**PROJECT TWO README**

**About the Project**

This project was designed for the user of Grazioso Salvare to help identify dogs that are good candidates for search-and-rescue training. Once these dogs are trained, they will be able to find and help rescue humans and other animals, even in serious life-threatening conditions. This tool will help ensure the proper dogs are selected for this task to create the best possible outcome in these situations.

**Required Functionality**

This project displays data in an easy to visualize way by using a utility called Jupyter Dash in the Jupyter Notebook. The data from the MongoDB database is sent over through Python code to Jupyter Notebook and displays data on the screen as shown below.

Graphical user interface, text, application

Description automatically generated

The screenshot here shows sample data of what it would look like with data imported into it. The dashboard can handle a large amount of data rows, not just one as shown here. There is also functionality to be able to see a geolocation data map of the data as well. This is shown below.

Chart, map

Description automatically generated

There is also supposed to be a pie chart available as well, but that is still under debugging and may be included in a future release.

**Tools Used**

To use this software, you must have each of the following installed:

* **Python** – Used to run certain commands and MongoDB queries.
* **MongoDB** – The database that stores all information and handles user authentication.
* **Jupyter** **Notebook** – Software used to execute commands and display the dashboard.

**Steps Taken to Complete the Project**

Here are the steps needed to install and operate this project:

* Install MongoDB
  + Import data from database
  + Create user authentication
* Install Python
* Install Jupyter Notebook
  + Upload CRUD.py
  + Upload ProjectTwoDashboard.ipynb
    - Edit username and password fields to match your database credentials
* Run ProjectTwoDashboard.ipynb in JupyterNotebook.

**Reflection**

There are always challenges when developing software. In this instance the software being used is MongoDB, Python, and Jupyter Notebook. This required me to learn the different syntaxes and languages associated with these platforms. It wasn’t easy but the more I was able accomplish, the more confident I felt about moving to the next step of the project.