# CS 340 README

## About the Project Create and Read in Python

The project is to provide functionality in order to develop a web application that connects a client-side user interface to a database. This is a portable Python module that has Create and Read functionality and connectivity to Mongodb database.

## Motivation

This project exists to glue a Mongodb database and a user interface together for Project One and it is also part of assignment Module 4 for CS-340 SNHU course.

## Getting Started

To get a local copy up and running, follow these simple example steps:

In the module4.py file change username, password, port\_number and database\_name to your Mongodb credentials.

self.client = MongoClient('mongodb://**username**:**password**@localhost:**port\_number**/**database\_name**')

## Installation

List of tools you will need to use this software:

* Python 3 information to download and install are at <https://www.python.org/>
* Jupter Notebook is used to test and run the test\_module4.ipynb download and install from <https://jupyter.org/>
* Mongodb is database software and can be downloaded and installed from <https://www.mongodb.com/>
* Pymongo is a tool to interacting with MongoDB database from Python <https://pypi.org/project/pymongo/>

## Usage

### Code Example

Initialize and connect to the database.

animal = module4.AnimalShelter()

Create and insert a new animal document into the database.

animal.create(data)

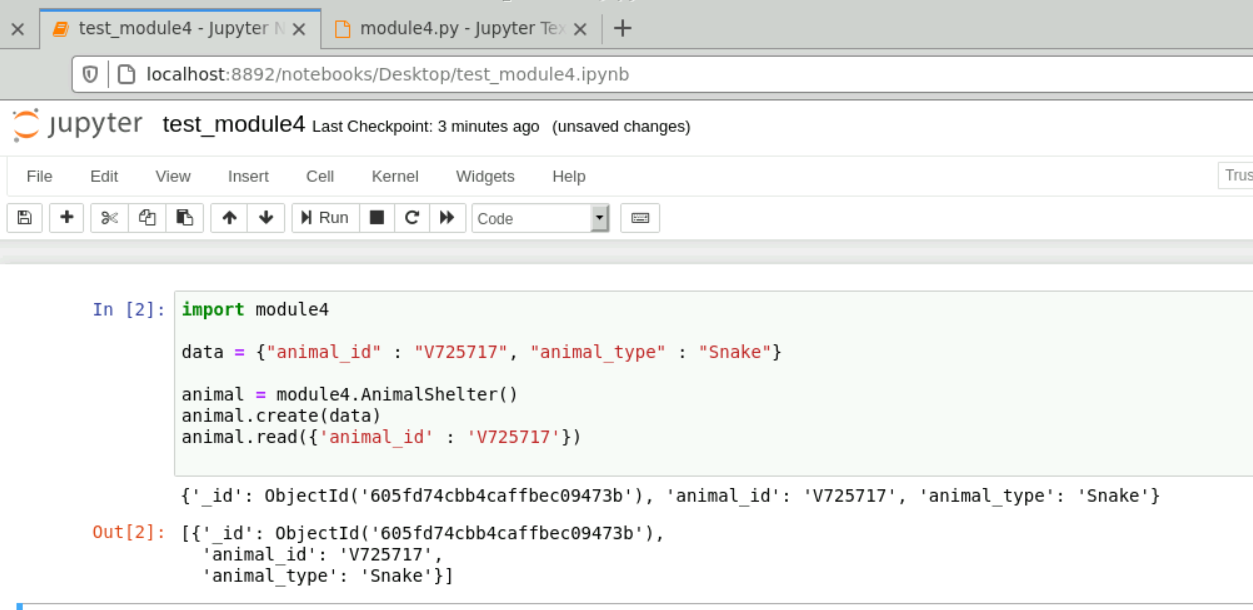
Query and return all documents in a list.

