Matthew Carrillo

CS 499 Computer Science Capstone

2/6/2025

**Milestone 4 Narrative**

This artifact is a full-stack application that was created between October to December of 2024 for the CS-465 course. It was designed to be a travel package shopping service that has a general user front end for selecting and purchasing travel packages and a back end for administrators to login and manage data and packages as a whole. Throughout this course I will continue to focus on the back end portion of the program meant for administrators.

I selected this artifact because it shows my understanding of how data is entered, stored and retrieved in a database, as well as how authentication security works for both a database and a website. It also helped me to further understand in detail how the data structure must be set up to handle that information, more so than the algorithm had. The artifact was improved by this inclusion in that it was not properly storing data prior to this enhancement, which made the insertion of new package options useless on the front end.

I think that I had met the outcomes outlined in module one for this enhancement. I had needed to make sure that the structure of the application was designed to mitigate exploitation and ensure security standards that protect the data within.

I didn’t really have any issues with MongoDB itself. I mostly had some challenges with the response on the website. I also had some issues with the add and edit functions that are accessible after logging in. I learned a lot about authentication and external database altering, and improved the artifact with improved functionality and a cleaned up interface.