Using Atlas
&
Compass as an interface to Mongodb Atlas

\# Last amended: 26th Nov, 2025
\# Myfolder: Ubuntu_kibana VM=>/home/ashok/Documents/mongodb//mongodb atlas
\# My folder: D:\Documents\OneDrive\Documents\mongodb
GitHub Repository link: [Databases](#)

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Notes:

1. For Mongodb Atlas , ALWAYS use Google Chrome and NOT Firefox.
2. Complete Help of MongoDB Atlas Charts is available at [this link](#). See **the left panel** of this help.
3. Data can be imported into Atlas using Mongodb Compass. Compass is installable on Windows

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1. Install MongoDB Compass on Windows or Mac, as the case maybe. Download from [this link](#) and install. Installation is straight forward.

2. See this [YouTube video](#) for working in Compass.

3. When Compass starts, an Add New Connection button appears for it to be connected to MongoDB server. We will connect it to MongoDB atlas.

4. In Chrome, search for MongoDB Atlas in Google and log into it using a Google Account.

5. Go to [this link](#) to register yourself with MongoDB Atlas and follow the simple steps

Figure 1: MongoDB Atlas, Sign in with your google account OR Write your name. You must write **FORE School of Management**. *Specify your emailid and password.*

Figure 2: If you did not login with Google Account, then, verify your email. After verification, you are taken to login screen.
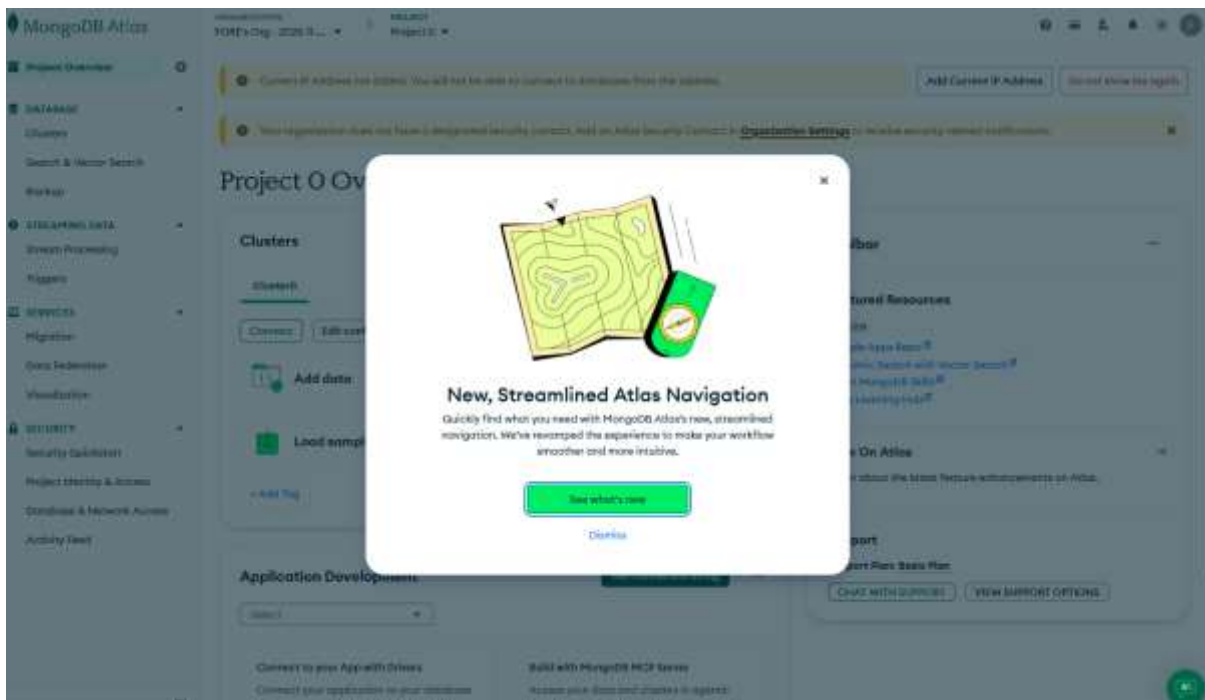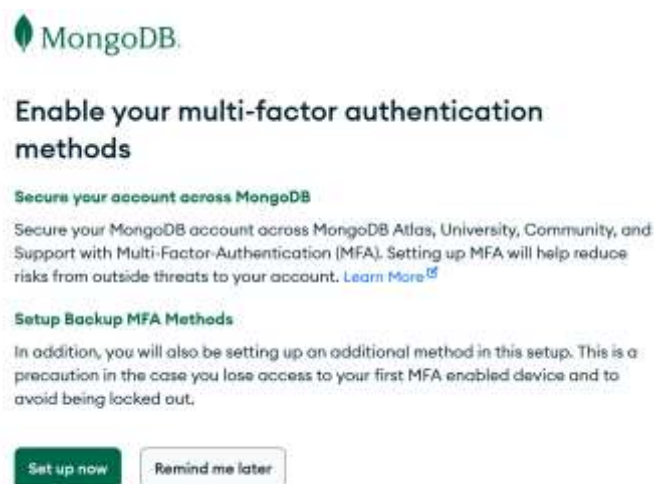
Figure 3: Click Dismiss

