CS499 ePortfolio Selection and Refinement Plan

For the first category of Software Engineering/Design I have selected my final project from CS405 in which I wrote and proposed a new security policy to be adopted by the organization I was working for in that project. My enhancement plan will include expanding on the most vital areas and providing more insight into the cost breakdowns for these elements. Furthermore, I’ll enhance this by including additional tool suggestions and training plans to help convey the implementation process of these new practices. The skills and outcomes to be demonstrated by this is developing a security mindset, helping to anticipate exploitation of our software and understanding code vulnerabilities in more depth to help mitigate any potential data breaches and loss of information and funds for the company this project is for.

For the second category being Algorithms and Data Structures I have selected one of my recent projects in my CS410 Reverse Software Engineering where I had to reverse engineer a binary file into assembly code then recreate the C++ code from there and enhance the program. This demonstrates the ability to use algorithms and data structures by utilizing binary files and converting assembly code into a C++ and building an entirely functional program from it. My enhancement plan will involve taking my program a step further and providing insight to additions to the program in which it can be improved and more user friendly and secured. This will help demonstrate my ability to use innovative techniques and skill along with other tools to help implement a better value of a solution.

Finally for the third category of Database I have selected my Final Project from the course DAT 220: Fundamentals of Data Mining. This project included ways to data mine large amounts of data to discover trends in customer habits to help propose new business strategies for Bubba Gump Shrimp. My enhancement plan will include reviewing the data that I gathered and working on creating more visuals to help convey the data in a clean and simple manner. I think doing so will help demonstrate a clearer message to the management team that this report was intended to go to. By reviewing the data and formulas used I can attempt to see where I could improve on this and see if there was a potential for better, or more accurate data to help convey the message in a better, more effective way. This will demonstrate the skills and outcomes of designing and delivering a professional-quality written and visual communications that are coherent and technically sound along with using strategies for building a collaborative environment in the field of computer science.

Overall my ePortfolio will demonstrate skills and outcomes across several areas, code review, narratives, and in a professional self-assessment. In my code review I will walk through my C++ code from my CS410 project. By explaining my functionality and analyzing the existing code I’ll then be able to discover and convey my plans for enhancement. The narrative I provide for each of my artifacts will help professionally convey the overall summary of the original project that I completed. Next in my narratives I’ll be able to explain why each one was specifically chosen and further discuss my enhancement plans. Doing this will demonstrate skills in designing and delivering a professional written communication that is technically sound and adapted to my particular audience. Finally I will be performing a professional self-assessment. This will be a total reflection of my time at SNHU and more specifically in the Computer Science program and how I have grown in the CS field. Doing this will demonstrate my skills in evaluating my solutions and my ability to learn and be a part of and facilitate a collaborative environment.