CSCI E-97 Fall 2020 Assignment 1

Due: Monday, 9/14/2020 at midnight ET

This assignment provides a warm-up Java exercise to ensure that you have sufficient Java skills to implement your software designs. The topic of this assignment is the implementation of a simple blockchain ledger. You will implement a software design document as a Java program. The file LedgerServiceDesignDocument.pdf contains the design.

Assignment Notes:

This assignment will help you become familiar with a design document's contents and how it can help guide and streamline implementation.

You should implement the classes as defined by the class diagram and class dictionary specified in the design document. Define all classes except for the TestDriver within the package "com.cscie97.ledger"

You may vary from the design, but if you do, you should document the changes, justify your changes, and describe how your changes continue to support the requirements.

Remember to use Java doc to document class and method headers. Add java comments inline where appropriate to explain code logic.

Sample Data

There is a sample command script in the file ledger.script.

What To Turn In

You'll turn in a zip file containing:

- Your source code ready to build (no .class files)
- Your data files (including the provided sample)
- Results of processing your test files
- Include a document (in pdf format) describing your results:
 - Any changes that you made to the proposed design and how they continue to support the requirements
 - Did the design document help with the implementation?
 - How could the design have been better, more straightforward, or made the implementation easier?

We should be able to unzip your file into a directory, then cd into that directory and compile your program with the command.

• javac com/cscie97/ledger/*.java com/cscie97/ledger/test/*.java

We should be able to run your program with the command:

• java -cp . com.cscie97.ledger.test.TestDriver ledger.script

The ledger.script is a file containing a list of commands to be run by the test driver.

Caution: Before submitting your assignment, try zipping your files, unzipping them into a different directory, and follow the steps above. In other words, test your packaging before you submit your assignment.

Zip your solution into a zip file and upload it to the canvas assignment 1 area. Please include your first and last name in the name of the zip file, for example, *joe_smith_assignment1.zip*