

task 10-10

date: 14/10/25

CRUD operations in Document Databases

Aim: To perform mongoose using NPM design on Mongoose designing document database and performing CRUD operations like creating, inserting, querying, finding and removing operations. like creating, inserting, querying, finding and removing operations.

steps:

step 1: install mango db using following link.

<https://www.mongodb.com/try/download/community>.

step-2: install mangosh using the below link.

<https://www.mongodb.com/docs/mongodb-shell/#download-and-install-mangosh>

step-3: To add the mongoose shell binary's location to your PATH environment variable:
open the control panel.

In the system and security category, click system.
click advanced system settings. The system properties modal displays

click environment variables

On the system variables section, select path and click edit. The edit environment variable modal displays.

click new and add the filepath to your mangosh binary.

click ok to confirm your changes on each other modal.

click ok to confirm your changes.

To confirm that your prob. PATH environment variable is correctly configured to find mangosh, open a command prompt and enter the mangosh --help command.

If your PATH is configured correctly, a list of valid commands displays.

step-4 open mango shell v.0 from c:\program files\mangodb\server\bin\mangod.exe.

step-5: Type the CRUD (CREATE READ UPDATE DELETE) COMMANDS GIVEN IN TEXT FILE.

CRUD OPERATIONS:

```
db.createCollection("mylab")
```

```
{ "ok": 1 }
```

```
> db.mylab.insertOne({ item: "canvas", qty: 100, tags: ["cotton"], size: { h: 28, w: 35.5, uom: "cm" } })
```

```
{
```

```
  "acknowledged": true,
```

```
  "insertedId": ObjectId("627d13acc73990c074e6397c")
```

```
}  
Inserted Id
```

```
{
```

```
> db.mylab.find({ item: "canvas" })
```

```
{ "_id": ObjectId("627d13acc73990c074e6397c"), "item":
```

```
"canvas", "qty": 100, "tags": ["cotton"], "size": { "h": 28, "w":
```

```
35.5, "uom": "cm" } }
```

```
> db.mylab.insertMany([ { item: "journal", qty: 25, tags: ["blank",
```

```
"red"], size: { h: 14, w: 21, uom: "cm" }, { item: "mat", qty: 85,
```

```
tags: ["gray"], size: { h: 27.9, w: 35.5, uom: "cm" }, { item:
```

```
"mouse pad", qty: 25, tags: ["gel", "blue"], size: { h: 19, w: 22.5,
```

```
uom: "cm" } } ] )
```

```
{
```

```
  "acknowledged": true,
```

```
  "insertedIds": [
```

```
    ObjectId("627d1598c73990c074e6397d"),
```

```
    ObjectId("627d1598c73990c074e6397e"),
```

```
    ObjectId("627d1598c73990c074e6397f") ]
```



```
1 db.mylab.find({item: 1, qty: 13})
2 { "_id": ObjectId("627d13acc73990c074e6397c"), "item":
  "canvas", "qty": 100 }
3 { "_id": ObjectId("627d1598c73990c074e6397d"), "item":
  "journal", "qty": 25 }
```

```
4 { "_id": ObjectId("627d1598c73990c074e6397e"), "item":
  "mat", "qty": 85 }
```

```
5 { "_id": ObjectId("627d1598c73990c074e6397f"), "item":
```

```
  "mouse pad", "qty": 25 }
6 db.mylab.find({item: 1, qty: 13}).pretty()
```

```
7 {
  "_id": ObjectId("627d13acc73990c074e6397c"),
```

```
  "item": "canvas",
```

```
  "qty": 100,
```

```
  }
```

```
8 { "_id": ObjectId("627d1598c73990c074e6397d"),
```

```
  "item": "journal",
```

```
  "qty": 25,
```

```
  }
```

```
9 { "_id": ObjectId("627d1598c73990c074e6397e"), "item": "mat",
```

```
  "qty": 85 }
```

```
10 {
```

```
  "_id": ObjectId("627d1598c73990c074e6397f"),
```

```
  "item": "mouse pad",
```

```
  "qty": 25,
```

```
  }
```

```
11 db.mylab.find({item: "canvas"}).pretty().sort({item: 1})
```

```
12
```



```
"_id" : object Id ("607d139acc73990c074e6397c"),  
"item" : "canvas",  
"qty" : 100,  
"tag" : [  
"cotton" ],  
"size" : 2  
"h" : 28,  
"w" : 35.5,  
"uom" : "cm"  
}
```

```
> db.mylab.deleteOne({item: "journal"}).
```

```
=> db.mylab.find({_id: 1, qty: 1}).pretty().
```

```
{  
  "_id" : object Id ("607d13acc73990c074e6397c"),  
  "item" : "canvas",  
  "qty" : 100  
}
```

```
{  
  "_id" : object Id ("607d1598c73990c074e6397d");  
  "item" : "canvas",  
  "qty" : 100  
}
```

```
{  
  "_id" : object Id ("607d1598c73990c074e6397d");  
  "item" : "journal",  
  "qty" : 25  
}
```

```
{ "_id" : object Id ("607d1598c73990c074e6397e"),  
  "item" : "mat",  
  "qty" : 85 }
```

```
{  
  "_id" : object Id ("607d1598c73990c074e6397f"),  
  "item" : "mousepad", "qty" : 85 }
```

Result:- Thus the implementation of CRUD operations like creating, inserting, finding and removing operations using MongoDB is successfully executed.

14/07/23

VEL TECH	
EX No.	10
PERFORMANCE (%)	75
ANALYSIS (%)	75
WAVE (%)	5
RD (%)	18
WITH DATE	14/07/23