**Module 8: Portfolio Project**

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CSC505-1: Principles of Software Development

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**Intro**

As this class started, I experienced something I was not familiar with, and throughout the class the same situation continued to appear. To overcome my lack of knowledge of the subject, much research was to be done to be able to seem as though I was on par with my classmates. Although much research was experienced, there were a few subjects that seemed to be more substantial than others. The first that I noticed to be impactful was the UML diagrams, they happened every week, to not improve from the beginning would be insane. The next was the builder pattern, the depth necessary to grasp this concept was annoying, but in the end I feel as though it stuck. Finally, the style of coding I have used throughout the course has changed due to the development in my own skills.

**UML**

Throughout this course I became more familiar with the UML diagram. Prior to this course, I had little experience with creating and reading UML diagrams. As the session progressed and I became more comfortable with the diagrams, I was able to depict a program that was to be worked on. The effect that this will have on my future work will be that I will not only be able to be an effective member of a team, but I will also be able to assist in the creation of new UML diagrams with enough requirements being gathered prior. As I have learned the most basic aspects of these, I will be able to continue learning the more intricate designs of UML diagrams, and one day, be able to make one for a major program.

**Builder Design Pattern**

The builder design pattern is the first professionally recognized pattern that I learned through this class. With knowledge of this design pattern I will be able to speak intelligently when the topic arises. Additionally, if this pattern is used for projects I am working with in the future, I will have a working knowledge of this and will be able to implement additional strategies to ensure the project is a success. With the step by step approach of building, the objects start off simple and adds complexity as the project needs it. Utilizing this approach allows me to develop a foundation with the bare minimum requirements and add difficulty as needed.

**Python**

The final thing that I have learned and gotten more acquainted with is python. Although I have been dabbling in python for quite some time, this is the first course and/or project that I felt I had to think outside the normal realm of thinking for coding. Which is a positive step for me, considering the lack of professional experience I have in this field. The progress has shown me that with consistent work, the programming skills will grow as well. Bringing this to the industry I hope to be in the future, the more I work on this skillset, the more I will become an invaluable asset, and eventually be able to create something that has yet to be heard of.

**Conclusion**

This class has built upon a range of skills I had previously had, but the three listed are the most impactful towards my future career. Although I was able to experience a UML diagram previously, this class has empowered me to be more confident with my UML skills. Additionally, the builder pattern is one that is recognized throughout many fields of software engineering, to become more comfortable with this adds a soft skill I can add to my resume. Arguably the most important quality of a software engineer is their programming skills, and this class has added to the repertoire that I had previously held. In conclusions, this class has taught me numerous skills, but the three listed were the most impactful.