**Milestone 4 - Assessment**

**What is the Artifact?**

The Artifact I chose is the final that was done for CS340. It is a mongoDB set of code that will have a menu in which you can select what you want. When you select your choice, it will ask you to input something specific and insert that into the mongoDB coding. It was created at the end of February 2019.

**Why?**

I chose this one for my portfolio for a few reasons. The first being that I have gone through multiple computers since I started the class and I do not have the codes for every class taken, I have the codes for I think two different classes including the CS340 one. I have some random codes for the other classes, but in the past I did have issues with Eclipse of any of the other programs used, and it was hard to get it to work right, so since I do not have those original programs they were used on due to new computer, I am unsure of what they need in order to work. I chose this one because per the 3 sections labeled in the final, CS340 was in all 3 of them. The skills I wanted to show off with this code was my ability to turn another project (the original project was in Python) to Java, also to split it up into different classes to keep the code more organized. This will show my skills in each section with the change of language, in a sense I am rebuilding the code from scratch as a lot of the coding used in python does not translate well at all into Java, most of the mongoDB stuff will have to be completely redone. The artifact is done now. It was improved over the original by spacing everything out more to make it easier to understand, the individual sections now have their own class instead of all cluttered into one class. More comments explaining what was done. I also ended up putting the string to document conversions into each of the individual classes instead of doing it within my while loop in my main().

**Course Objectives Met?**

I have met all my course objectives I had planned on. I converted my Python MongoDB code into working Java MongoDB code. I put all the individual methods into their own classes. Doing this freed up more space to make it look nicer in my main while loop. I added necessary comments. Tried to preserve coding space to not seem so cluttered, I tried organizing code so the relative code stays together. I currently do not have any updates to my outcome-coverage plans.

**Reflect**

So this artifact is for the most part what I expected, not to be easy what so ever. I expected to spend a lot of time trying to do it, but did not expect to have not as much time as I wanted. It has been a pain a lot because I am trying to search google for how to fix certain things, but at times I cant find anything remotely helpful, and I have to either try to modify other things (that don’t end up working) or try different search terms. I have learned that some of the knowledge learned in other classes went in one ear and out the other. Since the last time I used Java, I have worked with C++ and Python, so it has been replaced, I had to look up how to start some of the basic set ups, like remembering how it formats while loops, if else statements, and even the print statements. I faced many challenges and I am not done yet. Some of those challenges are searching on google with results that do not really help. Right now as of making this document, I have fixed my last issue with the help from the instructor and that took me pretty much all the way to the end except for the last two classes, Aggregate and FindStr. I thought I still had some issues left with my code, but I was working on it just now and tried a few things and thought of trying the code without quotes and ended up finding it printed out exactly as I wanted it to. I have my working Python code to examine, with all my results posted in my Final paper for my CS340 class, and the results are matching up. I learned that sometimes you just need to take a step away and come back to it another day with a clearer head, that can help sometimes. But having this working as intended now is such a huge stress relief, I was stressing out over doing this but it did not do as bad as I thought.