**CS 499 Milestone Four Narrative**

1. **Briefly describe the artifact. What is it? When was it created?**

The artifact I have created is from my CS360 Mobile Architect and Programming. The artifact’s name is called the weight tracking application. The purpose of this application is to assist users to track their weight aiding with weight loss or weight gain. The application has many features such as creating a new account, logging in and logging out of the application, set goal weight, view and add weight entries, and an SMS feature that will notify the user when they have achieved their goal. The application was created in August 2024.

1. **Justify the inclusion of the artifact in your ePortfolio. Why did you select this item? What specific components of the artifact showcase your skills and abilities in software development? How was the artifact improved?**

This artifact is esstional to my ePortfolio because it exhibits my experience with database design. My enhancement for this artifact improves query efficiency. I added indexing to the user\_id column in both daily\_weights and goal\_weights table.

1. **Did you meet the course outcomes you planned to meet with this enhancement in Module One? Do you have any updates to your outcome-coverage plans?**

Yes, I believe I have met the course outcomes that was planned for this artifact. The improvement I made in this enhancement has met the following outcome:

* Demonstrate an ability to use well-founded and innovative techniques, skills, and tools in computing practices for the purpose of implementing computer solutions that deliver value and accomplish industry-specific goals (software engineering/design/database)

1. **Reflect on the process of enhancing and modifying the artifact. What did you learn as you were creating it and improving it? What challenges did you face?**

During the enhancement process, I learned how indexing improves database performance. Indexing reduces query times which ensures data retrieval is efficient. I didn’t face any challenges enhancing this artifact.