Professional Self-Assessment

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Throughout the duration of this course, I reviewed old works I had completed in the past and reworked them to show the new skills I have mastered in my time as a Computer Science student. This demonstrated my strengths within the field, as I chose what enhancements I wanted to make to these artifacts and what I wanted to demonstrate my mastery in. My mastery in data structures and algorithms was demonstrated when I reviewed a former program, creating a new class and objects from it, as well as through my use of arrays, constructors, get and set methods, and input from the user themselves. My mastery in software engineering was shown when I took an artifact that was created in Python, and translated it into Java, retaining all its former functionality. I demonstrated a mastery in security by following the best practices in programming, ensuring that encapsulation was used as well as comments. I also used the standard syntactic practices. I showed a mastery in communicating to stakeholders through my narratives following each enhancement, showing that I can relay in clear English all of the changes I had made, and explain why they are significant. Finally, I demonstrated my mastery of collaborating in a team environment by using a GitHub repository, where multiple people could work on the same project and push their changes simultaneously.

The two artifacts I used in this project were a jukebox application where a user could create a playlist of songs from various artists, and a script for use within MongoDB, designed to allow a user to create, find, change and delete documents within a database. In the former, I created a class for artists, where they could have albums, songs, and band members. The user could then search for artists and songs. This demonstrated that I understood the utility of object-oriented development and could properly create and implement objects and classes. The other artifact was a python script that I converted to Java, retaining its functionality. This demonstrated a mastery of software design, as I could understand the differences between Python and Java and how to use the two tools to accomplish the same goal. I then created a user interface for this artifact, demonstrating proficiency when working with Databases, as this was a MongoDB script. These enhancements show what I have learned in my time within the Computer Science program. They challenged me to recall lessons learned all throughout the last few years and then implement these along with everything I have learned since. I struggled at first due to a lack of practice with a lot of these techniques and languages but was able to overcome these struggles.

Note: I was unable to upload my video Code Review to GitHub as the file size was too large. I therefore submitted it to BrightSpace. Also, the link for my GitHub page is <https://github.com/Josiepooh/Josiepooh.github.io>.