**README file**

**8-2 Journal: Portfolio Item**

**GitHub**

**Project Two: CS-340 Grazioso Salvare Rescue Dashboard**

**How do you write programs that are maintainable, readable, and adaptable?**

I create easy-to-maintain programs by organizing my code into separate modules with clear names, reusable functions, and helpful comments. In this project, the CRUD Python module from Project One was a real lifesaver. By putting all database interactions into that module, I could smoothly connect it to my dashboard in Project Two. This approach not only saved me time but also kept things consistent for tasks like data retrieval and filtering. The modular setup allowed me to concentrate on building the dashboard without having to rewrite the database code. Plus, I can easily reuse this CRUD module for any future projects that work with MongoDB, like managing customer records or inventory.

**How do you approach a problem as a computer scientist?**

When approaching a problem, I like to break it down into smaller parts. This helps me figure out what data I need, how to process it, and how users will interact. For my work with Grazioso Salvare, I started by clearly understanding their goal: to select and showcase dogs that are ready for rescue. I designed a dashboard that makes it easy to filter by rescue type, see breed distributions, and even map out locations. This project was different from my earlier assignments because it required me to view things from the client’s perspective and create a tool that was not only functional but also professional. Moving forward, I’m excited to use client-focused strategies like wireframing, planning with real datasets, and ensuring my logic is reusable!

**What do computer scientists do, and why does it matter?**

Computer scientists use data, logic, and technology to tackle real-world challenges! Our work significantly affects how organizations function, make choices, and support their communities. For this project, I created a dashboard for Grazioso Salvare that helps them filter rescue dogs, spot breed trends, and find dogs on a map. It’s a handy tool that streamlines their operations and helps them make quick, informed decisions. By making data more accessible and actionable, I’m excited to support organizations like Grazioso Salvare in their mission to save lives!

This project highlights the fun parts of data visualization, CRUD operations, and building interactive dashboards using Python and MongoDB. It also shows how modular and readable code can be repurposed to make a genuine difference in the real world!