# CS 340 README Template

*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

*Provide a little information about your project or an overview that explains* ***what*** *the project is about.*This project is a Python module designed to perform Create and Read operations on an Animal Shelter database using MongoDB. The module allows users to easily insert new animal records and query existing records, facilitating efficient database management for the animal shelter.

## Motivation

*This is a short description of the motivation behind the creation and maintenance of the project. This should explain* ***why*** *the project exists.*The motivation behind this project is to provide a streamlined solution for managing animal shelter data. By utilizing MongoDB for data storage and Python for the operations, this project aims to simplify the process of maintaining and retrieving animal records, ensuring that shelter staff can access and update information with ease.

## Getting Started

*This is an example of how you may give instructions on setting up your project locally: “To get a local copy up and running, follow these simple example steps.”****Prerequisites***

* *MongoDB instance with a user account (****aacuser****) and a database (****AAC****) with the* ***animals*** *collection.*
* *Python 3.x installed on your system.*
* ***pymongo*** *library installed*

## Installation

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

*Set up environment*

*python3 -m venv myenv*

*source myenv/bin/activate*

*install required python packages  
 pip install pymongo*

*import CSV data into MongoDB  
 export MONGO\_HOST=nv-desktop-services.apporto.com*

*export MONGO\_PORT=31593*

*export MONGO\_USER=aacuser*

*export MONGO\_PASS=VUDEHSNHUCS340*

*mongoimport --host $MONGO\_HOST --port $MONGO\_PORT -u $MONGO\_USER -p $MONGO\_PASS --authenticationDatabase admin --db AAC --collection animals --type csv --headerline --file /usr/local/datasets/aac\_shelter\_outcomes.csv*

## Usage

*Use this space to show useful examples of how your project works and how it can be used. Be sure to include examples of your code, tests, and screenshots.*

### 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.  
  
from animal\_shelter import AnimalShelter*

*USER = 'aacuser'*

*PASS = 'VUDEHSNHUCS340'*

*HOST = 'nv-desktop-services.apporto.com'*

*PORT = 31593*

*DB = 'AAC'*

*COL = 'animals'*

*shelter = AnimalShelter(USER, PASS, HOST, PORT, DB, COL)*

*sample\_data = {"animal\_id": "A123456", "name": "Fido", "breed": "Labrador"}*

*create\_result = shelter.create(sample\_data)*

*print(f'Create result: {create\_result}')  
  
read\_result = shelter.read({"animal\_id": "A123456"})*

*print(f'Read result: {read\_result}')*

### Tests

*Describe and show how to run the tests with code examples.*To run the tests, you can use the provided testing script. Ensure that your MongoDB instance is running and execute the following:  
  
python test\_crud\_operations.py

### Screenshots

*Provide screenshots that demonstrate your work.* A screenshot of a computer

Description automatically generated

## Roadmap/Features (Optional)

*Provide an open issues list of proposed features (and known issues). If you have ideas for releases in the future, it is a good idea to list them in the README. What makes your project stand out?  
  
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

Your name:  
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