Lab 01

CS140

Error Checking

Part 1 - Setup environment

1. Create a folder on a flash drive for work done in this class. Organizing this folder may help you with finding files in the future. If you do not have a USB storage device at this time, create this workspace in your documents. Also know that files created on the computer's file system are unsafe. Unexpected things happen to CIS networks. For this reason a usb device is the prefered location of storage.
2. Download soMany.java and save it to the new folder.
3. Start up Jgrasp and open up soMany.java using the file explorer within jgrasp or one of the drop down menus/toolbar buttons.
4. Make sure that line numbers are turned on in the IDE. There should be a button that looks like a page with numbers in a line down the side. This button toggles line numbers for the files in Jgrasp. You are not required to have these turned on, however you may find them useful.

Part 2 - Documentation

- Add a comment header to the top of the file that includes the following information.

1. Name
2. Date
3. Class number(Cs140)
4. fileName
5. Short file description

Part 3 - Fix the bugs(Errors)

1. Fix the code so that it compiles and runs. Use the + button in Jgrasp to compile the file and see the error messages. Use these messages to eliminate the syntactical errors left in the program. Once all the errors are gone, Click the run button, the one that looks like a running man.
2. Change the code so that the last line displayed to the console is **your** name.

3. Above each of the lines fixed in the first step, include a single or multiple line comment explaining the issue you fixed.
4. (Optional) Open the Settings drop down and click on the colors option. Customize the colors of your interface how you see fit.

Step 4 - Debugger

1. Next to one of the print statements within the main method, Click on the grey bar to the left of the line numbers. This is known as setting a breakpoint.
2. Once you have set a breakpoint, Click the bug button in the toolbar. This will start the debugger. A debugger is a different way of running a program. It attaches an inspector to the run of the program and displays much information about what is occurring within the program at the current moment.
3. The bar to the left of the edit window and console should now have changed to the debug tab. Up top there is a new toolbar that has the controls for the debugger. The button we will be using most of the time this quarter is the down arrow button which allows us to advance one statement in the execution of the program. You should also see something called the call stack and below that a list of variables which we will use to see information about data storage as our programs run this quarter.

Step 5 - Turn in your work

1. Log into canvas and navigate back to the Lab 01 Assignment listing.
2. Find the submit assignment button and click it.
3. Down below, click the box that will allow you to select a file to upload.Select the version of soMany.java that you have modified with your corrections and upload that file.
4. Click the submit assignment button.