**Grazioso Salvare Rescue Dashboard**

**Overview**

The Grazioso Salvare Rescue Dashboard is a comprehensive, interactive tool designed for Grazioso Salvare, an international organization specializing in search-and-rescue dog training. It leverages data from the Austin Animal Center’s database to identify dogs best suited for various rescue operations.

**Key Features:**

**- Rescue Type Filtering:** Users can filter dogs based on specific rescue types, including Water Rescue, Wilderness Rescue, and Disaster/Tracking.

**- Dynamic Data Display:** Real-time data is presented in a dynamic table for easy access and understanding.

**- Geolocation Mapping:** Selected dogs’ locations can be viewed on an interactive geolocation map.

**- Visual Data Representation:** A bar chart displays breed distribution, enhancing data analysis.

**- Brand Consistency:** The application includes the Grazioso Salvare logo and student identifier to maintain proper branding.

**Technologies Used**

The dashboard is built using a range of technologies, including:

- Python

- JupyterDash (for Dash applications in Jupyter Notebooks)

- Dash Core Components (dcc, html, dash\_table)

- Dash Leaflet (for geolocation features)

- Plotly Express (for data visualization)

- MongoDB (accessed via PyMongo)

- Pandas, NumPy, and Matplotlib (for data manipulation and analysis)

**Setup Instructions**

**1. Clone the Repository:**

You can clone the project to your local machine using the command:

`git clone <your-repo-url>`

**2. Install Required Packages:**

Ensure that you have the following Python packages installed:

`pip install jupyter-dash dash dash-leaflet pandas numpy plotly pymongo matplotlib`

**3. Run the Application:**

- Open `ProjectTwoDashboard.ipynb` in Jupyter Notebook or JupyterLab.

- Execute all the cells to render the dashboard inline in your notebook.

**MongoDB Credentials**

The application is configured with the following MongoDB credentials:

**- Username: `aacuser`**

**- Password: `RescuePets2025!`**

**Dashboard Features**

When submitting the project, include the following screenshots of the dashboard, ensuring that each captures the logo and identifier:

- Starting state of the dashboard

- Filtered view for Water Rescue

- Filtered view for Wilderness Rescue

- Filtered view for Disaster/Tracking

- Unfiltered or reset state

Alternatively, you may choose to provide a screencast.

**Attribution**

**The logo is © Grazioso Salvare and is used for academic purposes.**

License

This project is open-source and is provided for educational purposes under the MIT License.