# CS 340 README by Justin Leger

## About the Project/Project Title

CRUD means Create-Read-Update-Delete in MongoDB by using Pymongo; In the class will be create, read, update, and delete functionality and initialization component.

In this project is a dashboard for Grazioso Salvare so that they can review animals at the Austin Animal Shelter and we use CRUD operations to do so.

**Functionality**

* One of the tools used is radio buttons which allow the user to click on a circular button to select an item.
* Another tool used is the CRUD class which uses CRUD operations to help with formatting queries
* Python was used to build the dashboard

## Motivation

CRUD operations have limited scalability, are database-centric, and have complexity regarding keeping track of each record’s state in the database. Furthermore, it’s very tedious to worry about formatting the queries so a Python module that enables CRUD functionality helps tremendously.

## Getting Started

To get started, simply follow this guide

## Installation

To use, you will need:

* Python
* Pymongo
* MongoDB
* Jypiter Notebook

## Usage

* **Import statements**

Import from pymongo and bson

* **Class constructor**

Takes care of initializing MongoDB server and connects to the database

* **Create() function**

Inserts information if there is data entered

* **Read() function**

Finds information if there is data entered

* Update() function

Updates existing information with new one

* Delete() function

Deletes specified record

### Code Example

This code will create a record:

*print(animals.create({*

*'age\_upon\_outcome': '2 years',*

*'animal\_id': 'Test',*

*'animal\_type': 'Dog',*

*'breed': 'Jindo',*

*'color': 'White',*

*'date\_of\_birth': '1999-01-19',*

*'datetime': '1999-01-19 11:11:11',*

*'name': 'Harry',*

*'outcome\_subtype': '',*

*'outcome\_type': 'Adopted',*

*'sex\_upon\_outcome': 'Male',*

*'location\_lat': 28.6525984520228,*

*'location\_long': -70.7419863436444,*

*'age\_upon\_outcome\_in\_weeks': 124})*

*)*

### Tests

*Describe and show how to run the tests with code examples.*

1. Import .py file from AnimalShelter import AnimalShelter
2. Create animal object animals = AnimalShelter()
3. Create query animals.create({})
4. Read records animals.read({})
5. Update records animals.update({})
6. Delete records animals.delete({})

### Screenshots

## Roadmap/Features (Optional)

Indentation error prevents the application from being run

## Contact

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