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Enhancement Three: Databases Narrative

The artifact I have chosen for this milestone is the `AnimalShelterCRUD.py` file from CS-340, Client-Server Development, which acts as an interface connection between the project's dashboard and its linked database, and also provides the database with CRUD functionality. This program file is part of a software application I assembled in a previous course, which I will be improving during my current class. I plan to use this artifact for the third enhancement milestone, the databases category, of my final project for CS-499.

The main reason I decided to include this artifact in my ePortfolio was because of its connection to the `ProjectTwoDashboard` program, which I used for the first enhancement category. Specifically, the `AnimalShelterCRUD.py` file is the part of the application which interacts with a database and provides the user with CRUD functions for operating the database. In order to demonstrate my understanding of the databases category of computer science, I updated this file to allow it to handle multiple database entries at a time for each aspect of CRUD operations and added another function for counting database entries.

I successfully met the course outcomes that this enhancement required me to, although I wasn't able to implement the extra features like I originally planned. While the part of the program that

interacts with the database has been updated, the overall application is still lacking in security since the login connection between the dashboard and CRUD file is still hardcoded.

While working on this artifact, the biggest problem I faced was that useful information on anything more than basic CRUD functionality for connecting to a database seemed to be either difficult to find or tailored to a specific database. Part of the advanced CRUD functionality I was aiming to implement for enhancing this program was already coded in, and the final result of the enhancement isn't all that far from its initial state. I managed to achieve the course outcome associated with this enhancement, but it seems like a good idea to update this enhancement with additional functionality before I use it to demonstrate my computer science skills.