Lab 8

(MongoDB – Query)

Objective

In this Lab, you learn to query a database in MongoDB.

Getting Started

In this lab, you will use products.json dataset. Download products.json from Blackboard and store it in a folder named dataset.

Open your Windows command prompt and go the following directory where MongoDB is installed:

- cd C:\Program Files\MongoDB\Server\[version]**bin**

To run MongoDB, execute ***mongod***

- mongod

When MongoDB starts successfully, open another Windows command prompt and execute ***mongosh (***from the bin directory of the unzipped mongo shell archive file)

- mongosh

Or you execute a batch file to start up MongoDB.

You will import products.json to the *inventory* database. To import data, go to the *bin* directory:

- cd C:\Program Files\MongoDB\Server\[version]**bin**

Execute the following command:

- mongoimport --db inventory --collection products --file ..\dataset\products.json

For the *json* file, provide the full path to the prodcuts.json. After executing the command, the data is imported to the *inventory* database. To make sure data is imported successfully, go to the MongoDB shell and execute the following command to see the imported documents:

- show dbs

You should see the database added to the list of your databases. To see the documents inside the database:

- use inventory
- db.products.find().forEach(printjson)

Submission

You submit this file with answers (in the provided space). Name the file "L08_ID#_LASTNAME.pdf".

Tasks

1. Write a query to return *name* and *price* of each product in the *inventory* database.

To find the name and price only for each product in the inventory database:

- db.products.find({}, {"name": 1, "price": 1});

However, to find the name and price along with the id of each product in the inventory database:

- db.products.find({}, {"_id": 0, "name": 1, "price": 1});

2. Write a query to return *name* and *price* for products of type *accessory* in the *inventory* database.

The query to return the name and the price for products of type accessory in the inventory is:

- db.products.find({"type" : "accessory"}, {"_id": 0, "name": 1, "price": 1});

3. Write a query to return *name* and *price* for products with price between $12 and $20 (Values *12* and *20* are included).

The query to return name and the price for the products with the price between $12 to $ 20 is:

- db.products.find({"price": {"$gte" : 12, "$lte": 20}}, {"_id": 0, "name": 1, "price": 1});

4. Write a query to return *id*, *name*, *price*, and *type* for products that are not of type *accessory*.

The query to return the id, name, price and type for the products that are not of type called accessory is:

- db.products.find({"type": {"$ne" : "accessory"}}, {"_id": 0, "name": 1, "price": 1, "type": 1});

5. Write a query to return *id*, *name*, *price*, and type for products with type *accessory* or *service*.

The query to return the id, name, price and the type of the product with the type accessory or the service is:

- db.products.find({"$or": [{"type": "accessory"}, {"type": "accessory"}]}, {"_id": 0, "name": 1, "price": 1, "type": 1});

Good luck.