Twesha Mitra

<https://github.com/tweshamitra/CS1632_Deliverable2>

CS 1632- Deliverable 2: Unit Testing CitySim9005

Introduction

This deliverable taught me a lot about test driven development. When I started this assignment, I took a “cowboy coding approach” and this made it pretty difficult to modularize and test my code. I didn’t really plan it before I sat down to code and this was definitely a detriment. Initially, I started out by writing tests before I wrote the code and it was clear to see the benefits of this. It allowed to me to write the bare minimum code that made the test pass. However, it was easy to see that test driven development takes more time than normal. And since I had not come up with a plan, it was taking even longer to test. So, I started to focus more on the program code and less on the testing to try to get the program to do what it needed to do. Then, once I got it to work, I wrote more unit tests. This, in turn, led me to refactoring a lot of my code because as I was testing, I would think of better and more modular ways to perform tasks. Initially, I had some unit tests that were depending on other classes that weren’t being tested, which is why I had to refactor a lot of my code.

Another thing I found interesting about this project was the amount of freedom we were given. Usually, we are told to use certain data structures and algorithms. But, with this environment, we were allowed to implement however we want as long as the functional requirements were satisfied. Additionally, I am not used to writing numerous tests for every method I write, so this was definitely a challenge.

Going forward, I would definitely follow a plan instead of just sitting down and coding. I can see that it’s important to do at least a little bit of design work up front and then follow that as you code. This makes testing and coding much easier in the long run.