# CS 340 README Template

About the Project/Project Title

This project is a fully fledged client/server application designed to provide analytics insights to the client. It utilizes MongoDB and Python to build a fully functioning web application enabling exploration of Animal Shelter Data.

## Motivation

Grazioso Salvare is an international rescue-animal training company. A trained rescue dog can rescue humans or other animals in life-threatening conditions. Every day these animals make a difference. To identify dogs for training, Grazioso Salvare has reached an agreement with a nonprofit agency that operates five animal shelters in the region around Austin, Texas.

In the interest of their mission, this nonprofit agency has provided Grazioso Salvare with the data from their shelters. Leveraging this Data, Grazioso Salvare can more efficiently identify candidates for this training process.

## Getting Started

To get a local copy up and running, follow these steps.

1. Setup a local instance of MongoDB.
   1. Create a dedicated user called ‘aacuser’ that only interacts with the ‘aac’ database. A screenshot of a computer program

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   2. Upload the .csv of the animal shelter data to that database. A screenshot of a computer program

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2. Access the MongoCRUD.py and setup.py file.
   1. Update the Connection Details to match your local MongoDB instance. (MongoCRUD.py)A computer screen with white text

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   2. Create a distribution description (setup.py) A screen shot of a computer

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   3. Generate a distribution file.
      1. WindowsA white paper with text and black text

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      2. UNIXA diagram of a programming language

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   4. Install the Distribution File
      1. WindowsA close-up of a computer screen

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      2. UNIXA close-up of a computer screen

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3. Verify functionality by running the Jupyter notebook “MongoCRUD Test.ipynb” A screenshot of a computer

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## Installation

System Requirements:

* Python v3.5 or higher.
  + pymongo import MongoClient
  + from bson.objectid import ObjectId
* MongoDB v6.0.13 or higher.

## Usage

### Code Example

*Show what the library does as concisely as possible. Developers should be able to figure out how your project solves their problem by looking at the code example. Make sure that your code is short and concise.*

The MongoCRUD package provides functionality to Create, Read, Update, and Delete items from the MongoDB aac database animals collection.

**Import:**

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**Available objects:**

The MongoCRUD has the AnimalShelter Object available to it.

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**AnimalShelter Methods:**

**Create**:

Pass a JSON formatted set of data into the shelter object using the create function. A screenshot of a computer program

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**Read**:

Pass a JSON formatted search query into the shelter object using the read function.A computer code with text

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### Tests (MongoCRUD Test.ipynb):

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## Roadmap/Features (Optional)

1. Implement the Update and Delete Functionality of the MongoCRUD package.
2. Develop the Analytics Dashboard to assist in identifying candidates for animal rescue training.
3. Launch a fully functioning Analytics Dashboard on a webpage.

## Contact

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