# CS 340 7-2 ReadMe

## About the Project/Project Title

The animal\_shelter module and the accompanying dashboard are meant to provide an easy access solution to the Austin Animal Center (AAC) database of animals. The AAC want a tool to allow for the identification of animals suitable for training as rescue/assistance animals.

## Motivation

This project is to facilitate access to the AAC’s database of potential assistance animals.

## Getting Started

To use the middleware, Python and MongoDB must be installed and working.

The AnimalShelter class uses the pymongo and bson.objecid modules. Both must be present in your Python installation.

The dashboard requires many dependencies: jupyter\_plotly\_dash, dash, dash\_leaflet, dash\_core\_components, dash\_htmlcomponents, plotly.express, dash\_table, dash.dependencies, os, numpy, pandas, pymongo, bson.json\_util, and base64.

The setup of these resources is beyond the scope of this document.

## Installation

Placing the animal\_shelter\_009.py file into the working directory will allow the class to be imported into the dashboard code. You will need to modify the localhost:port in the \_\_init\_\_ call to match the port your installation of MongoDB uses.

The dashboard requires the installation of Jupyter Notebook. The dashboard file is loaded into a Jupyter Notebook and executed from there. The Jupyter Notebook and animal\_shelter\_009.py file should be in the same directory.

## Usage

### Code Example

###########################

# Data Manipulation / Model

###########################

# FIX ME change for your username and password and CRUD Python module name

username = "aacuser"

password = "password"

shelter = AnimalShelter(username, password)

# class read method must support return of cursor object

df = pd.DataFrame.from\_records(shelter.read\_all({}))

### Tests

Tests of the AnimalShelter module were successful  
The dashboard is not complete. Nor is the current version functional.

### Screenshots

This screenshot shows a testbed script in the Jupyter Notebook environment using the AnimalShelter class.

Graphical user interface, text, application, email

Description automatically generated

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## Roadmap/Features (Optional)

Currently further development of the dashboard needs to be carried out. The pie chart for animal breed needs to be added. Filtering of the dataset for desired rescue type need to be implemented.

The error that keeps the dashboard from operating at all needs to be found and corrected.

## Contact

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