## CSE360 Fall 2019 Assignment 2 Due October 9 11:59PM

This assignment is designed to give you practice with using a version control system. You can use any version control tool you wish. A suggestion is github but many students prefer to use bitbucket. No matter which system you use, you must allow access to your repository to the TA and the grader for grading. If no access is given, you will not be given credit.

## Github:

If you are using github, you will need to create a github account. Select the free public account option as you will need to provide access to this account for grading.

You will need to create a local git and github repository. If you are not familiar with this process, there are many references on line and especially on youtube.com. I found a very good tutorial that will walk you through the steps "Creating a Repository: Git & Eclipse" by Dr. Brian Fraser. <a href="https://www.youtube.com/watch?v=r5C6yXNaSGo">https://www.youtube.com/watch?v=r5C6yXNaSGo</a> The video demonstrates how to set up both git and github repositories and commit through Eclipse.

## Bitbucket:

If you use bitbucket, there are many tutorials available on Youtube and other sources.

Be sure to follow these steps in order to receive full credit for the assignment. These instructions assume that you are using Eclipse. If you are not, then you are responsible for the similar results for each step.

- 1. Create the initial version
  - a. Create the package cse360assign2.
  - b. Copy the file AddingMachine.java to this package. Document this file using the Javadoc comment style but do not make any code changes to the file at this time. Most of the methods are blank.
  - c. Commit the project to git and github (or bitbucket)
- 2. Create the second version
  - a. Make the following changes to the AddingMachine class.
    - i. The add method should add the parameter to the total variable
    - ii. The subtract method should subtract the parameter from the total variable
    - iii. The getTotal method should return the current total
    - iv. A history of the transactions must be kept to be returned by the toString method. The history should start from the initial 0 value to the last input.
      - 1. Use the normal operators for the operations (+, -).
      - 2. There is no limit on the size of the String returned.
      - 3. The format of the String should separate all operations and values with a space.
      - 4. For example:

```
myCalculator.add (4);
myCalculator.subtract (2);
myCalculator.add(5);
```

then the toString method should return

$$0 + 4 - 2 + 5$$

- v. Add other variables as needed to the class. Any additional variables must be private. Make changes to the other methods if needed.
- vi. Update all documentations as needed
- b. Test your solution and then commit the project to git and github. (or bitbucket)
- 3. Submit your java file (AddingMachine.java) on Canvas. Put the URL to your code repository and access information in the comment for the assignment submittal. The repository will be checked as part of the grading.

## Notes

- A program that does not compile will receive little or no credit.
- Access to the repository must be given.
- No late assignments will be accepted.
- Test your code thoroughly.