Lab 9 – MongoDB – UPDATE

Objective

In this lab, students learn how to update documents in a MongoDB database.

update(): This method updates one document by default. If you want to update all documents that match the criteria using this method, you need the option {multi:true}.

update(<filter>,<update>,<option>)

The *filter* parameter specifies the criteria. For instance:

{"_id"=0}

{} for updating all documents

The *update* parameter specifies the changes that will be applied to a document.

updateOne(): This method updates only the first document that matches the criteria.

updateOne(<filter>,<update>)

updateMany(): This method updates all documents that match the criteria.

updateMany(<filter>,<update>)

Submission

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

Your file should be called: **L09–*lastname-firstname*** (for example: L09-King-Les)

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

Getting Started

In this lab, you will use students.json dataset. Download students.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 students.json to the *college* database. To import data, go to the *bin* directory:

- cd C:\Program Files\MongoDB\Server\4.2**bin**

Execute the following command:

- mongoimport --db college --collection students --file ..\dataset\students.json

To import the *json* file, provide the full path to the students.json. After executing the command, the data is imported to the *college* 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 college
- db.students.find().forEach(printjson)

or

- db.students.find().pretty()

Tasks

1. Write an update statement to add new fields *program* and *term* to all documents in the *students* collection and set them to values "*CPA*" and *1*.

2. Write an update statement to modify the value of the *program* field to "*BTM"* for all documents in the *students* collection.

3. Write an update statement to modify the value of the program field to "*CPA"* for the student named *Jonie Raby*.
   Before executing an update statement or a delete statement, you can use the *find()* method with the update or delete criteria, to see how many documents will be affected.
   Write the update statement in the box below.

   How many documents are there with the value *Jonie Raby* for the *name* field? _____
   How many documents were updated? _____

4. Write a query to show only the *program* field for the document that the value of the filed *name* is *Jonie Raby*.

5. Write an update statement to increase the value of the *term* field by 2 for documents with *_id* 20, 22, and 24.

6. Write an update statement to remove the *term* field from documents that the value of the *term* filed is 3.