Completing my coursework in the Computer Science program and developing my ePortfolio has strengthened my technical expertise, improved my problem-solving skills, and prepared me to enter the workforce as a capable software developer. Over the course of the program, I worked independently to design, implement, and improve projects that required me to apply skills in algorithms, software engineering, database design, and security. My Capstone project, a sentiment analysis web application, served as an opportunity to bring together these skills into one cohesive artifact. This process reinforced my ability to take a project from conception to deployment while maintaining professional coding standards and focusing on usability.

I deepened my understanding of data structures and algorithms, applying them not just in theory but in practical applications like the machine learning model used in my Capstone project. The process of training, saving, and integrating a custom sentiment analysis model required efficient vectorization of text data, probabilistic classification algorithms, and performance optimization. On the software engineering side, I applied modular design principles, built a maintainable Flask web application, and integrated front-end elements for a smooth user experience. My database and security work included designing a database schema for storing sentiment entries, implementing CSRF protection, and securing API interactions. These enhancements showcased my ability to combine backend functionality with user interface design in a secure and scalable way.

My artifacts fit together to highlight the range of my abilities in the field of computer science. Each enhancement demonstrates a different area of expertise, from designing efficient algorithms to structuring maintainable web applications and securing data storage. Together, they show my growth from a student with programming knowledge to a professional capable of delivering complete, production-ready solutions. This portfolio reflects my technical skills as well as my adaptability, problem-solving ability, and commitment to continuous learning. As I move forward in my career, I am confident that the knowledge and experience gained through this program will allow me to contribute effectively to any development project and adapt to the evolving demands of the technology industry.