

02/10/25 - MongoDB + PyMongo

PyMongo

A Python library for interfacing with MongoDB instances

```
from pymongo import MongoClient

client = MongoClient(
    'mongodb://user_name:pw@localhost:27017'
)
```

Getting a Database and Collection

```
db = client['ds4300'] # or client.ds4300
collection = db['myCollection'] # or db.myCollection
```

Inserting a Single Document

```
post = {
    "author": "Mark",
    "text": "MongoDB is Cool!",
    "tags": ["mongodb", "python"]
}

post_id = collection.insert_one(post).inserted_id
print(post_id)
```

Count Documents in Collection

```
SELECT count(*) FROM collection
```

```
demodb.collection.count_documents({})
```

Find all Movies from 2000

```
from bson.json_util import dumps

# Find all movies released in 2000
movies_2000 = db.movies.find({"year": 2000})

# Print results
print(dumps(movies_2000, indent = 2))
```

Jupyter

Activate your DS4300 conda or venv python environment

Install pymongo with `pip install pymongo`

Install Jupyter Lab in your python environment with `pip install jupyterlab`

Download and unzip the zip file which contains 2 Jupyter Notebooks

In terminal, navigate to the folder where you unzipped the files, and run `jupyter lab`