Software Quality and Testing Computer Lab 2

Unit testing Practice

Assignment 1

In this assignment you will write tests for the Tennis Game task that you have seen last week. Note that you will write tests for a sample code that I have created, not for your own implementation. The sample code contains some bugs. Write unit tests to find these errors and try to fix them. Continue to write tests until you are confident that the implementation is correct.

Discussion: How many tests is needed? Can we have %100 test coverage?

Instructions:

Follow these instructions carefully step by step.

Get the assignment files:

- ☐ Locate the repository: The link is available on [SQAT Lab web page](SQAT%20Lab%20web%20page) following the instructions. NOTE: This is not the same repository you used last time. So, you need to fork and import to eclipse this repository.
- ☐ Create a fork of this repository
- ☐ Import into Eclipse
    - o In Eclipse: Select File > Import
    - o In Import Window: Select Git > Projects from Git
    - o In Import Projects from Git Window: Select Clone URI
    - o In the next window:
        - ▪ URI: paste the URL for your repository The URL of your repo is available at your repository's web page on Github under HTTPS clone URL on the right-hand side of the page. Link should be https://github.com/[YourGithubaccountName]/TennisGame_Testing.git
        - ▪ In the Branch Selection window select master branch
        - ▪ Proceed with the default options

Implementation

- ☐ Write unit tests and modify the code when necessary to fix errors.

Submit your work

- ☐ Commit and Push:
    - o In Eclipse: Right-click project in the package explorer. Then Select **Team > Commit**
    - o Write "Project Finished" in commit message textbox
    - o In Commit Changes window click **Commit and Push**
    - o NOTE: If you encounter an error "There are no staged files" during commit, select all the files in *Unstaged changes* area and move them to *Staged area* in commit window.
    - o On your Github repository page check the status to verify that it is up to date with your local copy
    - o On your Github repository page check last commit message is "assignment finished"

☐ Create Pull Request
  o On your Github repository page create a pull request
    ▪ Click New Pull Request button located above the listing of repository files

Assignment 2

In this assignment you will write tests for the Gilded Rose task. The task description is available at SQAT Lab web page and also included in Guthub repository. Note that the implementation may contain errors. You will write tests for *updateEndOfDay* method to test if the *quality* and *sellIn* values or Items are updated according to the requirements. Do not try to locate and fix the errors. Just write tests.

Instructions:

Follow these instructions carefully step by step.

Get the assignment files:

☐ Locate the repository: The link is available on SQAT Lab web page following the instructions.
☐ Create a fork of this repository
☐ Import into Eclipse
  o In Eclipse: Select File > Import
  o In Import Window: Select Git > Projects from Git
  o In Import Projects from Git Window: Select Clone URI
  o In the next window:
    ▪ URI: paste the URL for your repository The URL of your repo is available at your repository's web page on Github under HTTPS clone URL on the right-hand side of the page. Link should be https://github.com/[YourGithubaccountName]/GildedRose.git
    ▪ In the Branch Selection window select **testing** branch
    ▪ Proceed with the default options

Implementation

☐ Write unit tests for *UpdateEndOfDay* method. Do not try and fix the errors.

Submit your work

☐ Commit and Push:
  o In Eclipse: Right-click project in the package explorer. Then Select **Team > Commit**
  o Write "Project Finished" in commit message textbox
  o In Commit Changes window click **Commit and Push**
  o NOTE: If you encounter an error "There are no staged files" during commit, select all the files in *Unstaged changes* area and move them to *Staged area* in commit window.
  o On your Github repository page check the status to verify that it is up to date with your local copy
  o On your Github repository page check last commit message is "assignment finished"
☐ Create Pull Request
  o On your Github repository page create a pull request
    ▪ Click New Pull Request button located above the listing of repository files