**CS 1632 – DELIVERABLE 2**: Unit Testing CitySim9005

**Project**: https://github.com/jkellyjr/CS1632\_Deliverable2

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**Description**

I found this deliverable to be more fun than the previous one because we were tasked with writing code instead of repeatedly following steps trying to break things. I do not think that anyone could remain sane with a career in black box testing—if that even exists, that is. I also think that I preferred this deliverable because I did not have too much trouble writing the CItySim9005 program and its corresponding tests. I found this deliverable to be a nice intro into unit testing.

I used CitySim9005 as the main class that ran the other helper classes: City and Location. I created a testing class to ensure the various validations (i.e. argsValidation) worked as specified, and the Main/Run/Driver hierarchy obeyed certain properties. I did not use a graphing algorithm to implement the City because I did not believe the simulated city was too complex for a well-defined City and Location class. As long as the Location could keep track of its adjacent locations and outbound streets, I could create the simple City, and traverse the city easily. I tested all public methods that returned values, and tested some state variables. I did not have any trouble testing the returning methods, but I did have some trouble attempting to test state variables—particularly when I was updating the current location. I wanted to attempt to test impure functions but ran into the roadblocks that were expected. I was not surprised, but I just wanted to try myself.

**Unit Tests**

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