William Colon  
FINAL PROJECT

REFLECTION

This document serves as a reflective submission regarding my experiences throughout the CS499 Computer Science Capstone course assignments. I elaborate on how I achieved the course goals by refining the artifacts within my ePortfolio, culminating in the successful creation of a professional ePortfolio that demonstrates my expertise, abilities, and expertise acquired from the Computer Science curriculum.

Developing a professional portfolio that highlights my distinctive skills and talents serves as an effective visual communication tool to convey our worth to prospective employers. The ePortfolio information serves as a robust foundation for articulating my skills across the major areas. Domains of Computer Science. The artifacts from various courses in the Computer Science Program illustrate my development in the essential domains of software design and engineering, algorithms and data structures, and databases.

My ePortfolio consolidates the knowledge and abilities acquired and refined during my tenure in the Computer Science program at SNHU. It signifies the advancement of my program, and the attainment of honor rolls due to superior outcomes. In my ePortfolio, I created and presented a professional-quality display of my written and visual communication skills that is cohesive, technically proficient, and well-tailored to a specific audience and context.

The computer science coursework and the assignments of CS499 enhanced my ability to acquire new abilities rapidly. Provide solutions to challenges with intellectual humility and a leadership mindset to excel in computer science, grounded in recognized hard skills and competencies acquired through the practice of computer and technology skills, data analysis, software development, and technical writing, as evidenced by the accompanying artifacts in the ePortfolio. Every course in the Computer Science program has contributed to the development of the skills and knowledge essential for securing employment in related fields.

Code reviews identify errors when rectification is economical, enhance the team's competencies, and introduce a degree of fault tolerance to the business or individuals, facilitating improved recovery from disruptive changes. It yields superior code that is more readily maintainable. Conducting a code review of the chosen artifacts related to software design and engineering, algorithms and data structures, and databases has equipped me to implement strategies that foster collaborative environments, facilitating diverse stakeholders in supporting organizational decision-making in computer science, grounded in the critical aspects of functionality code analysis and enhancements. In the code video review, I examine the artifacts code and outline my strategy for improvements. The code review involved an examination of the current source code and enhancements to the artifacts. By utilizing the produced videos, I am enhancing my skills in delivering a code review within collaborative settings that are coherent, technically robust, and suitably tailored to distinct audiences and contexts.

 Through the chosen artifact of the CS320 course in the software design and engineering category, I exhibited my proficiency in employing established and novel approaches, skills, and tools in computing practices to develop computer solutions that provide value aligned with industry-specific objectives. The artifact covered a comprehensive software design and engineering process, incorporating design considerations for user experience and interaction with various decisions and activities within the program. Facilitate easy application usage and feature accessibility using industry-standards, alongside a relational database for the storage of CSV data generated, accessed, modified, and deleted by users throughout application operation.

 I developed and assessed computing solutions to address specific problems by employing algorithmic principles and adhering to relevant computer science practices and standards, while balancing the trade-offs inherent in design decisions, implementing the interplay and functionality of algorithms and data structures across various classes and methods, as well as the organization of their layouts and source code. I cultivated a security mindset that predicts adversarial exploits in software architecture and designs to identify potential vulnerabilities, rectify design faults, and safeguard privacy. I improved data and resource security by applying engineering methods and methodologies for validating input inside a security-oriented architecture characterized by default denial.

 I assert that my ePortfolio showcased my capacity to employ established and creative methodologies. I developed computer solutions that provide value and achieve industry-specific objectives, demonstrated through the creation of features involving CSV data files. I developed and assessed computing solutions that address specified problems by employing algorithmic principles and adhering to relevant computer science practices and standards, while effectively managing the trade-offs inherent in design decisions through engineering considerations of relationships and functionality within the code.