

Task 10
Date: 14/10/25

CRUD operations in Document Database

Aim:-

To perform Mongoose using NPM design on mongo DB
designing document database and performing crud

Steps:-

Step 1) install Mongo db using following link

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

Step 2) install Mongo h using the below link

<https://www.mongodb.com/docs/mongo-shell>

Step 3) To add the mongo DB shell Binary location

Step 4) Open, Mongo Shell 4.0 from C:\program files.

Step 5) Type the CRUD (create, Read update delete)

COMMANDS GIVEN IN TEXT FILE

CRUD operations:

1. Create database

```
db.createCollection("products")
```

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

2. Insert one product:

```
db.products.insertOne({name: "laptop",
```

```
price : 8500 }
```

```
category : "Electronics", stock : 25, tags : ["intel"],
```

```
details : {brand : "Hp", warranty : "2 years" } }
```

output:

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

```
"insertedId" : ObjectId("62a1b3acc") }
```

3. Find one product (read)

```
db.products.find({name: "Laptop" })
```

output:

```
{ "id" : object ('62a1b3acc'),  
  "name" : "laptop",  
  "price" : 85000,  
  "category" : "Electronics",  
  "stock" : 25,  
  "tags" : ["intel"] }
```

4. insert multiple products

```
db.products.insert many ({name: "smartphone",  
  price: 25000, category: "Electronics",  
  stock: 50, tags: ["android", "5m"], details: {  
    "Samsung" : 3 } },  
  {name: "T-shirt", price: 299, category: "Fashion",  
  stock: 100, tags: ["Cotton", "blue"], details: {  
    brand: "Nike" } },
```

output:

```
{ "acknowledged" : true,  
  "insertedIds" : [  
    object id ('62a1b579c'),  
    object id ('62a1b500c') ]  
}
```

5. Display selected field

```
db.products.find({}, {name: 1, price: 1, stock: 1})
```

output:

```
{ "id": "6201b3acc", "name": "laptop", "price": 85000, "stock": 25 }
```

```
{ "id": "6201b5aee", "name": "smartphone", "price": 25000, "stock": 50 }
```

```
{ "id": "6201b500", "name": "t-shirt", "price": 799, "stock": 150 }
```

b) pretty format:

```
db.products.find({ name: 1, price: 1, stock: 1 })  
  .pretty()
```

output:

```
{ "id": "6201b3acc", "name": "laptop", "price": 85000, "stock": 25 }
```

```
{ "id": "6201b5aee", "name": "smartphone", "price": 25000, "stock": 50 }
```

```
{ "id": "6201b500", "name": "t-shirt", "price": 799, "stock": 150 }
```

Delete one product

```
db.products.deleteOne({ name: "T-shirt" })
```

output:

```
{ "acknowledged": true, "deleteCount": 1 }
```

final display:

```
db.products.find({ name: 1, price: 1, stock:
```

```
1 })
```


output:

```
{ "id" : object id ("62a1b3acc"), "name": "lapto",  
  "price": 85000 , "stock": 25 }
```

```
{ "id" : object id ("62a1b3a9c"), "name": "smartphone",  
  "price": 25000 , "stock": 50 }
```

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EX NO.	10
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	
TOTAL (20)	15
DATE	14/6/22

Result:

Thus, a implementation of CRUD operations like Creating, inserting, finding, and removing operations using mongo DB is executed successfully.