CS 453 – Software Quality Assurance
Homework #3

Deadline

Due by 11:59 PM on 2024-09-26.

For this homework, you are required to work in a 2-person (a single 3-person team will be allowed if there are an odd total number of students in the class).

In this homework exercise,

1) Download the FactsProject from Canvas which contain the source files of a web application written in Java with a combination of Java servlets, Java server pages, JavaScript, and XML. We will be using it for future evolution and assignments. You will not need to be an expert in web apps to do these assignments, but you will need to understand how this small application works. Download the project and examine them to see how well you can understand the code.

2) Pick a Java class from the Facts project. Critique the coding style.
   a. Does it exhibit an apparent coding style?
   b. Is the coding style consistent?
   c. Which style decisions do you agree and disagree with?

3) Modify the given server to have a different interface. More specifically, change it to run as a simple GUI on your computer (not a web application).

4) As you make the changes, keep a simple documentation log of what you do. Note which components and methods you change and which ones you no longer use. Summarize the changes in a few words. You do not need to go to the level of which variables you create or delete or how you change the control flow. I just want the highlights.

5) Next, write a short assessment of the maintainability of the software. What did the original programmers do that made it hard to change the software? What did the original programmers do that made it easy to change the software? What would you do differently if you did it again?

*   Name your file **HW03.zip**:

Submission Guidelines:

Submit a zip file per team, contain (two files):

1) A PDF file, and on the top of the file,
   a. Document:

// CS 453 Fall 2024 – HW 03
// <Student1_Name> and <Student2_Name>

Substitute your own names for the <Student_Name> placeholders above.

b. Then, provide your answer on Question 2 stated above (Critique the coding style), with appropriate header text.

c. Then, provide a screen shot (or a series of screenshots) showing your working software (GUI, show that your application successfully runs).

d. Then, your simple documentation log (as explained above), with appropriate header text.

e. Then, your maintainability assessment (as explained above), with appropriate header text.

2) The source code of your project, a zip.

Each Team should submit the above-mentioned zip via Canvas under Homework 3.