Lab 9 – Week 10 (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\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 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 *college* 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.

db.products.find({},{“\_id”:0, “name”:1, “price”:1});

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

database.

db.products.find({”type”:”accessory”},{“\_id”:0,"”name”:1,”price"’:1});

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

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

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

*accessory*.

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

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

*service*.

db.products.find({“$or”: [{“type”: "accessory"},{“type”: "service"}] },{ “name”: 1, “price”: 1, “type”: 1 });

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

db.products.find({"type": {"$exists": true}},{"\_id":1,"name":1,"price":1,"type":1});

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

*accessory* and *case*.

db.products.find({"type": {"$all": ["accessory", "case"]}},{"\_id":1,"name":1,"price":1,"type":1})

Good luck.