**Milestone 4 Narrative**

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Originally, my plan for this enhancement was to complete a thermostat using the TI CS3220 Launchpad and integrate it to record temperatures into a database. Due to technological issues however, this plan did not come to fruition. Instead, I opted to continue the Grazioso project from my first enhancement and create a database and database management system for it. This enhancement took two weeks to complete after trying multiple different methods for creating databases. I finally used sqlite3. This enhancement also did away with the object files for rescue animals, dogs and monkeys as they were no longer being stored in local vectors and instead created tables where each record was an animal. I also worked on integrating security features to prevent SQL injection attacks and buffer overflows for inputs (especially given that menuChoice is a char type variable). During these two weeks I learned that I took the preloaded dependencies for databases for MySQL and MongoDB for granted as I struggled greatly with trying to connect them. It was also a healthy reminder that even though I am very close to graduating, I am not all knowing in the field and still have a lot to learn as a computer scientist, and I look forward to every puzzle, no matter how frustrating it will end up being. Even though this was not my original plan, I still believe I met the database course outcomes with this enhancement, even if it is not graded for being so late, I can now rest easier knowing that I do have a project to integrate into my ePortfolio.

For this milestone I believe that I made progress in, if not met the standards for three of the course outcomes:

* 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.
* 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 (data structures and algorithms).
* 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 (software engineering/design/database)