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, and reduced redundancy.

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 met the course outcomes I planned to meet with this enhancement because I displayed proficiency in specific skills such as Object Oriented Design and Fluency in Multiple Languages by interpreting one project in Java and translating into C++. I do not have anything new to update for my outcome plans, everything is still the same as intended.

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?

Translating this project from Java to C++ was a great learning experience that deepened my understanding of both languages. I learned a lot about how to find equivalents of things in different languages. For example, Junit is what I used to test my code in Java which is super simple and easy to use. However, in C++ I had a hard time translating the tests due to the different testing library used which was the CppUnitTestFramework. Some methods of testing the code would not work with this library so I had to find a way that worked with the library I had in C++ to get the desired result.