Testing, testing, testing with TDD

Objectives

‣ Writing tests that fail (RED)

‣ Writing code that passes those tests (GREEN)

‣ Writing cleaner code that does not break those tests (REFACTOR)

‣ Continue practice of Git/GitHub

Using seg3103_playground

‣ Create **/lab04** directory

  ‣ Extract **tic.zip** and **fizzbuzz.zip**

  ‣ Make sure you can

    ‣ compile code

    ‣ Run tests

NOW IGNORE THOSE PROJECTS :-)

‣ Create tic_java OR fizzbuzz_java

‣ Write a small desire (failing test)

‣ Have it fail (commit that change)

‣ Have it pass (commit that change)

‣ Make it better if relevant (and commit that change)

Test Drive For An Hour

‣ Once you have a your first failing test start the clock

‣ Red - Green - Refactor for an hour

  ‣ If you encounter a technical challenge stop the clock

  ‣ If you get stumped with a Java (or JUnit issue) then stop the clock

‣ Every progress forward should be captured as a commit (this includes adding a new RED failing test)

Submission

- All work should written under
    - **seg3103_playground/lab04**
- Git commit message should include the results of the JUnit tests
- Create **README.md** to summarize your work
    - Identify at least 5 commit groups (per person) to highlight examples of
        - A failing test
        - A passing test
        - Refactored code (where the test still pass)
    - To clarify, if working in a team then you need10 commit groups in total
        - 5 per teammate
        - Clearly identify otherwise you will be penalized
- Share your repository with the teacher and TA (s)
    - Submissions to BrightSpace should clearly reference your GitHub repository

BOTH STEPS ARE REQUIRED:

1. Share your repository with the teacher and TA:

   ‣ aforward@uottawa.ca

   ‣ n.bayati@uottawa.ca

   ‣ One repository FOR ALL LABS. Any student that submits a new repository for labs 4 through X can earn at most 1/2.

2. Upload this in Brightspace:

   ‣ Text file that contains the link to your GitHub repository.

Marking criteria:

‣ 2/2   Excellent effort

‣ 1.5/2 Some effort demonstrated

‣ 0.5/2 Little effort demonstrated

‣ 0/2   No effort and/or did not participate