CS 499 Computer Science Capstone

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Professional Self-Assessment

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In my academic journey, I have developed advanced knowledge and skills. Creating the portfolio showcases my unique abilities, skills, experiences, accomplishments, and knowledge while completing my bachelor’s degree at SNHU. Through the computer science and assignments of CS 499, I have increased my learning capacity to learn new things in a short period. It demonstrates my readiness to take on challenges in software development, algorithm database management, and cybersecurity. The audience will gain insight into problem-solving, technical expertise, and commitment to learning while enhancing in the computer science field.

Collaborating in a team environment is important for successful teamwork and I excel in this area through effective communication, adaptability, and a strong sense of collective goal achievement.

Communicating with stakeholders includes presentations, making reports, and strong verbal and written communication skills. Prioritizing active listening to understand the stakeholders' needs, concerns and feedback is a crucial part of project success.

Data structures and algorithms are important to solve complex problems. I have a strong foundation in the array, trees, graphics, and sorting algorithm, sorting algorithm.

In software engineering and database, I have designed scalable and implemented error-free and clean code. I have worked with MYSQL, and NoSQL (MongoDB). I designed a database schema with queries.

Security is critical in software development. I implement best practices to safeguard the system and data. I am familiar with encrypting, authentication, and vulnerabilities.

I have selected the artifact calculator.java project for the software engineering and design category. The project had a basic calculator, and I enhanced it by converting the calculator to a scientific calculator. The artifact shows the enhancement which involves designing, building, and testing. I have chosen a rescue animal project for the algorithms data structures, and database categories. I designed this project when I took the IT 145 class at SNHU. For the algorithm and data structure. I have arranged the data and added the binary search. This shows my design approach and solves the given problem using algorithm principles and computer science practice and standards. For database categories, I have used MYSQL which demonstrates my ability to use well-organized, innovative skills, techniques, and tools in computer science.