I concentrated on enhancing my Animal Shelter Dashboard's database capabilities for this milestone. It was initially developed during my CS-340 semester. Users can search for animals by breed and age on this dashboard, which was created to assist animal shelters in managing their available pets. I chose this project because it relies so much on database operations, and I thought I could strengthen that aspect to increase security and usability.

Because I think it demonstrates my abilities to create and oversee systems that depend on real-time data while keeping long-term data security and dependability in mind, I put this artifact in my ePortfolio. Since the goal of this milestone was to reinforce the database side of things, I mainly concentrated on ensuring that the app handled problems correctly and linked to the database securely. To be more precise, I saved the credentials in a .env file, which is a safer way to handle confidential data, rather than hardcoding them into the code. To prevent the system from crashing if something goes wrong when attempting to connect or access the database, I also incorporated error handling.

Yes, I think I achieved the objectives I set in Module One. I intended to concentrate on enhancing data security and ensuring that information was not readily lost by the system. Even though I didn't create a complete backup system for this milestone, I did make a significant first step by enhancing the way failures are handled, and credentials are managed. This, in my opinion, demonstrates my progress toward the course objectives for database administration and security design. I don't believe the original outcome plans need to be altered.

Improving this aspect of the project made me more aware of how minor adjustments, such as eliminating a hardcoded password, may have a significant impact on security. I also discovered that the application should not crash but rather fail gracefully in the event of an issue. Finding the appropriate method to securely store login credentials and ensuring that everything remained connected after I made the change presented one issue for me. At first, there was some trial-and-error, but now I have a better understanding of the procedure. Overall, I believe this enhancement gave me the confidence to deal with real-world databases today and helped me make the dashboard more stable and professional.