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CS499

Narrative for animal\_shelter.py

Artifact Three

This artifact is animal\_shelter.py, which comes from CS340. The purpose of this code is to make a connection to MongoDB in a python file that has CRUD implementation in it. CRUD refers to the ability to create, update, read and delete data that is found within the database. This artifact was originally created in May of 2024. This program is coded in the python language. To test the CRUD functionality that is in the python file, there is an ipynb file to create, read, update, and delete data in the database.

I selected this artifact to be included in my ePortfolio because it was a perfect example of a code fetching data from a database. I wanted to create my own database, add data into it, and make a connection within the existing animal\_shelter.py file and test it in Testing\_to\_database.ipynb file.

The specific components in the artifact that showcase my skills and abilities in databases is the replacement of my own database and making a connection to it. The enhancements improved the artifact as the database is my own. Some specific skills I demonstrated in my enhancement was mastering the creation of a database, adding data to it, implement CRUD in. a.py file, and test it in an ipynb file. Some things I learned while creating and enhancing the artifact was troubleshooting. Opening a previous program from a previous class that was completed on a Virtual Machine made it hard to get it running again. The major thing was the connection to the database. After spending time trying to get connection to a database, I was able to make a connection to my own database with my own data in it, and test the CRUD functionality. The artifact was improved by replacing the existing database with my own. The course outcomes that I met with these enhancements employ strategies for building collaborative environments that enable diverse audiences to support organizational decision making in the field of computer science. Design, develop, and deliver professional-quality oral, written, and visual communications that are coherent, technically sound, and appropriately adapted to specific audiences and contexts. Design and evaluate computing solutions that solve a given problem using algorithmic principles and computer science practices and standards appropriate to its solution, while managing the trade-offs involved in design choices. Demonstrate an ability to use well-founded and innovative techniques, skills, and tools in computing practices for the purpose of implementing computer solutions that deliver value and accomplish industry- specific goals. Develop a security mindset that anticipates adversarial exploits in software architecture and designs to expose potential vulnerabilities, mitigate design flaws, and ensure privacy and enhanced security of data and resources. There were no course outcomes that were not met. There was not any feedback to incorporate as I made changes to the artifact.