# CS 340 README Project 2

## Motivation

This program was created as an exercise. It was designed to test my ability to use the Dash framework to create a functional dashboard. This dashboard was meant to be the outward facing infrastructure the client would use when accessing the data from the aac\_shelter\_outcomes.csv file. This dashboard included a title, a logo for the client, radio buttons that allowed for easier filtration for specific conditions the client gave, and an interactive table that could also be filtered by each category. A histogram of the dog breeds shown and a map of the first dog in the list were also added to the bottom of the dashboard.

## Getting Started

To get a local file running you need to perform the following actions:

1. In a Linux terminal window import the csv file aac\_shelter\_outcomes.csv using the Mongo import command
2. Create a simple index for navigating the data stored in the document.
3. Create a more complex index for navigating the data stored in the document.
4. For authentication purposes, create both an Admin account and an aacuser account to access the database
5. Before continuing check that these accounts have been set up properly and you still have access to them (i.e. you remember the passwords used)
6. Using python, you would then run the Animal Shelter class.
7. The use should then run the ProjectTwoDashboard.ipynb file

## Installation

* A current version of python (recommend Jupyter) for running .ipynb files.
  + This is how we run the dashboard used to display the data for this project
* A program for writing/editing .py files
  + This is used to be able to open the file where the CRUD functionality is written. This allows us to perform queries as needed for the dashboard
* MongoDB (for accessing database)
  + We have to have this for our module to link back into when running the program. This is the foundation for the entire system.
* Dash framework
  + This is needed for actually creating the tangible dashboard that the data is being presented on by compiling the html code into a working page.

## Screenshots

With the screenshots, I provide an overall view of the window to show the entire functionality, but then add in zoomed views for a closer look at the parts shown.

Table

Description automatically generated

The beginning dashboard when first launched

Table

Description automatically generated

Zoomed in view to show the radio buttons and the interactive table

Table

Description automatically generated

Overall view of what the other widgets look like when the water rescue button is clicked.

Graphical user interface, text, application

Description automatically generated

Overall view of what the other widgets look like when the mountain/wilderness rescue button is clicked.

Table

Description automatically generated

Overall view of what the other widgets look like when the Disaster/Individual tracking button is clicked.

Map

Description automatically generated

Zoomed in view of table, graph, and map when the Disaster/Individual tracking button is clicked.

**Challenges**

One of the major challenges I faced here was a compounded error from a previous assignment. I had somehow imported other datasets into the AAC database and specifically the animals collection. I had to clear out the entire database and reimport the correct dataset to get any of my features to work correctly.

## Contact

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