# CS 340 Project 1 README

## About the Python CRUD project

The project will provide the C and R functionality of CRUD to the user as if they were using commands in the mongo shell. This will allow for database modification within the program.

## Motivation

This project will be the base of managing a database from within an application. This is also used to train my skills of working with mongo and python and their integration.

## Getting Started

## Install mongodb

1. Create user and auth in mongosh
2. Import the csv file into the AAC database
3. Install pymongo
4. Use the python crud module to alter the database

## Installation

Current version of python

Mongodb to access mongo shell and setup project

An IDE for python

## Usage

### Code Example

def create(self, data):

if data is not None:

try:

self.database.animals.insert\_one(data)

return ("successfully inserted", data)

except Exception:

return "failed to insert"

else:

raise Exception("Nothing to save, because data parameter is empty")

def read(self, searchParam):

if searchParam:

result = self.database.animals.find(searchParam)

return ("success", result)

else:

result = self.database.animals.find({})

return ("failure", result)

#Method to update database content

def update(self, query, data):

try:

if data is not None:

result = self.database.animals.update\_one({'\_id': ObjectId(query)},

{'$set': data})

return result

else:

raise Exception("No data")

except Exception:

return "Failed to find and modify"

#Method to delete entries from the database

def delete(self, query):

try:

result = self.database.animals.delete\_one(query)

return result

except Exception:

return "Failed to delete"

### Tests

### Screenshots

A screenshot of a computer program

Description automatically generatedA screenshot of a computer program

Description automatically generatedA screenshot of a computer program

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A screenshot of a computer

Description automatically generatedA screenshot of a computer

Description automatically generatedA screenshot of a map

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Troubles along the way:

I struggled greatly with getting the map to work. I found it was not getting an index from the table correctly and I struggled with implementing that correctly but I figured it out in the end. It took a while to get comfortable with the structure and flow of the data.

## Contact

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