



Back-end development: Basic

MongoDB – MONGO SHELL SHORTCUTS

cls

Clear the screen

mongod --port 27018

Explicitly giving a port number

mongo --port 27018

Connect to that specific port

show dbs

shows all the db databases you have

use <dbName>

Creates a new database or enters and existing database

show collections

Shows the collections of that database

db.dropDatabase()

Remove existing database

Data Types

String: "some text"

Boolean: true or false

Number(integer, NumberLong, NumberDecimal):
33, 123456789123456789, 33.34

ObjectId: Automatically created

ISODate: new Date()

TimeStamp: new Timestamp()

Embedded Document: {}

List: []

MONGO CRUD OPERATIONS

Create

`insertOne(data, options)`

`insertMany([data], options)`

Read

`find(filter, options)`

`findOne(filter, options)`

Update

`updateOne(filter, data, options)`

`updateMany(filter, data, options)`

`replaceOne(filter, data, options)`

Delete

`deleteOne(filter, options)`

`deleteMany(filter, options)`

Crud Docs

<https://docs.mongodb.com/manual/crud/>

Operators

<https://docs.mongodb.com/manual/reference/operator/>

Examples:

Create

```
db.teachers.insertOne({name:"Mordi",subjects:[],students:[],capacityLeft:30})
db.teachers.insertMany([{name:"George",subjects:[],students:[],capacityLeft:10},{name:"Harry",subjects:[],students:[],capacityLeft:30}])
```

Read

```
db.teachers.find().pretty()
db.teachers.findOne({_id:ObjectId("5ff6fecaf91717875a68fc06")}).pretty()
db.teachers.find({name:"Mordi"})
db.teachers.find( { capacityLeft:{$gt:11}}).pretty()
db.teachers.find( { capacityLeft:{$lt:11}}).pretty()
```

Cursor Methods

```
db.users.find().toArray()
db.users.find().forEach(user => printjson(user))
db.users.find().forEach(user => printjson(`users name is ${user}`))
db.users.find().count()
db.users.find().limit(2)
```

Update

```
db.teachers.updateOne({_id:ObjectId("5ff6ffa6f91717875a68fc09")},{ $set:{name:"Jennifer"}})
db.teachers.updateOne({_id:ObjectId("5ff6ffa6f91717875a68fc09")},{ $set:{age:22}})
db.teachers.updateMany({age:22},{ $set:{age:23}})
db.teachers.updateMany({age:{$gt:20}},{ $set:{young:true}})
db.teachers.replaceOne({_id:ObjectId("5ff6ffa6f91717875a68fc08")},{name:"harry"})
```

Delete

```
db.teachers.deleteOne({_id:ObjectId("5ff6ffa6f91717875a68fc09")})
db.teachers.deleteMany({name:{$exists:true}})
```

Dealing with Arrays

pushing to an array:

```
db.teachers.updateOne({_id:ObjectId("5ff70df4f91717875a68fc0b")},{$push:{subjects:"history"}})
```

removing from an array:

```
db.teachers.updateOne({_id:ObjectId("5ff70df4f91717875a68fc0b")},{$pull:{subjects:"history"}})
db.teachers.updateOne({_id:ObjectId("5ff70df4f91717875a68fc0b")},{$pop:{subjects:1}})
```

get the values from an array:

```
db.teachers.findOne({_id:ObjectId("5ff70df4f91717875a68fc0b")}).subjects
```