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

This artifact is a unit test project for maps of different objects that was created in December of 2024 during my Software Testing, Automation, and Quality Assurance course.

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?

I included this artifact because it shows how I can proficiently use unit tests to make sure my code works as intended. The tests check every part of the system, like adding, updating and deleting items, to catch any mistakes before they become problems. By writing tests for both normal cases and potential errors, like invalid dates or blank names, I proved my code handles all situations correctly. These tests give me confidence that my system works exactly as planned, and they'll help catch any future bugs if changes are made. This artifact was improved with clearer labeling, more organized structure, reduced redundancy, and a database implementation to store data.

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?

I did meet the course outcomes I planned to meet with this enhancement in Module One because I said I would demonstrate my ability to use the skills of CRUD Operations and Database Integration which are valuable computing practices, and the implementation of a database provides practical value for storing information about objects/people. I have met these requirements in my database enhancement. I have no new updates for my outcome coverage plans.

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?

While enhancing my project with database integration, I learned how important it is to maintain clean code structure and thorough testing. The biggest challenge was ensuring the new database functionality worked seamlessly with my existing tests, especially when dealing with duplicate entries and data validation. I had small changes in one part of the system unexpectedly affect other areas, so careful planning and incremental improvements were very important.