Grazioso Salvare CRUD Operations BY JAMAR SAMPSON

Purpose

This Python module provides CRUD (Create, Read, Update, Delete) operations for the Grazioso Salvare project, allowing interaction with the MongoDB database containing animal shelter data.

Usage

MongoDB Driver

We use pymongo as the Python driver for MongoDB due to its ease of use and comprehensive documentation.

### CRUD Class

The `AnimalShelter` class provides the following methods:

- `create(data)`: Inserts a document into the database.

- `read(query)`: Queries documents from the database.

- `update(query, update\_data)`: Updates documents in the database.

- `delete(query)`: Deletes documents from the database.

Example

Here's how to use the CRUD class:

from test\_crud\_operations import AnimalShelter

# Connection details

MONGO\_HOST = 'nv-desktop-services.apporto.com'

MONGO\_PORT = 33567

MONGO\_USER = 'aacuser'

MONGO\_PASS = 'SAMPSONSNHUCS340'

DB = 'AAC'

COLLECTION = 'animals'

# Instantiate the AnimalShelter class

shelter = AnimalShelter(MONGO\_USER, MONGO\_PASS, MONGO\_HOST, MONGO\_PORT, DB, COLLECTION)

# Create a new document

test\_animal = {

"animal\_id": "German Shepherd",

"animal\_type": "Dog",

"breed": "German Shepherd Mix",

"color": "Brown/Black",

"date\_of\_birth": "2020-06-03",

"outcome\_type": "Adoption"

}

print("Create:", shelter.create(test\_animal))

# Read documents

query = {"animal\_id": "German Shepherd"}

results = shelter.read(query)

if results:

print(results[0]) # Print first matching document

# Update documents

update\_query = {"animal\_id": "German Shepherd"}

update\_data = {"color": "Black/Brown/Tan"}

print("Update:", shelter.update(update\_query, update\_data))

# Verify update

updated\_doc = shelter.read({"animal\_id": "German Shepherd"})

if updated\_doc:

print("Updated color:", updated\_doc[0]["color"])

# Delete documents

delete\_query = {"animal\_id": "German Shepherd"}

print("Delete:", shelter.delete(delete\_query))

Screenshots Below.