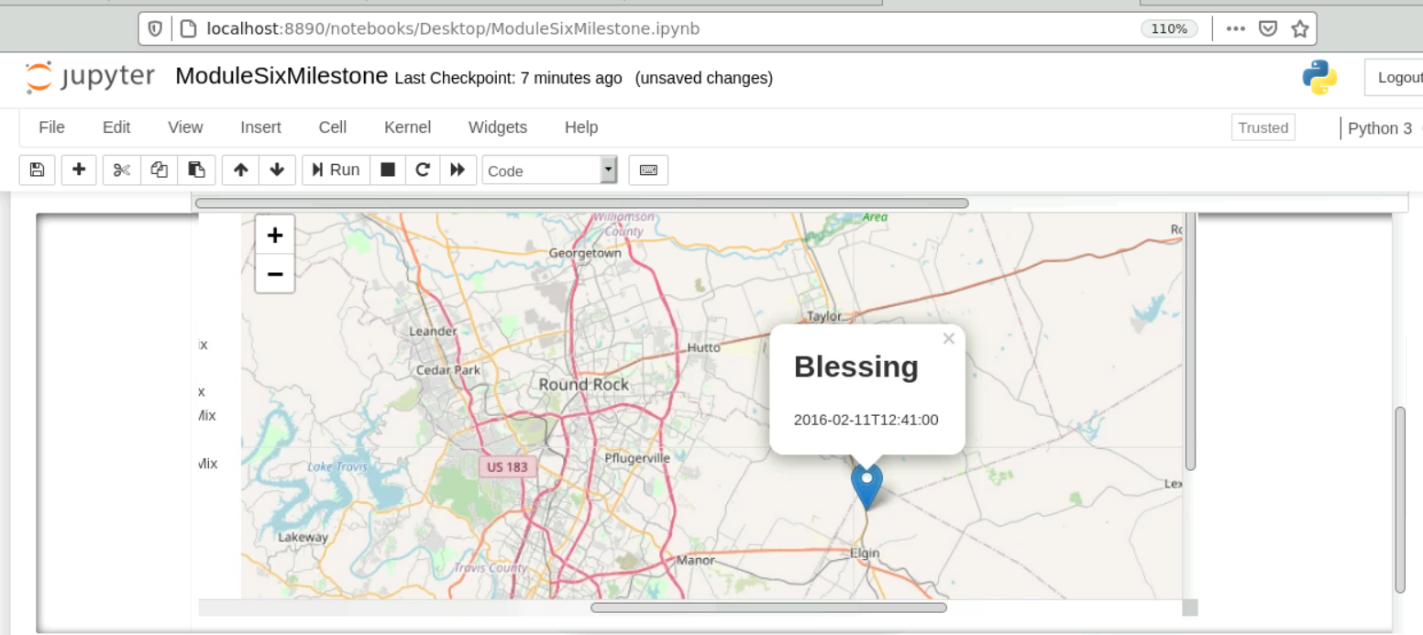
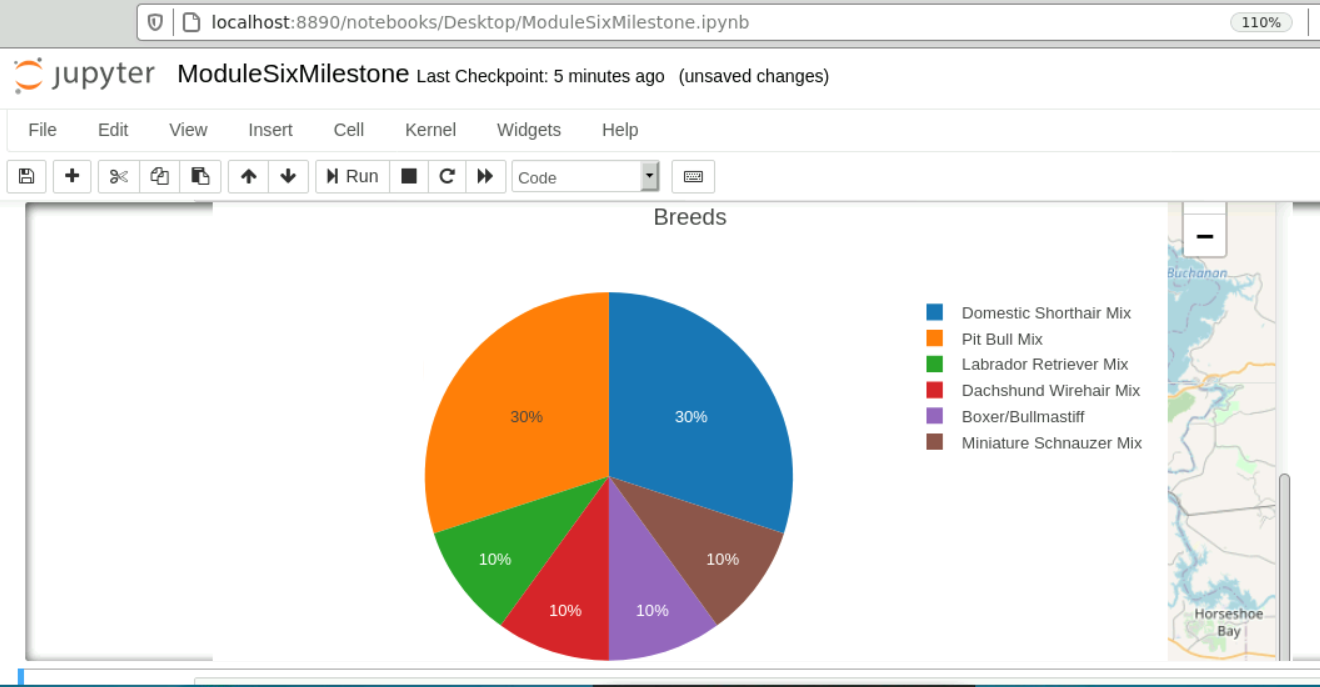
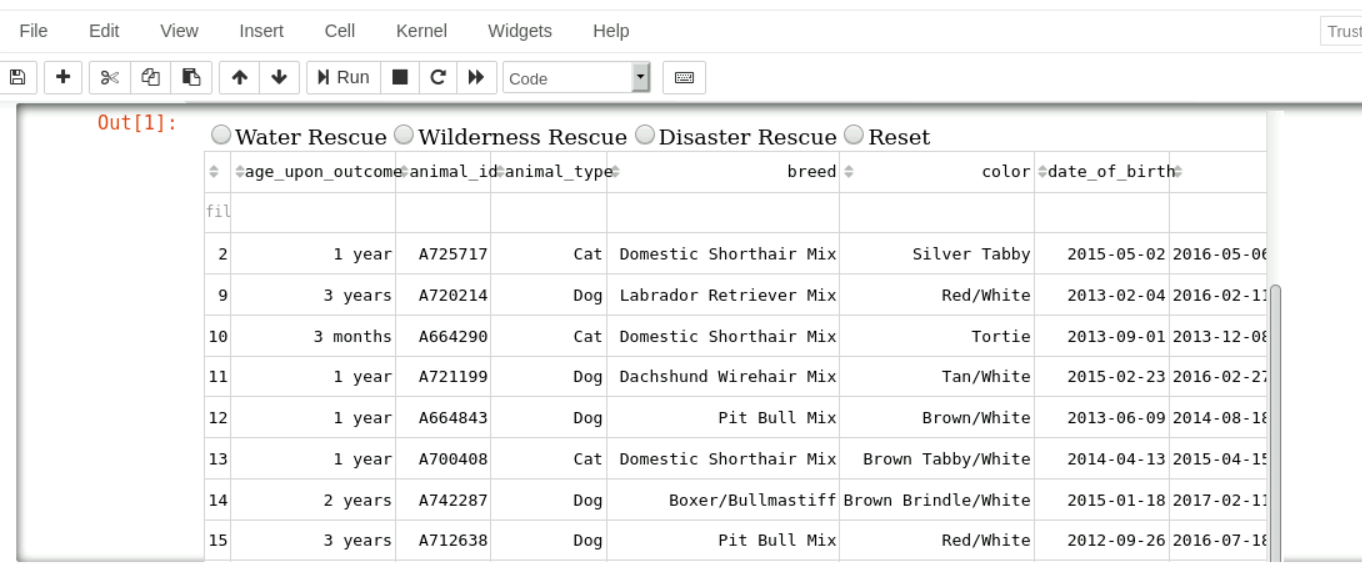
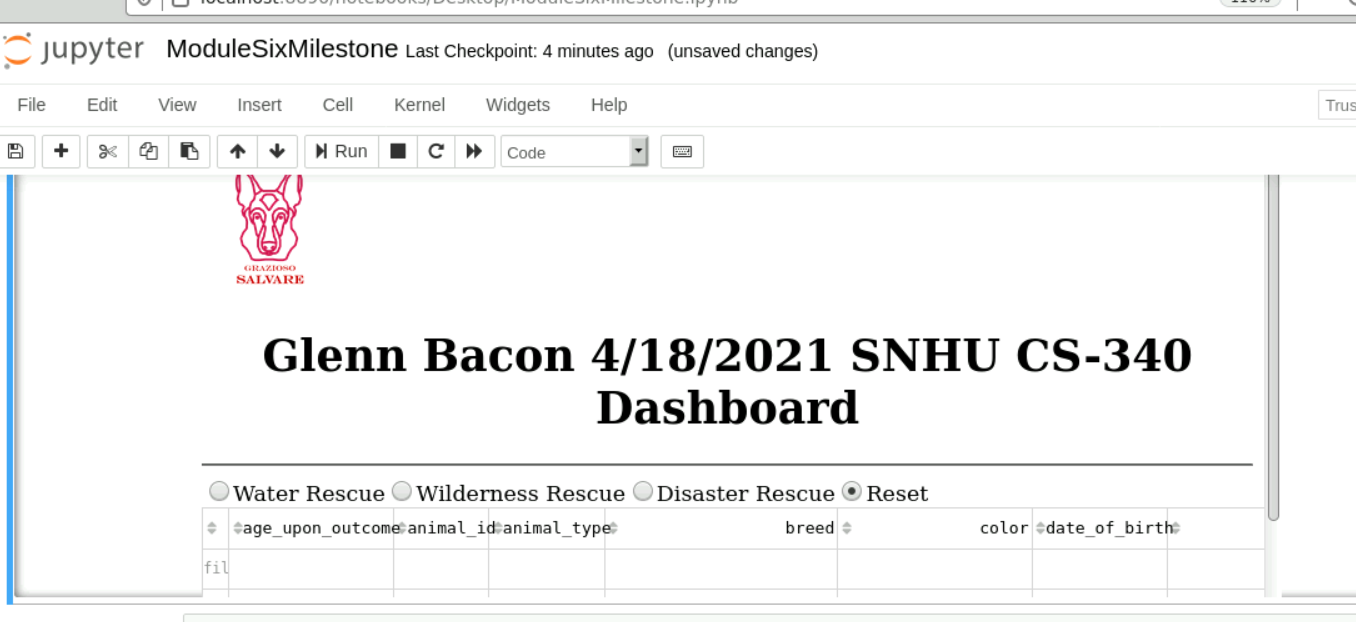
animal.read(data)

### Tests

To run and test this module make sure to update module4.py connection settings that are shown in the getting started section of this README above. To run a test simply open the test\_module4.ipynb in Jupyter Notebook. The test should run automatically if it does not click the Run button. A successful test will return True and show input and output data of the test. A failed test will return False and may also show other errors if exists.

### Screenshots



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## Contact

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