Class: CS499 Computer Science Capstone

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Date: 1/26/2025

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

I included my original artifact AnimalShelter python class, which was created approximately a year ago. I also included my new revised artifact CRUD java class, which I created this week.

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 selected this python class item and created a new Java class item to demonstrate my ability to write programming logic in multiple coding languages. The same functionality is present for each coding language.

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 believe I met the course outcome I planned to complete with this enhancement, because I was able to create the same programming logic of the CRUD module utilizing the Java programming language.

1. **Reflect on the process of enhancing and modifying the artifact. What did you learn as you were creating and improving it? What challenges did you face?**

I learned that while it certainly is possible to integrate Java with MongoDB, it appears that Python is the preferred method of doing so. The import modules within Pymongo were much more smooth and intuitive to utilize for the first project I worked on during CS340. I had to consult the article, Getting Started with MongoDB and Java – CRUD Operations Tutorial, which I retrieved here: <https://www.mongodb.com/developer/languages/java/java-setup-crud-operations/> to learn which modules to import for the CRUD actions. Also, I found it very challenging to work on and unit test the integration with a specific dataset in MongoDB, because I don’t have the original dataset from CS340. I tried to focus more on the process of converting the CRUD process logic from Python to Java for this enhancement.