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| SNHU CS-340 Client/Server Development 22EW2 |
| Module Four Milestone |
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1. Upload the Austin Animal Center (AAC) Outcomes data set into MongoDB by importing a CSV file using the appropriate MongoDB import tool. This file is in the /usr/local/datasets/ directory in Apporto and the filename is “aac\_shelter\_outcomes.csv”. Use the database name “AAC” and collection name “animals”. Complete the import using the mongoimport tool and take screenshots of both the import command and its execution.

Graphical user interface, text

Description automatically generated

Text

Description automatically generated

1. Next, you must develop a Python module in a PY file, using object-oriented programming methodology, to enable create and read functionality for the database. To support code reusability, your Python code needs to be importable as a module by other Python scripts.  
     
   Develop a CRUD class that, when instantiated, provides the following functionality:
   1. A method that inserts a document into a specified MongoDB database and collection
      1. Input -> argument to function will be set of key/value pairs in the data type acceptable to the MongoDB driver insert API call
      2. Return -> “True” if successful insert, else “False”

Graphical user interface, text, application

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* 1. A method that queries for documents from a specified MongoDB database and specified collection
     1. Input -> arguments to function should be the key/value lookup pair to use with the MongoDB driver find API call
     2. Return -> result in cursor if successful, else MongoDB returned error message

Graphical user interface, text

Description automatically generated with medium confidence

1. Finally, create a Python testing script in Jupyter Notebooks that imports your CRUD Python module to call and test the create and read instances of CRUD functionality. Be sure to use the username and password for the “aacuser” account for authentication when instantiating the class. This script should be created in a separate Jupyter Notebook IPYNB file, and should import and instantiate an object from your CRUD library to effect changes in MongoDB. After creating your script, execute it in Jupyter Notebook and take screenshots of the commands and their execution.

Testing for animal creationGraphical user interface, text, application, email

Description automatically generated

Testing for no data

Graphical user interface, text, application, email

Description automatically generated

Reading known animal (the one we just added)

Graphical user interface, text, application, email

Description automatically generated

Also working with authentication:

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