

MongoDB (CRUD) Checkpoint

Checkpoint Objective

Create a database called "contact"

Create a collection called "contactlist"

```
mongosh mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000
C:\Users\Bilel>mongosh
Current Mongosh Log ID: 6569a9b30c56e3a2184744f8
Connecting to:      mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+2.1.0
Using MongoDB:      6.0.11
Using Mongosh:      2.1.0

For mongosh info see: https://docs.mongodb.com/mongodb-shell/

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  The server generated these startup warnings when booting
  2023-11-28T13:50:32.358+01:00: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted
-----

test> show dbs
admin    40.00 KiB
config  108.00 KiB
local   72.00 KiB
test> use contact
switched to db contact
contact> db.createCollection("contactlist")
{ ok: 1 }
```

Insert these documents in "contactlist" :

Last name: Ben Lahmer, First name: Fares, Email: fares@gmail.com, age:26

Last name: Kefi, First name: Seif, Email: kefi@gmail.com, age:15

Last name: Fatnassi, First name: Sarra, Email: sarra.f@gmail.com, age:40

Last name: Ben Yahia, First name: Rym, age:4

Last name: Cherif, First name: Sami, age:3

```
contact> db.contactlist.insertMany([{"lastName": "Ben Lahmer", "firstName": "Fares", "Email": "fares@gmail.com", "age":26}, {"lastName": "Ben Lahmer", "firstName": "Fares", "Email": "fares@gmail.com", "age":26}, {"lastName": "Kefi", "firstName": "Seif", "Email": "kefi@gmail.com", "age":15}, {"lastName": "Fatnassi", "firstName": "Sarra", "Email": "sarra.f@gmail.com", "age":40}, {"lastName": "Ben Yahia", "firstName": "Rym", "age":4}, {"lastName": "Cherif", "firstName": "Sami", "age":3}])
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('6569affb0c56e3a2184744fa'),
    '1': ObjectId('6569affb0c56e3a2184744fb'),
    '2': ObjectId('6569affb0c56e3a2184744fc'),
    '3': ObjectId('6569affb0c56e3a2184744fd'),
    '4': ObjectId('6569affb0c56e3a2184744fe')
  }
}
contact>
```

Display all of the contacts list

```
test> use contact
switched to db contact
contact> db.contactlist.find({})
[
  {
    _id: ObjectId('6569affb0c56e3a2184744fa'),
    LastName: 'Ben Lahmer',
    FirstName: 'Fares',
    Email: 'fares@gmail.com',
    age: 26
  },
  {
    _id: ObjectId('6569affb0c56e3a2184744fb'),
    LastName: 'Kefi',
    FirstName: 'Seif',
    Email: 'kefi@gmail.com',
    age: 15
  },
  {
    _id: ObjectId('6569affb0c56e3a2184744fc'),
    LastName: 'Fatnassi',
    FirstName: 'Sarraf',
    Email: 'sarraf@gmail.com',
    age: 40
  },
  {
    _id: ObjectId('6569affb0c56e3a2184744fd'),
    LastName: 'Ben Yahia',
    FirstName: 'Rym',
    age: 4
  },
  {
    _id: ObjectId('6569affb0c56e3a2184744fe'),
    LastName: 'Cherif',
    FirstName: 'Sami',
    age: 3
  }
]
contact>
```

Display all the information about only one person using his ID.

```
contact> db.contactlist.findOne({ _id: ObjectId('6569affb0c56e3a2184744fd') })
{
  _id: ObjectId('6569affb0c56e3a2184744fd'),
  LastName: 'Ben Yahia',
  FirstName: 'Rym',
  age: 4
}
contact> _
```

Display all the contacts with an age >18.

```
contact> db.contactlist.find({ age: { $gt: 18 } })
[
  {
    _id: ObjectId('6569affb0c56e3a2184744fa'),
    LastName: 'Ben Lahmer',
    FirstName: 'Fares',
    Email: 'fares@gmail.com',
    age: 26
  },
  {
    _id: ObjectId('6569affb0c56e3a2184744fc'),
    LastName: 'Fatnassi',
    FirstName: 'Sarraf',
    Email: 'sarraf@gmail.com',
    age: 40
  }
]
contact>
```

Display all the contacts with an age>18 and name containing "ah".

```
contact> db.contactlist.find({ $and: [{ age: { $gt: 18 } }, { $or: [{ FirstName: /ah/ }, { LastName: /ah/ }] } ] })
[
  {
    _id: ObjectId('6569affb0c56e3a2184744fa'),
    LastName: 'Ben Lahmer',
    FirstName: 'Fares',
    Email: 'fares@gmail.com',
    age: 26
  }
]
```

Change the contact's first name from "Kefi Seif" to "Kefi Anis".

```
contact> db.contactlist.updateOne( { FirstName: "Seif" }, { $set: { FirstName: "Anis" } })
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

Delete the contacts that are aged under <5.

```
contact> db.contactlist.deleteMany({ age: { $lt: 5 } })
{ acknowledged: true, deletedCount: 2 }
```

Display all of the contacts list.

```
contact> db.contactlist.find()
[ acknowledged: true, deletedCount: 0 ]
  {
    _id: ObjectId('6569affb0c56e3a2184744fa'),
    LastName: 'Ben Lahmer',
    FirstName: 'Fares',
    Email: 'fares@gmail.com',
    age: 26
  },
  {
    _id: ObjectId('6569affb0c56e3a2184744fb'),
    LastName: 'Kefi',
    FirstName: 'Anis',
    Email: 'kefi@gmail.com',
    age: 15
  },
  {
    _id: ObjectId('6569affb0c56e3a2184744fc'),
    LastName: 'Fatnassi',
    FirstName: 'Sarrra',
    Email: 'sarrra.f@gmail.com',
    age: 40
  }
]
contact>
```