Peter Mccabe

CS-499: Milestone Four: Enhancement Three – Databases

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

The artifact I used for this enhancement is the SNHU Travel app, which I originally worked on in CS 250. It’s a Python-based program that lets users search for vacation trips by destination, budget, or keyword. The first version was made without any kind of data storage, so the trip information and any user actions were lost once the program closed. Each enhancement I’ve made has been building off of the SNHU Travel App. I felt that it had much room for improvement and since I had taken CS 250 last term, much of the information was still fresh in my mind.

**2.) 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 chose this artifact for the Databases category because the original project had potential to grow with some kind of data management. For this enhancement, I added the ability for users to save their favorite trips and view them later, even after restarting the app. This shows that I understand how to work with persistent data using a JSON file. Specifically, the program now writes and reads trip info to and from a file called favorites.json. It’s a basic but important feature that shows I can handle file-based storage in a real app. The changes required integrating file operations, managing user input, and avoiding duplicate entries which are all useful skills in software development.

**3.) 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 believe I met the course outcomes I originally planned for this enhancement. My goal was to demonstrate that I could build a small scale data storage feature and integrate it into a working program. I originally thought I might let users add new trips and store those, but I ended up going with a more practical feature that lets users save favorite trips instead. It still enhances the experience for users.

**4.) 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?**

Enhancing this part of the program helped me realize how important simple features like saving data really are for usability. Even just letting users save favorites gives the app more value and feels more real. I learned how to handle file reading and writing with JSON in Python, how to load that data back into the app, and how to avoid duplicate entries when saving. One of the harder parts was making sure the saved data stayed clean, and the user interface didn’t get confusing. I also had to think through how the new features would fit into the existing menu structure. Overall, the process helped me feel more confident about applying basic data storage techniques in my future projects.