# CS 340 README

## About the Project/Project Title

This project, titled "Rescue Dog Dashboard," was developed as part of the requirements for CS 340. It is a web application dashboard designed to assist Grazioso Salvare, an international rescue-animal training company, in identifying and categorizing dogs for search-and-rescue training.

## Motivation

The motivation behind this project was to provide Grazioso Salvare with a user-friendly tool to interact with and visualize data from animal shelters. By creating a dashboard that allows for easy filtering and analysis of shelter animal data, the goal is to streamline the process of identifying suitable candidates for search-and-rescue training.

## Getting Started

To get started with the project, unzip the provided folder containing the code for the dashboard. Ensure that all necessary dependencies are installed, including Python, MongoDB, and the required Python libraries. Follow the instructions in the README file to reproduce the project on your local machine.

## Installation Before running the dashboard, ensure that Python and MongoDB are installed on your system. Additionally, install the required Python libraries by running the following command:

pip install -r requirements.txt

**Usage**  
To use the dashboard, open the ProjectTwoDashboard.ipynb file in a Jupyter Notebook environment. Execute the code cells to run the dashboard. Use the interactive options provided to filter the data and visualize the results.

### Code Example # Example code snippet

### import pandas as pd

### import dash

### import dash\_core\_components as dcc

### import dash\_html\_components as html

### # Define app layout

### app = dash.Dash(\_\_name\_\_)

### app.layout = html.Div("Hello, World!")

### # Run the app

### if \_\_name\_\_ == '\_\_main\_\_':

### app.run\_server(debug=True)

**Tests**  
Testing of the dashboard functionality was performed to ensure that all components work as expected. Automated tests were conducted on individual dashboard widgets and interactive options to verify their functionality.

### Screenshots A screenshot of a computer program Description automatically generated

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## Roadmap/Features (Optional)

The dashboard could be expanded in the future to include additional features, such as predictive analytics for identifying potential rescue candidates or integration with external APIs for real-time data updates.

## Contact

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