

Lab 8 – MongoDB – Query

Objective

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

Submission

For this lab, you should submit a file with the below exercises completed.

Your file should be called: **L08-*lastname-firstname*** (for example: L08-King-Les)

Make sure to show your output for each command to demonstrate it works.

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\4.2\bin`

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

➤ `mongod`

When MongoDB starts successfully, open another Windows command prompt and go the same *bin* directory:

➤ `cd C:\Program Files\MongoDB\Server\4.2\bin`

and execute ***mongo***

➤ `mongo`

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\4.2\bin`

Execute the following command:

➤ `mongoimport --db inventory --collection products --file ../dataset/products.json`

For the *json* file, provide the full path to the `products.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 *inventory* added to the list of your databases. To see the documents inside the database:

➤ `use inventory`
➤ `db.products.find().forEach(printjson)`

Tasks

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

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

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

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

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

6. Write a query to return *id*, *name*, *price*, and *type* for products that do have the *type* key.

7. Write a query to return *id*, *name*, *price*, and *type* for products that their type is both *accessory* and *case*.