# Dashboard Helper README

## About the Project

This project is to let Grazioso Salvare employees access a mongo database in a more friendly way that lets them find the type of rescue dogs they are looking for.

## Motivation

The problem with databases is that they are not that user friendly and that is why I wanted to build a project to help with that interaction, therefore we now have a interactive dashboard.

## Getting Started

To get a local copy up and running make sure you have the files Animal\_Shelter.py and project2.ipynb in the same directory.

## Installation

For this project you need the mongo database with the AAC database and animal collection. You will also need Jupiter notebook to run the ipynb file.

## Usage

### Screenshots

Radio Button selection – Water Rescue

Table

Description automatically generated

Radio Button selection – Mountain Rescue

Table

Description automatically generated

Radio Button selection – Disaster Tracking

Table

Description automatically generated

Radio Button selection – Reset

Table

Description automatically generated

Dashboard header

Text

Description automatically generated with medium confidence

Animal Locator Map

Map

Description automatically generated

Data Pie Chart

Chart, pie chart

Description automatically generated

## Contact

Larry Arndt

We used MongoDB as a non-SQL database because it was easy to use and interfaced nicely with python code which we were able to make a “glue” middleware class with to access the Mongo database with. The Dash framework provides the user a friendly web application to access the database through without having to directly interface with Mongo itself. Dash allows many reassures to be used such as ploty that was used for pie charts. For me the first steps I took to complete this project were to transfer in some of the work I had already done like the geo location map and the data set layout, I attempted the pie chart next but hit a snag and went on to the radio buttons and programed in the logic for the queries behind their callbacks. I had several challenges the radio buttons would not work in the format given on one dash page and had to be done another way that I found maybe do to different versions of dash and then I was stuck on the pie chart because I was sending a text field into a field that needed numbers, but I thought it would just count the items I overcame this by getting advice and I overcame the problem with the radio items by doing more research.

[Pie charts with Python (plotly.com)](https://plotly.com/python/pie-charts/#pie-chart-in-dash)