Wk 5-6: Proj Dev: Test-Driven Development

# Part 1: Research Test-Driven Design and Unit Testing

Identify four principles associated with TDD and Unit Testing. Answer these questions:

* What advantages as a developer does TDD provide?
  + More modular since each feature is a “micro” feature
  + Each feature is completely tested [1]
  + Less debugging
  + Easier to refactor
  + Can force you to document as you go
* What steps do I do to implement TDD?

1. Make sure that your code is testable. This will force the developer to make it modular. Using a development process like MVP or MVC is a great way to make sure your code is modular. [2]
2. Learn yourself and teach your team about TDD.
   1. Learn about what types of unit tests need to be done.
   2. Identify frameworks that can be used for unit testing.
   3. Identify a pattern for writing tests
   4. Learn about test reports
   5. Learn about test driven development in general
3. Do programming sessions in which you and your team write the tests.
4. Build a team or culture around TDD. Practice it in all code your team does.

* What tools or software can I use to do unit testing?
  + “csUnit : An open source unit test tool that offers a TDD unit test framework for .Net projects” [3]
  + “DocTest: A very simple, easy to learn unit testing framework for Python” [3]
  + JUnit: A Java TDD unit test framework [3]
  + NUnit: This one again is used for .Net projects [3]

# Part 2: Personal Development folder

Update your personal development folder with your reflections and status.

Done. https://github.com/Bunker-Kenyon/CSE-490R

# Part 3: Sprint 2

Provide your meeting minutes notes and results.

## Sprint 2 Meeting 05/20/2022

* Work on SRS and SDD. Must be finished ASAP
* Showed how to use Trello
* Review what the customer is looking for.

## Class Meeting on 05/23/2022

Reviewed points for sprint items using planning poker.

## Weekly Sprint Meeting 05/27/2022

1. Reviewed success and issues from previous sprints
2. Reviewed what sprint tasks were completed and what needs to be worked on
3. Identify points for sprint
4. Identify sprint tasks
5. Set schedules for One on Ones with PM

# References

[1] Advantages and disadvantages of Test Driven Development (TDD), Geeks for Geeks, 16 Dec, 2020, <https://www.geeksforgeeks.org/advantages-and-disadvantages-of-test-driven-development-tdd/>

[2] How to Get Started with Test Driven Development — A Step by Step Guide, Anca Onuta, Sep 22, 2021, <https://medium.com/geekculture/how-to-get-started-with-test-driven-development-a-step-by-step-guide-bfdd831fae71>

[3] What is TDD? [Roadmap to Implement TDD in Your Organization], Hardik Shah, April 15, 2019, <https://www.simform.com/blog/what-is-tdd/>