to the "ASSIGNMENT SUBMISSION" area and click on the "Write Submission" area. In this area, you must also copy/paste your code.
 - **DO NOT ATTACH THIS as a TXT File**, you **must** type this in or copy/paste this from your VS Code app.


- Remember, you must **type in your code** and **attach the .cpp file**. If one of these two is missing, points will be deducted from the homework grade.
- When submitting your work in BB, **make sure to accept** and select the **“I agree to submit my paper(s) to the Global Reference Database”**. This is under the Plagiarism Tools area in your BB assignment.
 - *This is individual homework, not teamwork, so I am expecting unique programs from all the students.*

ASSIGNMENT SUBMISSION

Text Submission Write Submission 

Attach Files Browse Local Files Browse Content Collection Browse Cloud Service

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ADD COMMENTS

- Remember to **Compile this program in Linux**. This is the platform I will be using to check/grade all your work. If you work in a different environment, it might give you a different output. Once your work is graded, I will not accept modifications.
- **Due Date: Sunday, October 1st, 2023, before 11:59 pm.**
- **NO LATE work will be accepted.**
- You are allowed to submit several attempts; however, I will be **ONLY** grading your last attempt.