

Homework3

SE 4367: Software Testing, Verification, Validation and QA

PLEASE PRINT ALL PARTICIPANT NAMES ON TOP OF THE PAGE

Class, Section and Group# _____

Total Points (Out of 100 points) _____

Instruction:

1. Answer to the problem on a **PDF file (PDF file only)** and save it as HW#_YOUR-TEAM#.PDF
 2. Submit the **PDF** file to eLearning before the due date
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Your job this week is to evolve the server to provide the ability to add new facts through the interface. (Please note that editing the data file directly does not satisfy the assignment.) For full credit, the new facts should be saved in the permanent file.

You can decide how to add this feature, but you must attempt to preserve the integrity of the data file. That is, check the new text to ensure it conforms to minimal syntactic requirements. It is up to you to determine the rules for new facts (what to check for), how to check, and what to do if the facts are not valid.

The original web app had a “community search” feature. If that does not make sense in your system, you may remove that functionality.

As in HW2, when you make the changes, keep a simple documentation log of what you do. Note which components and methods you change and added. 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. This should be one page or less. (*Hint: This will much easier if you keep the log while you change the program. Trying to remember later will take more time. That is, waiting until the end will create maintenance debt, always a bad thing.*)

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?

Submission

Submit five items in a PDF file:

1. A very simple cover page with all partner names (no more than three per team), and where the TA can access your source files
 2. A screen shot showing your working software
 3. A one-paragraph description of the data integrity checks
 4. The simple documentation log
 5. Your maintainability assessment
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Grading

We will grade on several factors.

- (20 pts) Whether each item is included
- (15 pts) Whether the modified software works
- (20 pts) Clarity and thoughtfulness of the documentation log
- (20 pts) Clarity and thoughtfulness of the maintainability assessment
- (15 pts) Quality and maintainability of the changes you made to the code (this is why we need access to source files)
- (10 pts) Other factors to be determined while grading such as team collaborations,....