CS-499-11429  
Professor Brooke Goggin  
Mark Irwin  
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3-2 Milestone Two: Enhancement One: Software Design and Engineering

The artifact I have chosen is called Spaceship Escape it was a project from IT140. It is a text-based adventure that was originally made in python. I created the code for the project in python almost two years ago when I was in IT140. Spaceship Escape!!! Is a text-based game that has the player travelling through a ship looking for survival items to use an escape pod to escape to safety.

I chose this artifact for my ePortfolio as it would allow me to not only return to one of the first projects, I developed but also showcase how far I have come. I knew when I heard a project needed to be selected I could have so much potential in where I could take this artifact. This artifact will allow me to showcase my skills and abilities in software development by showcasing my ability to write in multiple languages, meet expectations regardless of language, showcase my ability to adapt to new coding environments to enhance functionality, and adapting to challenges. I improved the artifact by not only converting it from Python to Java but also utilizing the conversion within Android Studio making it a fully functional mobile application.

With this enhancement I did meet the course outcomes I planned to meet with this enhancement:

“Employ strategies for building collaborative environments that enable diverse audiences to support organizational decision making in the field of computer science.”

* I showcased and met this outcome by ensuring and promoting a collaborative coding environment by utilizing well documented code that broke down how my code functioned and the intent of my application. I also made sure that my code was well commented which would allow other developers to easily adjust features of the application. My code is also designed in a way that would allow for further adaptation and improvement to the code.

“Design, develop, and deliver professional-quality oral, written, and visual communications that are coherent, technically sound, and appropriately adapted to specific audiences and contexts.”

* I showcased and met this outcome by ensuring that communication within my applications code and gameplay was clear. This would allow clear communication not only for the players of the application but also for any future developers that utilize my code. I also ensured that my application was appropriately adapted to the android studio environment and adapted to the needs of the users of that environment. I also utilized a clear user interface design which will help audiences better understand the application navigation.

As I was working on enhancing and modifying the artifact, I grew a better understanding of not only what my goal and purpose was but also how much I have learned during my time at SNHU, not only in my understanding but also in my growth will how I conquer problems. I also was able to learn more about Android Studio and what could be accomplished. It changed not only how the artifact was played but also improved it. During this enhancement I faced many challenged. Not only in just the code conversion from Python to Java, but also in the logic of the game itself and how it could not quite run the same but can be adapted to work the same just in a different way. Which not only helped the game functionality but also the efficiency of the application.