# CS 340 README Animal Shelter

Project Two: Animal Shelter

*The project provides the user with a dashboard that allows them access to a database of animals in the Austin Animal Center. The dashboard can filter and search for animals based on the input criteria. Once a filter is selected, the dashboard’s data will update, along with the new animal's geolocation and the associated histogram. The dashboard’s filter options were created with Grazioso Salvare’s company interest in mind to allow them to identify dogs for training purposes.*

## Motivation

The application was designed to showcase the skills I have acquired by working with a database using MongoDB and manipulating the data using Python. Python was chosen because it works seamlessly with MongoDB, can be written quickly and concisely, and compiles easily. Jupyter Notebook was the built in complier used to run and test the program.

## Getting Started

1. Start an instance of Mongo and import the csv file for the AAC shelter
2. Create a simple and complex index to read the data contained in the database
3. Create an admin and aacuser account
4. Open the AnimalShelter.py document and insert the correct port, username, and password for the created account
5. Run the program and click the output Dash link to access the dashboard locally

## Installation

An up-to-date installation of both Python and MongoDB to access the files and database.

## Usage

*Use this space to show useful examples of how your project works and how it can be used. Be sure to include examples of your code, tests, and screenshots.*

### Code Example

Opening the Dash link and viewing the dashboard. Upon opening the dashboard, the reset filter will be selected to view all the entries within the database.

A screenshot of a computer

AI-generated content may be incorrect.

*Selected the Water Rescue radio button beneath the logo in order to view the ideal dogs for water rescue training. The histogram and geolocation will automatically update for the new results.*

A screenshot of a computer

AI-generated content may be incorrect.

*Selected the Mountain/Wilderness Rescue radio button beneath the logo in order to view the ideal dogs for Mountain/Wilderness Rescue training. The histogram and geolocation will automatically update for the new results.*

A white screen with a white background

AI-generated content may be incorrect.

*Selected the Disaster Rescue and Individual Tracking radio button beneath the logo in order to view the ideal dogs for Disaster Rescue and Individual Tracking training.* *The histogram and geolocation will automatically update for the new results.*

A white screen with a black line

AI-generated content may be incorrect.

*Selected the color column which highlights and sorts the field in alphabetical order. The histogram and geolocation will automatically update for the new results.*

A screenshot of a computer

AI-generated content may be incorrect.

Challenges:

The greatest challenge of this project was the functionality to update the dashboard fields. I kept getting a tuple error even though I sanitized the dataframe by dropping the \_id column. I realized the issue was due to a syntactical error in my animalShelter.py file that forget to set \_id to false. Once the change was made the dashboard began to update upon different filter selections.

## Contact

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