# Project 2 CS 340 README

## About the Animal Shelter Project

The Project was created as a way for Grazioso Salvare to have a functional web-based dashboard to review animals at the Austin Animal Shelter that suit their Search and Rescue needs. There would be geolocation mapping and user interaction to help organization, as the user would be able to search for specific animals and situations using a filter in the dashboard.

## Motivation

The program was designed to test my current knowledge on working with databases, manipulating data, and creating accessible frontends for them. As python is fast and can be easily manipulated with MongoDB, the language was chosen to be used for this project.

## Installation

* Mongodb and Python are required and must be installed.
* PyMongo, Dash, Plotly, Pandas, and Leaflet libraries are required to create functions and UI
* Jupyter Notebook must be installed to run the .ipynb files.

## Getting Started

After installing the prerequisites, import the csv file aac\_shelter\_outcome.csv using mongodb.

Then, create an index to parse the data within the document and create a user account to access the database. After this, it’s simply a matter of running the program within the python and notebook files to access the dashboard.

## Usage

### Code Example

Below are screenshots of code that show how the filter buttons work, as well as the process of updating the website to account for it.

A computer screen shot of text

AI-generated content may be incorrect.

A screenshot of a computer code

AI-generated content may be incorrect.

### Tests

To see if the database is properly accessible, using prints as tests is an easy and quick way to troubleshoot the problem. Below is code that will check to see if the database was properly read and prints it before anything else is created.

A black and white text

AI-generated content may be incorrect.

The results of the print are also shown below, indicating the program was successful in accessing the database.

A close up of text

AI-generated content may be incorrect.

### Screenshots

Below are screenshots of the dashboard in action.

A red line drawing of a dog

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect. A screenshot of a map

AI-generated content may be incorrect.

When using a text and button filter:A group of people on a white surface

AI-generated content may be incorrect. A screenshot of a computer

AI-generated content may be incorrect.

## Contact

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