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

The artifact used here was the CS340 Project, in which I created a MongoDB-based animal shelter management system using full CRUD functionality. This was created in April 2025 during my time in CS 340.

**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 to demonstrate my skills with database systems. The specific components of this project demonstrating my abilities are the updated database indexing system, aggregation pipeline methods, and overall performance improvements.

**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 all of the course outcomes I planned to meet with these improvements aside from the Windows usability transfer. I was in over my head with that expectation, yet still managed to demonstrate my abilities with the other improvements.

**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?**

I learned that databases are much more in-depth than I originally thought. When I started learning about databases, I didn’t know there was so much you could use them for, and so many different ways to do the same thing. The same could be said for programming in general; however, I assumed databases were simpler. I was very wrong. The biggest challenge I faced was implementing the aggregation pipelines in place of the original pandas-based filtering. I had very little experience with this, so there was a lot of research and fixing minor errors.