

COMP 1451 Assignment 1

Introduction:

This term we will be developing a program that simulates a simple Banking system. This first assignment represents the basic structure of that program.

You have been provided HTML documentation that represents the program interface. Your task is to implement the classes and methods specified within these documents. You are to stick strictly to the definitions provided. Implementations are entirely in your hands.

Also, for your convenience is provided the InputReader class, which will be used throughout the application runtime to return user provided input.

Part of your task is to interpret the details in the documentation provided. It would be wise to get an early start on this as you will need time to figure out how the methods fit together and get a solid sense of the program logic flow.

Assessment:

This assignment will be assessed on a mark out of 15. The program MUST compile and run without runtime exceptions to be considered for evaluation.

Marks will be awarded for proper use of programming concepts and conventions. Proper validation where appropriate, proper use of fields, local variables and constants, correct choice of loops, well organized selection structures, etc. will be factored in to your mark.

You are expected to demonstrate proper OO design by considering concepts like coupling, cohesion, duplication, class responsibilities, reuse, etc.

Submission:

This assignment is due the day before the 5th session. The exact date will be indicated on the D2L dropbox. Submissions must be complete and follow the establish submission standards. The due date is firm. There will no acceptance of late submissions for any reason.

As stated above, submissions must compile and run error free to be considered for marks. Be certain to double check your submissions. I will mark only what has been uploaded to the dropbox prior to the deadline. Submissions are to be made as Eclipse projects. These are to be archived into ZIP files.

Full comments are expected in your source code. Use the documentation provided as your guide. This is to be considered the assignment specification.

Submissions are to created by each individual. There is to be no code sharing or joint submissions.

Sample output is on the next page.

Sample runtime of the program:

Welcome to Bullwinkle's Bank.

Choose one of the following options:

- 1 - Sign In
- 2 - Deposit
- 3 - Withdraw
- 4 - Display Account Info
- 5 - Exit

> 2

ERROR: You must LOGIN before you can perform a transaction.

Enter Account Number:

tetet

Enter Passcode:

1212121

ERROR: Either account number or passcode is not correct.

Welcome to Bullwinkle's Bank.

Choose one of the following options:

- 1 - Sign In
- 2 - Deposit
- 3 - Withdraw
- 4 - Display Account Info
- 5 - Exit

> 1

Enter Account Number:

ST-123

Enter Passcode:

123

Choose one of the following options:

- 1 - Sign In
- 2 - Deposit
- 3 - Withdraw
- 4 - Display Account Info
- 5 - Exit

> 2

Enter the amount to deposit:

100.00

Choose one of the following options:

- 1 - Sign In
- 2 - Deposit
- 3 - Withdraw
- 4 - Display Account Info
- 5 - Exit

> 3

Enter the amount to withdraw:

25.83

Choose one of the following options:

- 1 - Sign In
- 2 - Deposit
- 3 - Withdraw
- 4 - Display Account Info
- 5 - Exit

> 4

Here is your information.

```
BankCustomer [firstName=Darby, lastName=Dog, accountNumber=ST-123, passcode=123,
balance=74.17]
Choose one of the following options:
1 - Sign In
2 - Deposit
3 - Withdraw
4 - Display Account Info
5 - Exit
> 5
Thank you for banking at Bullwinkle's Bank
DEBUG: Displaying all the accounts in the bank.
BankCustomer [firstName=Darby, lastName=Dog, accountNumber=ST-123, passcode=123,
balance=74.17]
BankCustomer [firstName=Freckle, lastName=Cat, accountNumber=ST-789, passcode=789,
balance=0.0]
BankCustomer [firstName=Myia, lastName=Dog, accountNumber=ST-456, passcode=456, balance=0.0]
```