

Mini Project 4

MongoDB

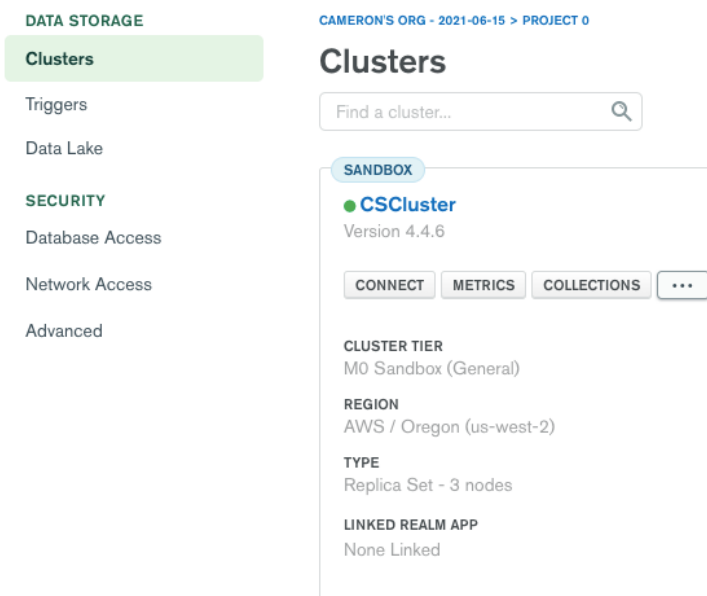
Use MongoDB as a DB to Sales Order DB or any other sample data that you want to use. Use Compass to connect to the MongoDB and insert, update and query data from MongoDB.

Solution:

I used the 'Company' Database from a previous project for this activity. My steps are listed below

1. Created Cluster

a.



The screenshot displays the MongoDB Atlas interface. On the left, a navigation menu includes 'DATA STORAGE' (with 'Clusters' highlighted), 'Triggers', 'Data Lake', 'SECURITY' (with 'Database Access', 'Network Access', and 'Advanced' listed), and 'Triggers'. The main content area is titled 'Clusters' and shows a search bar 'Find a cluster...'. Below this, a 'SANDBOX' tab is active, displaying details for a cluster named 'CSCluster' (Version 4.4.6). The cluster is in the 'M0 Sandbox (General)' tier, located in the 'AWS / Oregon (us-west-2)' region, and is a 'Replica Set - 3 nodes' type. It is currently 'None Linked' to any realm app. Action buttons for 'CONNECT', 'METRICS', 'COLLECTIONS', and a menu icon are visible.

2. Connected Compass to MongoDB Cluster

New Connection ☆ FAVORITE

Fill in connection fields individually

Paste your connection string (SRV or Standard ⓘ)

Connect

a.

3. Created a Database and first Collection called Company

Create Database

Database Name

Collection Name

☐ Capped Collection ⓘ

☐ Use Custom Collation ⓘ

Before MongoDB can save your new database, a collection name must also be specified at the time of creation. [More Information](#)

CANCEL CREATE DATABASE

a.

4. Download data from each table in 'Company' Database in MySQL Workbench to a CSV. Below, shows me doing this for the table Company from the database company. Tables transferred include Company, Employee, Manages, and Works.

1 • **SELECT** * **FROM** company.company;

100% 1:1

Result Grid Filter Rows: Search Edit: Export/Import:

company_n...	city
ABC	Dallas
FBC	Plano
NULL	NULL

a.

5. Import data into Collection 'Company' in the 'Company_DB' Database via the CSV. I will use this same process of creating a collection and importing data through a downloaded CSV for each collection.

