# 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

My project is designing a python module that enables seamless interaction with an Animal Shelter database made in MongoDB. This was made to support “Create & Read” operations. By simplifying the process of adding new animal records & retrieving existing ones, I can ensure efficient database management for the shelter.

## Motivation

This project was developed to simplify animal shelter data management. By leveraging MongoDB for storage and Python for operations, it offers an efficient way to maintain and retrieve animal records, enabling shelter staff to access and update information effortlessly.

## Getting Started

1. Using MongoDB, create instanced user account (aacuser) & new database (AAC) with the animals collection.
2. Make sure Python 3.x is installed on the system.
3. Make sure pymongo library was installed.

## Installation

*(Pseudocode)*

*# SETUP ENV & IMPORT DATA*

*python3 -m venv myenv && source myenv/bin/activate # Create/activate venv*

*pip install pymongo # Install dependency*

*# MONGO IMPORT COMMAND*

*export MONGO\_HOST="nv-desktop-services.apporto.com" \*

*MONGO\_PORT=33567*

*MONGO\_USER="aacuser" \*

*MONGO\_PASS="SAMPSONSNHUCS340" && \*

*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

*from animal\_shelter import AnimalShelter*

*USER = 'aacuser'*

*PASS = 'SAMPSONSNHUCS340'*

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

*PORT = 33567*

*DB = 'AAC'*

*COL = 'animals'*

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

*sample\_data = {"animal\_id": "K22257", "name": "Kiko", "breed": "German Shepherd"}*

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

*print(f'Create result: {create\_result}')  
  
read\_result = shelter.read({"animal\_id": "K22257"})*

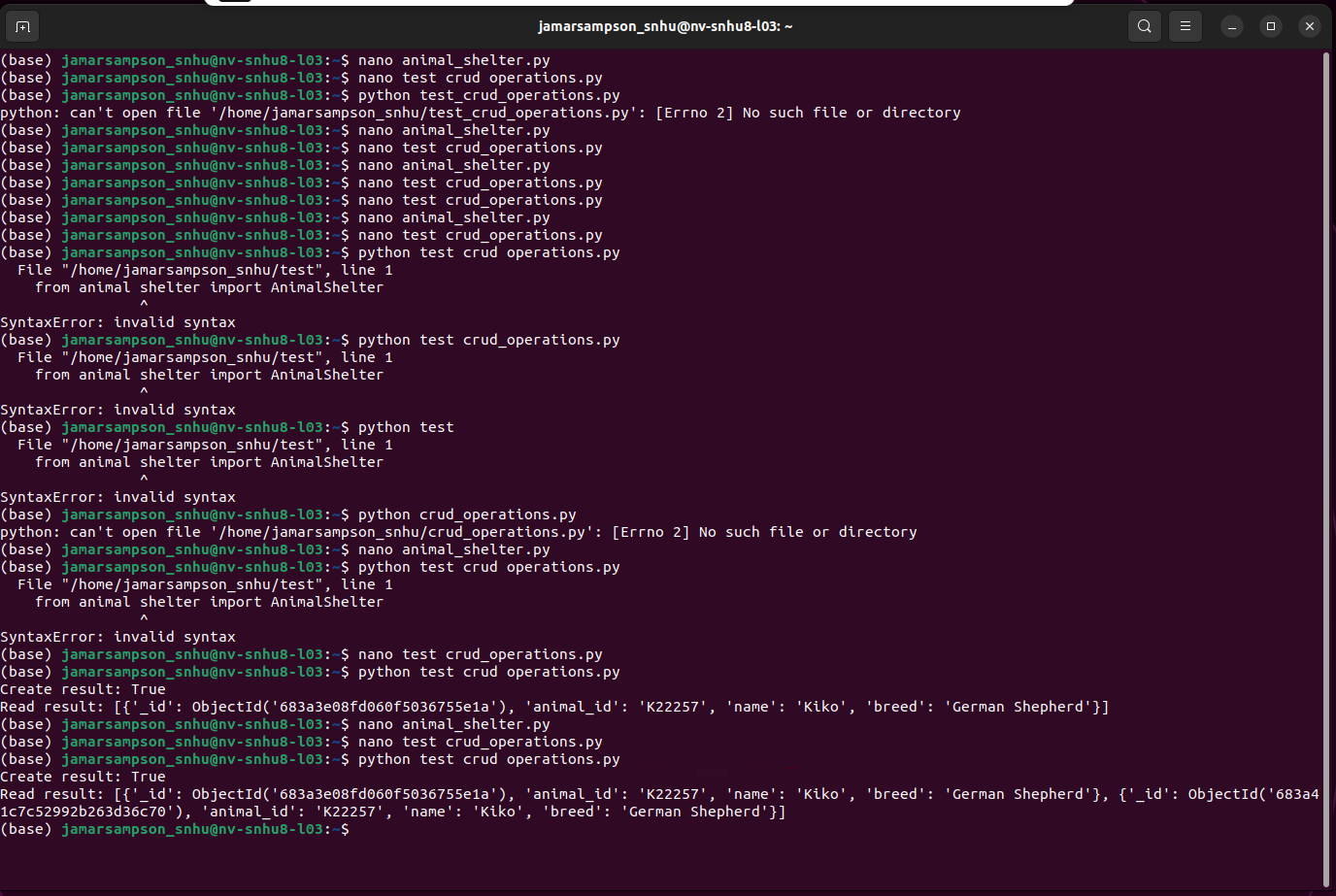
*print(f'Read result: {read\_result}')*

### Tests

In order to run the tests, the user needs to run the provided testing script. Ensure that MongoDB instance is running & run the following:

python test\_crud\_operations.py

### Screenshots



## Contact

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