Matt Iwema CM 1711 March 22, 2012 CSSE 376 Sriram Mohan Lab 5

[Question 1 (4 pts)] In your own words, explain the process of TDD.

The process of TDD is the reverse way most developers think. Most of the time, the developer codes up the entire project and then test out the project at the end and fix all the bugs. However, TDD states that you must write your test cases first and then you are allowed to write or modify the code that satisfies the test case you just wrote. In this way, your code will be more likely to be bug free as you catch the errors as you go than writing thousands of lines of code to look for the errors later.

[Question 2 (6 pts)] TDD proponents claim that it benefits software development. The advantages that are often associated with TDD are that (a) it increases the confidence software developers have in their code, and (b) it improves overall code quality. Do you agree with these claims? Justify your answer.

Yes. I love product testing and quality assurance. I am a big proponent that code needs to be cleaner, and more bug free from the get go, especially as systems get larger and more integrated. By improving code quality, developers can focus more on creating more feature rich programs rather than wasting a lot of time fix bugs in the code.

[Question 3 (5 pts)] Based on your experience with this lab, please specify advantages and disadvantages of TDD.

Advantages: This method is very useful for finding bugs in the code and correcting them before they get out of hand. Since we started with smaller cases and worked our way up to large cases, we could see errors in our code much easier as they unfolded. Another advantage is that we were able to understand what our code did line by line more effectively than if we had written all the code first and then the tests later.

Disadvantages: It is difficult at first to think about testing your code first before actually writing the code itself. It took a bit of getting used to thinking in this mindset, but it is easy to start thinking of TDD after a while. Another disadvantage of TDD is time consuming process of where one person writes a test, commits and then the other user fixes the code so the test will run and then commits it once the test runs. This eats up a lot more time than if one person was doing both jobs.