CSE360 Spring 2019 Assignment 2
Due February 25 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 for grading.

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. https://www.youtube.com/watch?v=r5C6yXNaSGo 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 Calculator.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 Calculator 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. The multiply method should multiply the total by the parameter
        v. The divide method should divide the total by the parameter. Use integer division. If the parameter is zero, set the total to zero. Do not print an error message or rasise an exception..
        vi. The getHistory method should NOT be changed at this time and should continue to return an empty String
    b. Commit the project to git and github. (or bitbucket)
3. Create the third version
    a. Make the changes to the Calculator class as needed so that the getHistory method will return a history of all actions as a String.

i. The history should start from the initial 0 value to the last input.
ii. Use the normal operators for the operations (+, -, *, /).
iii. There is no limit on the size of the String returned.
iv. The return String should separate all operations and values with a space. For example:

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

then the history method should return

```
0 + 4 – 2 * 2 + 5
```

v. Add other variables if 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. Submit your java file to git and github (or bitbucket)

4. Submit your java file (Calculator.java) on Blackboard. 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 only receive a minimal amount of credit.
- No late assignments will be accepted.
- Test your code thoroughly.