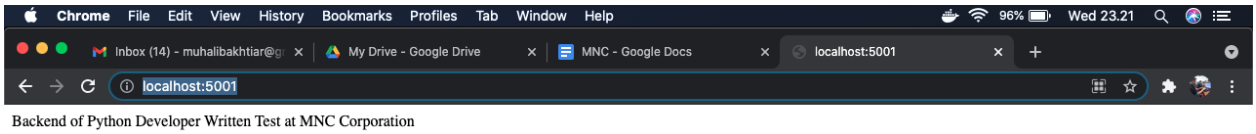
Answer of Written Test at MNC Corporation

Repository : https://github.com/muhammadali07/coding_interview/tree/main/mnc

1. Clone the repository (https://github.com/muhammadali07/coding_interview/tree/main/mnc)
2. Running docker-compose to create container,
3. And open open http://localhost:5001




Backend of Python Developer Written Test at MNC Corporation

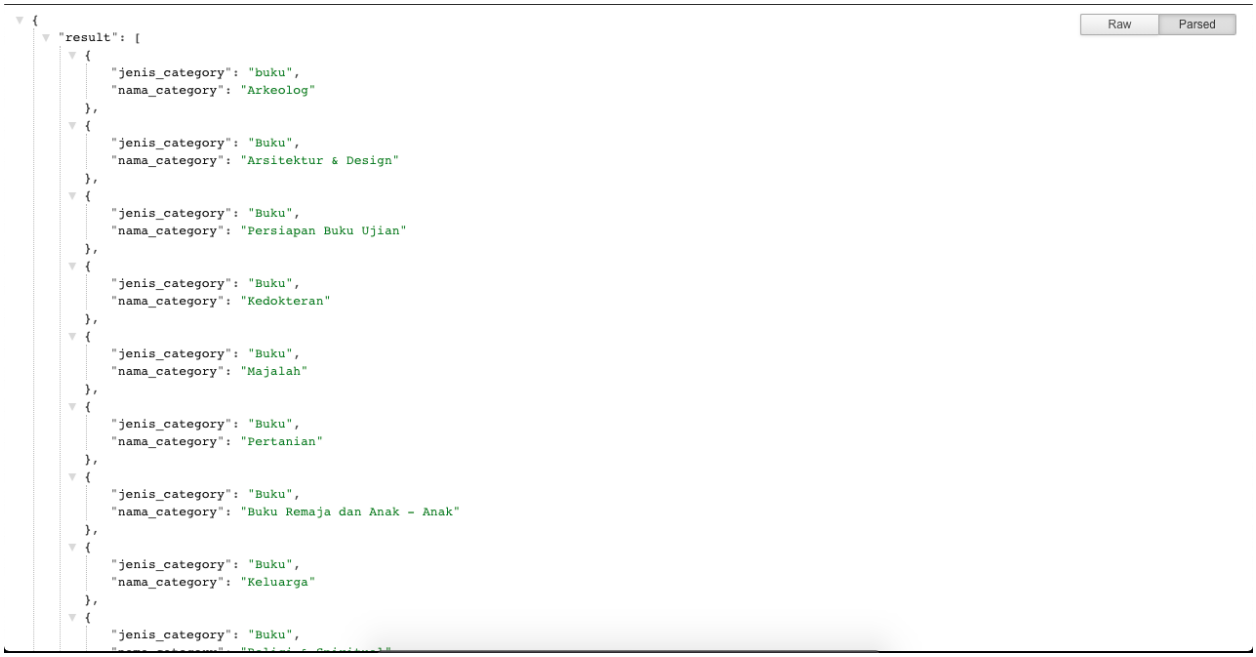
4. And then you must import JSON data (datax.json) to MongoDB using database name mnc (name of database) and buku (name of collection).
5. If you get an error a like this :

   pymongo.errors.ServerSelectionTimeoutError

   ```
   pymongo.errors.ServerSelectionTimeoutError: 172.19.0.2:27017: [Errno 111] Connection refused, Timeout: 30s, Topology Description:
   <TopologyDescription id: 60d35e0a853d99869a719f9f, topology_type: Single, servers: [<ServerDescription ('172.19.0.2', 27017) server_type:
   Unknown, rtt: None, error=AutoReconnect('172.19.0.2:27017: [Errno 111] Connection refused')>]>
   ```

   You can check the IPAddress of mongodb container using command : docker inspect (docker-container-name)


6. If success , you can access to endpoint : http://localhost:5001/check to view a data from collection:




I'm using other data because the SPSS file which you share to me on google drive can not be opened.

This is my code using flask framework:

app.py

```
from flask import Flask
from flask_pymongo import PyMongo
from flask import jsonify
from bson.json_util import dumps


app = Flask(__name__)
#for IP of DB, you can find the IP using command docker inspect
<docker-container_name-db>
app.config["MONGO_URI"] = "mongodb://172.19.0.2:27017/mnc"
mongo = PyMongo(app)

@app.route('/')
def index():
    return 'Backend of Python Developer Written Test at MNC Corporation'

@app.route('/check')
def check_data():
```

```
    data = mongo.db.buku.find({})
    output = []
    for x in data:
        output.append({'nama_category':x['nama_category'],
'jenis_category':x['jenis_category']})
        json_data = dumps(output, indent = 2)
        with open ('datax.json', 'w') as file:
            file.write(json_data)
    return jsonify({'result':output})

if __name__ =='__main__':
    app.run(debug=True)
```

Dockerfile

```
FROM python:3.8

COPY requirements.txt /app/
RUN pip install -r /app/requirements.txt

WORKDIR /app

ENV FLASK_APP=app
ENV FLASK_DEBUG=1

CMD ["flask", "run", "--host", "0.0.0.0", "--port", "5000"]
```

Docker-compose.yml

```
version: '3.8'
services:
 web:
   build: .
   restart: always
   ports:
   - "5001:5000"
   volumes:
   - .:/app
   links:
   - mongo
   networks:
```

```
    - flask_network
 mongo:
   restart: always
   image: mongo:4.2
   ports:
     - 27017:27017
   command: mongod
   networks:
     - flask_network

networks:
 flask_network:
   name: flask_network
```

Datax.json

```
[
 {
   "nama_category": "Arkeolog",
   "jenis_category": "buku"
 },
 {
   "nama_category": "Arsitektur & Design",
   "jenis_category": "Buku"
 },
 {
   "nama_category": "Persiapan Buku Ujian",
   "jenis_category": "Buku"
 },
 {
   "nama_category": "Kedokteran",
   "jenis_category": "Buku"
 },
 {
   "nama_category": "Majalah",
   "jenis_category": "Buku"
 },
 {
   "nama_category": "Pertanian",
   "jenis_category": "Buku"
 },
```

```
{
  "nama_category": "Buku Remaja dan Anak - Anak",
  "jenis_category": "Buku"
},
{
  "nama_category": "Keluarga",
  "jenis_category": "Buku"
},
{
  "nama_category": "Religi & Spiritual",
  "jenis_category": "Buku"
},
{
  "nama_category": "Buku Hukum",
  "jenis_category": "Buku"
},
{
  "nama_category": "Kesehatan & Gaya Hidup",
  "jenis_category": "Buku"
},
{
  "nama_category": "Novel & Sastra",
  "jenis_category": "Buku"
}
]
```