# CS 340 README Template

**About the Project/Grazioso Salvare Animal Rescue Project**

Global Rain has partnered with Grazioso Salvare, an innovative international rescue-animal training company that specializes in identifying and training dogs for search-and-rescue missions. Grazioso Salvare collaborates with a nonprofit agency operating five animal shelters in the Austin, Texas region to source potential canine candidates for their training programs.

Global Rain, a custom software design and development company, has been contracted to develop a software application for Grazioso Salvare. This application will include the creation of a MongoDB database and the development of a Python module that provides CRUD (Create, Read, Update, Delete) functionality to interact with the database. The Grazioso Salvare Animal Rescue Project will be executed in two phases:

Phase One: Focuses on setting up the MongoDB database, implementing user authentication, and developing the CRUD Python module.

Phase Two: Involves enhancing the database, creating a client-facing web application dashboard, and updating the documentation to reflect the full stack development.

**Motivation**

Global Rain sees this opportunity as a win-win situation. Grazioso Salvare, a nonprofit organization, recognized the potential to enhance their operations by leveraging technology to streamline the identification and training process of rescue dogs. By automating and optimizing these processes, Grazioso Salvare aims to improve the efficiency and effectiveness of their search-and-rescue missions, ultimately saving more lives.

**Getting Started**

To get this program started you would first,

1. Enter and Mongo and import the csv file aac\_shelter\_outvome.csv.

2. next one would want to create a simple and a complex index to parse the data stored within the document.

3. Now to authenticate a user would want to create both an Admin account and an aacuser account to access the database.

4. next a user would need to have access to or install python and run the program out of a notebook.

**Installation**

A current version of Python to run both the .py and the .ipynb files

MongoDB - to access the database.

## Usage

The CRUD Python module provides functionality for creating, reading, updating, and deleting documents in the MongoDB database.

### Code Example:

#Create Document

print(animals.create({

'age\_upon\_outcome': "5 years",

'animal\_id': "test",

'animal\_type': "Dog",

'breed': "pure breed",

'color': "brown"

'date\_of\_birth': "2019-11-27",

'datetime': "2019-11-27 05:05:00",

'monthyear': "2019-11-27T05:05:00",

'name': "Koda",

'outcome\_subtype': "",

'outcome\_type': 'Adoption',

'sex\_upon\_outcome':"Spayed Male",

'location\_lat': 55.5486827521539,

'location\_long': -63.77515568423578,

'age\_upon\_outcome\_in\_weeks': 48.556351}))

### Screenshots

A screenshot of a computer program

Description automatically generated

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