

Week 12 assignment

Data communications

April 2, 2024

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The screenshot displays the MongoDB Compass interface for a database named 'gradingSystem'. The left sidebar shows the database structure with collections: admin, config, gradingSystem, classrooms, courses, grades, students, teachers, and local. The main panel shows the 'gradingSystem' database with a list of collections: classrooms, courses, grades, and students. Each collection has a storage size of 4.10 kB, 0 documents, 1 index, and a total index size of 4.10 kB. The 'students' collection is highlighted, and its details are shown below, indicating it has 0 documents. The terminal at the bottom shows the following commands and output:

```
> MONGODB
> use gradingSystem
switched to db gradingSystem
> db.createCollection("students")
{ ok: 1 }
> db.createCollection("courses")
{ ok: 1 }
> db.createCollection("grades")
{ ok: 1 }
> db.createCollection("teachers")
{ ok: 1 }
> db.createCollection("classrooms")
{ ok: 1 }
```

The second screenshot shows the 'students' collection in detail. It has 0 documents, 0 aggregations, 1 schema, 1 index, and 1 validation. The 'ADD DATA' button is highlighted, and a message states: 'This collection has no data. It only takes a few seconds to import data from a JSON or CSV file.' The terminal at the bottom shows the following command and output:

```
> MONGODB
> db.students.updateOne(
  { _id: ObjectId("5f87a31e6e6e123456789ab") },
  { $set: { age: 19 } }
)
{ acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  upsertedCount: 0 }
```

MongoDB Compass - clusterbhav.upayb8.mongodb.net/gradingSystem.courses

Connect Edit View Collection Help

clusterbhav.upa...

My Queries gradingSystem courses

Documents 0 Aggregations Schema Indexes 1 Validation

Type a query: { field: 'value' } or [Generate query](#)

Explain Reset Find Options

ADD DATA EXPORT DATA UPDATE DELETE

1 - 2 of 2

`{`
 `_id: ObjectId('5f87a31e6e1234567890ac')`
 `name: "Math"`
 `teacher: "Kingsley"`
`}`

`{`
 `_id: ObjectId('5f87a31e6e1234567890ad')`
 `name: "English"`
 `teacher: "bhav"`
`}`

`> MONGODB`
`>`
`> db.students.findOne({ _id: ObjectId("5f87a31e6e1234567890ab") })`
`< {`
 `_id: ObjectId('5f87a31e6e1234567890ab'),`
 `name: 'bhav',`
 `age: 19,`
 `email: 'joo@example.com'`
`}`

Atlas atlas-izdytx-shard-0 [primary] gradingSystem>

MongoDB Compass - clusterbhav.upayb8.mongodb.net/gradingSystem.courses

Connect Edit View Collection Help

clusterbhav.upa...

My Queries gradingSystem courses

Documents 0 Aggregations Schema Indexes 1 Validation

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Explain Reset Find Options

ADD DATA EXPORT DATA UPDATE DELETE

1 - 2 of 2

`{`
 `_id: ObjectId('5f87a31e6e1234567890ac')`
 `name: "Math"`
 `teacher: "Kingsley"`
`}`

`{`
 `_id: ObjectId('5f87a31e6e1234567890ad')`
 `name: "English"`
 `teacher: "bhav"`
`}`

`> MONGODB`
`>`
`>`
`< {`
 `acknowledged: true,`
 `insertedId: null,`
 `matchedCount: 1,`
 `modifiedCount: 1,`
 `upsertedCount: 0`
`}`

Atlas atlas-izdytx-shard-0 [primary] gradingSystem>

MongoDB Compass - clusterbhav.upayb8.mongodb.net/gradingSystem.students

clusterbhav.upa...

My Queries gradingSystem students

Documents 0 Aggregations Schema Indexes 1 Validation

Type a query: { field: 'value' } or [Generate query](#)

EXPLAIN RESET FIND UPDATE DELETE 1-1 of 1

```
{
  "_id": ObjectId("5f87a31e6e6e1234567890ab"),
  "name": "bhav",
  "age": 19,
  "email": "joo@example.com"
}
```

My Queries Performance Databases Search

- admin
- config
- gradingSystem
 - classrooms
 - courses
 - grades
 - students
 - teachers
- local

terminal

```
> MONGODB
> db.students.updateOne(
  { _id: ObjectId("5f87a31e6e6e1234567890ab") },
  { $set: { age: 19 } }
)
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1
}
```

MongoDB Compass - clusterbhav.upayb8.mongodb.net/gradingSystem.courses

clusterbhav.upa...

My Queries gradingSystem courses

Documents 0 Aggregations Schema Indexes 1 Validation

Type a query: { field: 'value' } or [Generate query](#)

EXPLAIN RESET FIND UPDATE DELETE 1-2 of 2

```
{
  "_id": ObjectId("5f87a31e6e6e1234567890ac"),
  "name": "Math",
  "teacher": "kingsley"
}

{
  "_id": ObjectId("5f87a31e6e6e1234567890ad"),
  "name": "English",
  "teacher": "atul"
}
```

My Queries Performance Databases Search

- admin
- config
- gradingSystem
 - classrooms
 - courses
 - grades
 - students
 - teachers
- local

terminal

```
> MONGODB
{
  acknowledged: true,
  insertedId: ObjectId("5f87a31e6e6e1234567890ab")
}
> db.courses.insertMany([
  {
    _id: ObjectId("5f87a31e6e6e1234567890ac"),
    name: "Math",
    teacher: "kingsley"
  },
  {
    _id: ObjectId("5f87a31e6e6e1234567890ad"),
    name: "English",
    teacher: "atul"
  }
])
{
  acknowledged: true,
  insertedIds: [
    ObjectId("5f87a31e6e6e1234567890ac"),
    ObjectId("5f87a31e6e6e1234567890ad")
  ]
}
```

MongoDB Compass - clusterbhav.upayvb8.mongodb.net/gradingSystem.students

Connect Edit View Collection Help

clusterbhav.upa... My Queries gradingSystem students

gradingSystem > students

Documents 0 Aggregations Schema Indexes 1 Validation

Type a query: { field: 'value' } or [Generate query](#) Explain Reset Find Options

ADD DATA EXPORT DATA UPDATE DELETE 1 - 1 of 1

```
{
  "_id": ObjectId("5f87a31e6e1234567890ab"),
  "name": "bhav",
  "age": 18,
  "email": "joo@example.com"
}
```

> MONGODBSH

```
_id: ObjectId("5f87a31e6e1234567890ab") ;
name: "bhav",
age: 18,
email: "joo@example.com"
})
< {
  acknowledged: true,
  insertedId: ObjectId("5f87a31e6e1234567890ab")
}
```

Breaking news
Israel dismisses...

Search

2:20 PM
4/5/2024