Import To Collection Company_DB.Company

Select File

/Users/Camo/Documents/SMU_DS/DB Mgmt/Mini_Projects/Mini_Project_ [BROWSE](#)

Select Input File Type

JSON CSV

Options

Select delimiter COMMA

☒ Ignore empty strings

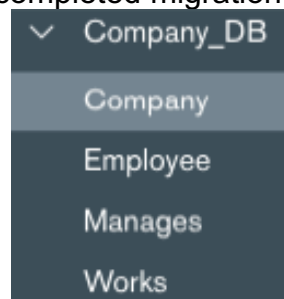
☐ Stop on errors

Specify Fields and Types

	<input checked="" type="checkbox"/> company_name String	<input checked="" type="checkbox"/> city String
1	ABC	Dallas
2	FBC	Plano

CANCEL IMPORT

- a.
6. View completed migration of MySQL database to MongoDB



a.

Company_DB.Company

Documents

Aggregations

Schema

FILTER { field: 'value' }

ADD DATA



VIEW



```
_id: ObjectId("60ca862058b95a2abe33c7e5")
company_name: "ABC"
city: "Dallas"
```

```
_id: ObjectId("60ca862058b95a2abe33c7e6")
company_name: "FBC"
city: "Plano"
```

b.

7. Insert a Document into Company Collection

Insert to Collection Company_DB.Company

VIEW



```
1 ▾ /**
2   * Paste one or more documents here
3   */
4 ▾ {
5 ▾   "_id": {
6     "$oid": "60ca8f716d21410250260f88"
7   },
8   "company_name": "Big_New_Company",
9   "city": "Seattle"
10 }
```

CANCEL

INSERT

a.

Company_DB.Company

Documents

Aggregations

Schema

Explai

FILTER { field: 'value' }

ADD DATA



VIEW



```
_id: ObjectId("60ca862058b95a2abe33c7e5")
company_name: "ABC"
city: "Dallas"
```

```
_id: ObjectId("60ca862058b95a2abe33c7e6")
company_name: "FBC"
city: "Plano"
```

```
_id: ObjectId("60ca8f716d21410250260f88")
company_name: "Big_New_Company"
city: "Seattle"
```

b.

8. Update a document in Company Collection

a.

```
> _id: ObjectId("60ca862058b95a2abe33c7e6")
  company_name: "FBC"
  city: "Plano"
```



```
1 _id: ObjectId('60ca862058b95a2abe33c7e6')
2 company_name: 'Toyota'
3 city: 'Plano'
```

ObjectId
String
String

b.

Document Modified.

CANCEL UPDATE

Company_DB.Company DOCUMENTS 3

Documents Aggregations Schema

FILTER { field: 'value' }

ADD DATA VIEW

```
_id: ObjectId("60ca862058b95a2abe33c7e5")
company_name: "ABC"
city: "Dallas"

_id: ObjectId("60ca862058b95a2abe33c7e6")
company_name: "Toyota"
city: "Plano"

_id: ObjectId("60ca8f716d21410250260f88")
company_name: "Big_New_Company"
city: "Seattle"
```

C.

9. Query documents from Company_DB Database in Works collection. Query looks for documents where company_name = "ABC" and then sorts in ascending order by person_name.

Company_DB.Works DOCUMENTS 24 TOTAL SIZE 2.2KB AVG. SIZE 92B INDEXES

Documents Aggregations Schema Explain Plan Index

FILTER {company_name: "ABC"} PROJECT { field: 0 } SORT {person_name: 1} MAX TIME MS 6000 COLLATION { locale: 'simple' } SKIP 0 LIMIT 0

ADD DATA VIEW

Displaying documents 1 - 3 of 3

```
_id: ObjectId("60ca8ae558b95a2abe33c806")
person_name: "Coppens"
company_name: "ABC"
salary: "5000.00"

_id: ObjectId("60ca8ae558b95a2abe33c815")
person_name: "Sahm"
company_name: "ABC"
salary: "23000.00"

_id: ObjectId("60ca8ae558b95a2abe33c816")
person_name: "Sowerby"
company_name: "ABC"
salary: "111000.00"
```

a.