README – CS-340 Project Two Dashboard

Grazioso Salvare Dashboard – Javaney Thomas

Overview

This dashboard helps Grazioso Salvare identify dogs suitable for various rescue missions. It connects to a MongoDB database and displays animal data from the Austin Animal Center. Users can:

- View all animal records

- Filter animals by rescue type

- See a pie chart of breed distribution

- View animal locations on a map

Tools Used

- MongoDB – flexible database for animal records

- Dash – builds interactive dashboards

- Dash Leaflet – shows animal locations on a map

- Plotly Express – creates graphs

- Python / Pandas – handles data queries and transformations

Why MongoDB?

- Handles large data sets

- Easy to filter breeds and ages

- Works well with Python

Why Dash?

- Interactive visualizations

- Runs in Jupyter

- Combines charts, tables, and maps

Steps Taken

- Loaded data into MongoDB

- Built CRUD Python module to connect

- Created the dashboard layout

- Added dropdown filters for rescue types

- Connected the data table, chart, and map

- Tested all filters and functions

Challenges Solved

- Removing MongoDB’s \_id field for the DataTable

- Making the map update with selected rows

- Ensuring filters matched the correct breeds

Screenshots

