

Practical - 3

10-01-24

CRUD USING Mongodb

Write-up: -

- NOSQL Vs SQL
- Types of NOSQL
- Document document-oriented NoSQL
- Mongodb
- Mangodb shell
- Basic commands of mongodb

See Databases

```
test> show databases;
admin  40.00 KiB
config 72.00 KiB
local  80.00 KiB
myapp  40.00 KiB
test   72.00 KiB
```

Create Database

```
test> use practical_3;
switched to db practical_3
```

Creating a New Collection

```
practical_3> db.createCollection("users");
{ ok: 1 }
```

Inserting Documents in Collection

```
practical_3> db.users.insertOne({
... name: "Angela",
... age: 27,
... });
{
  acknowledged: true,
  insertedId: ObjectId('6780eb70255313953d6b6f92')
}
practical_3> db.users.insertMany([
... {name: "Angela",age: 27},
... {name: "Dwight",age: 30},
... {name: "Jim",age: 29},
... ]);
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('6780ebac255313953d6b6f93'),
    '1': ObjectId('6780ebac255313953d6b6f94'),
    '2': ObjectId('6780ebac255313953d6b6f95')
  }
}
```

Read Data

```
practical_3> db.users.find()
[[
  {
    _id: ObjectId('6780eb70255313953d6b6f92'),
    name: 'Angela',
    age: 27
  }
]]
```

```
    },  
    {  
      _id: ObjectId('6780ebac255313953d6b6f93'),  
      name: 'Angela',  
      age: 27  
    },  
    {  
      _id: ObjectId('6780ebac255313953d6b6f94'),  
      name: 'Dwight',  
      age: 30  
    },  
    { _id: ObjectId('6780ebac255313953d6b6f95'), name: 'Jim', age: 29 }  
  ]  
practical_3> db.users.find().pretty()  
[  
  {  
    _id: ObjectId('6780eb70255313953d6b6f92'),  
    name: 'Angela',  
    age: 27  
  },  
  {  
    _id: ObjectId('6780ebac255313953d6b6f93'),  
    name: 'Angela',  
    age: 27  
  },  
  {  
    _id: ObjectId('6780ebac255313953d6b6f94'),  
    name: 'Dwight',  
    age: 30  
  },  
  { _id: ObjectId('6780ebac255313953d6b6f95'), name: 'Jim', age: 29 }  
]
```

```
practical_3> db.users.find({ age: { $gt: 29 } }, { name: 1, age: 1 })
[
  {
    _id: ObjectId('6780ebac255313953d6b6f94'),
    name: 'Dwight',
    age: 30
  }
]
practical_3> db.users.findOne({ name: "Jim" })
{ _id: ObjectId('6780ebac255313953d6b6f95'), name: 'Jim', age: 29 }
```

Update Data

```
practical_3> db.users.updateOne({ name: "Angela" }, { $set: { email:
"angela@gmail.com" } })
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
practical_3> db.users.updateMany({ age: { $lt: 30 } }, { $set: { status: "active" } })
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 3,
  modifiedCount: 3,
  upsertedCount: 0
}
```

Delete Documents

```
practical_3> db.users.deleteOne({ name: "Angela" })
{ acknowledged: true, deletedCount: 1 }
```

```
practical_3> db.users.deleteMany({ age: { $lt: 30 } })
{ acknowledged: true, deletedCount: 2 }
```

```
practical_3> db.users.find().pretty()
[
  {
    _id: ObjectId('6780ebac255313953d6b6f94'),
    name: 'Dwight',
    age: 30
  }
]
```

Delete Database

```
practical_3> db.users.drop()
true
practical_3> show databases;
admin   40.00 KiB
config 108.00 KiB
local   80.00 KiB
myapp   40.00 KiB
test    72.00 KiB
```