# CS 340 README Template

## About the Project/Project Title

This project started off with creating a CRUD Python module for the database we created using MongoDB. Each part of the project built on itself and slowly progressed until it was fully finished with full functionality. The CRUD module was the foundation of this project and was used at the end to incorporate the database that was built with the full user interface, provided using HTML and a ipynb file.

## Motivation

This project was created to help Grazioso Salvare find rescue animals easily from provided shelter data. They are able to use this tool to get in depth stats on all dogs in the area from the shelters. By implementing a user-friendly interface, users are seamlessly able to navigate a database without knowing any code or queries.

## Getting Started

To get this up and running you’ll just need to follow these steps:

1. Clone the repo
2. Install MongoDB
3. Install the required Python dependencies
4. Change the MongoDB connection parameters to your own

## Installation

Clone the repository, install the required dependencies, then configure the MongoDB connection parameters in the dashboard application. The connection parameters can be found

## Usage

Filter animals by rescue type (Water, Mountain, or Disaster)

View filtered animal data in an organized table

Visualization provided with Pie Chart

Quickly check animal location with interactive map

### Code Example

In the screenshots you will be able to see that all filters work correctly for the different rescue types. In addition to that this is possible by connecting the radio buttons directly to queries which will find the specific breed of dogs that are most commonly used in certain rescue situations. For example, German Shepherds are great for disaster rescues and Labradors are great for water rescues.

### Tests

Tests can be run by using a test script. To utilize the CRUD module by itself, a test script can start off with “from animalShelter import AnimalShelter” to import the actual Module itself, then instantiate by using “CRUD = AnimalShelter(“type\_username”, “type\_password”)” and enter your own username or password. From there you will gain access to the following methods, Create, Read, Update, and Delete which will serve their respective names.

### Screenshots

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*A screenshot of a map

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*A screenshot of a computer screen

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## Contact

Your name: Robert Fjellin