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FINAL PROJECT

REFLECTION

 This article's objective is to present a reflective account of my progress in the Computer Science Capstone course (CS499) that I am now enrolled in. My professional ePortfolio highlights the skills, knowledge, and capabilities that I have acquired through the Computer Science curriculum. Additionally, I provide a comprehensive explanation of how I was able to achieve the course goals by enhancing the artifacts provided by the course.

This is a terrific approach to demonstrate to prospective employers how useful I am by exhibiting my work in a visual style, and it can be accomplished by constructing a portfolio that highlights my distinctive capabilities. Throughout the primary subjects that are covered in my ePortfolio, which is titled Foundations of Computer Science, I have established a strong foundation for explaining my capabilities. The artifacts that I have created from the various classes that I have taken in the Computer Science Program are evidence of my growth in the fundamental fields of database administration, algorithmic data structure design, and software engineering.

During the course of my time as a student in the Computer Science department at Southern New Hampshire University, I have amassed a vast amount of information and abilities, and I have shared them with others through my electronic portfolio. Not only does this demonstrate my advancement in the program, but it also demonstrates the acknowledgment I have earned for delivering outstanding achievements. The objective of the electronic portfolio that I developed and handed in was to ensure that my abilities and knowledge in written and visual communication were presented in a manner that was well-organized, technically sound, and contextually appropriate.

My capacity to fast acquire new skills was significantly improved as a result of the computer science curriculum and the assignments that were assigned in CS499 class. The candidate's competencies in computer science, data analysis, software development, technical writing, and leadership are displayed in the supporting artifacts of the ePortfolio. Additionally, the candidate's ability to tackle challenges with intellectual humility and a can-do attitude is demonstrated. As a result of the several classes that I have taken while pursuing a degree in computer science, I have acquired the skills and information necessary to be successful in a profession in computer science and sectors that are related to it.

The identification of errors at a time when resolving them would be cost-effective, the enhancement of the team's competencies, and the introduction of fault tolerance to the organization or individuals are all ways in which code reviews contribute to the recovery process following disruptive changes. It generates code that is of higher quality and is simpler to maintain. I have the ability to develop and implement strategies that promote teamwork, bring together various types of stakeholders, and assist organizations in making better decisions regarding computer science based on solid analysis and improvements to code that improve functionality. This is made possible by my experience in code reviews for software engineering, algorithms, and databases. I do an analysis of the code for the artifacts and provide my strategy for making improvements in the code video review. When conducting the code review, it was necessary to examine both the artifacts and the existing source code in order to determine how they could be enhanced. Through the utilization of the films that are produced, I am enhancing my capacity to deliver code reviews in collaborative situations that are cohesive, technically sound, and well suited to a variety of audiences and contexts.

   This software design and engineering artifact that I developed for my CS320 class demonstrates my capacity to employ both conventional and cutting-edge methodologies, techniques, and tools in the field of computing to design and construct solutions that are tailored to the requirements of particular industries. An entire software design and engineering process was covered by the artifact, which meant that it included design considerations for user experience and interaction with a variety of program decisions and activities. By utilizing industry standards, the application should be made user-friendly, and its functions should be easily accessible. A relational database should be used to store CSV data that has been created, accessed, updated, and deleted by users.

For the purpose of developing and evaluating computing solutions to specific problems, I utilized algorithmic principles, adhered to applicable computer science practices and standards, struck a balance between the inherent trade-offs in design decisions, implemented the interplay and functionality of algorithms and data structures across classes and methods, and organized their layouts and source code. Developing a security mindset that anticipates hostile assaults on software systems allowed me to discover security flaws, correct design errors, and safeguard user privacy. I also built this mindset in order to preserve user privacy. By utilizing engineering methodologies and techniques for input validation, I was able to improve the security of both data and resources inside a security-oriented architecture that was defined by default denial.

Through this ePortfolio, I have demonstrated that I am capable of utilizing both conventional and unusual methods while attempting to solve problems. Through the development of features that make use of CSV data files, I was able to demonstrate my expertise in the design of computer solutions that are not only specific to the industry but also generate value. My ability to provide a presentation that was not only instructive but also entertaining was made possible by this. My ability to successfully handle the trade-offs that are inherent in design decisions was made possible by engineering considerations of relationships and functionality within the code. This allowed me to successfully handle the trade-offs effectively. By utilizing algorithmic principles and adhering to relevant computer science norms and standards, I was able to construct and evaluate computing solutions that address specific problems. In addition, I was able to do this. Thanks to the application of the computer scientific technique.

<https://github.com/williamcolon/CS-499>