# CS 340 Project Two

*Use this template to complete your README file. When completing the template, keep the headings as they are so that your document has a clear organization. Remove the italicized prompt text after you have completed each section for a polished final document.*

## About the Project/Project Title

The project that I worked on is related to the project we completed this week. This is the querying of mongo shell with a python file which I found really interesting.

## Motivation

The purpose of this project is to make it easier to query the mongo shell with a python file instead of from the command line. The python file handles all of the querying of the mongo shell and performs a CRUD operation as request by the user. Overall the functionality of being able to write this in Python makes things much easier, and scripting much more understandable.

The purpose behind the CRUD Python module is to follow the steps of CRUD, those being create, read, update, and delete. We are given a CSV file that needs to have the given CRUD functionalities implemented to query the database. Python was chosen to write the script for the functionality of CRUD and to query this database. One of the benefits is the ease of use and syntax simplicity with Python which is why it was chosen as the script language.

The driver that was used for the python driver would be PyMongo. This driver allows for the ability to connect to the database, and perform the CRUD functions. Those again being Create, Read, Update, and Delete. The Update and Delete methods were created in this module and were added to the .py files to be run.

At this point the functionality of the CRUD operations are as follows:

* 1. Create a database that should be a dictionary
  2. Read the contents from the given database file
  3. Update file contents given the parameters provided
  4. Delete documents from the database that match the key that we are querying.

## Getting Started

Import the file from the mongo shell and show the collections. Then create an index in the database:

Text

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Then sign into the user account created with Python code:

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## Installation

List the tools you need to use the software and how to install them.

## Usage

I needed to implement the CRUD with python in Jupyter and the command line in the Linux server app. I then added the functionality for the visual representation of the file contents to display the graph and interactive table.

### 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.

A picture containing text

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Graphical user interface, text, application, email

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### Tests

Simply run this from Jupytper which will finalize and execute the commands for running the script. From here you will see the table that you can interface with and update the contents. I also include a reset button to pull all of the original data back into the table.

### Screenshots

Graphical user interface, text, application

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## Roadmap/Features (Optional)

Additional functionality might include being able to actually ping the file to update without a reset if needed. This would allow for changes to be done outside the mongo shell and right through the physical interface.   
  
Note: This section is optional for the purposes of this assignment. If you choose not to fill out this section, remove it from your final README file.

## Contact

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