The University of Texas at El Paso
Department of Computer Science
CS 3331 – Advanced Object-Oriented Programming, Fall 2020
Programming Assignment 1

Instructor: Daniel Mejia

Instructions:

This assignment should be done individually. Your code must be written in Java. You must submit your assignment through Blackboard. In the comments of your source code (at the beginning), write your given name, date, course, instructor, lab assignment, lab description, and honesty statement.

Scenario:

You have begun organizing your bank. You now have a few customers who are using the bank.

1. Create a class called "Checking" which will be representative of a checking account. This class should have appropriate fields.
    a. The fields can be found in the csv file

2. Read a csv file with account information and store it appropriately in a data structure
    a. Account information includes first name, last name, account number, starting savings balance

3. Create methods that will inquire a balance, pay someone, deposit money, withdraw money, log all transactions
    a. The account balance should change appropriately
        i. You should not be able to spend more money than what is in the account
        ii. You should not be able to withdraw/deposit negative amounts
    b. Appropriate messages should be given in the console
        i. For example, let the user know when a transaction is a success and when it is a failure
        ii. Think about how you would use your own checking account

4. Logged transactions should be written to a text file in a standard way
    a. For example, “Mickey Mouse deposited $20 in their savings account”

5. Allow for user input to make transactions
    a. Transactions for a single person
    b. Transactions between any two people
        i. For example, Alice can pay Bob and vice versa

6. Write the lab report describing your work (template provided)
    a. Any assumptions made should be precisely commented in the source code and described in the lab report.
    b. Lab report should contain sample screenshots of the program being run in different circumstances including successful and failing transactions

7. Implement basic exception handling such as a transaction failing by attempting to deposit a negative amount

8. Schedule a demo time with the TA/IA

To turn in (Blackboard) September 4, 2020 by 11:59pm (zip file):

1. Source code (all .java files)
2. Lab report (Submit in PDF format)
3. Transaction log (.txt file)