*Figure 4: Again, if you did not login with Google account, do not enable Multi-factor authentication. click '**Remind me later**'*

6. Cluster creation in Atlas

In atlas, we need to create a cluster first. By default, cluster is named as *Cluster0*. Do not try to change the name.
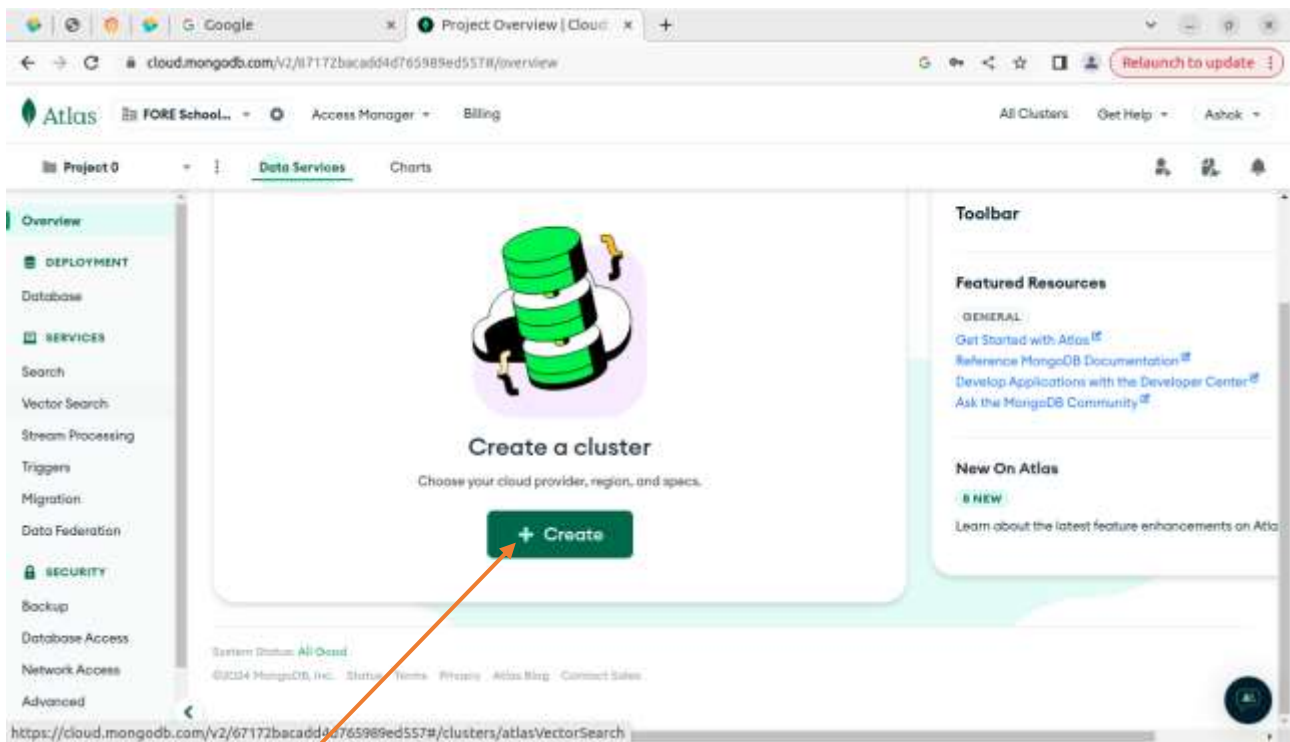
Figure 5: Click on Create a Cluster button, if cluster is NOT already created.

7. Cluster Deployment

For cluster deployment, there are a number of options. We will select the last one, i.e. the free option. Under this option, we can have a max data of 500mb.
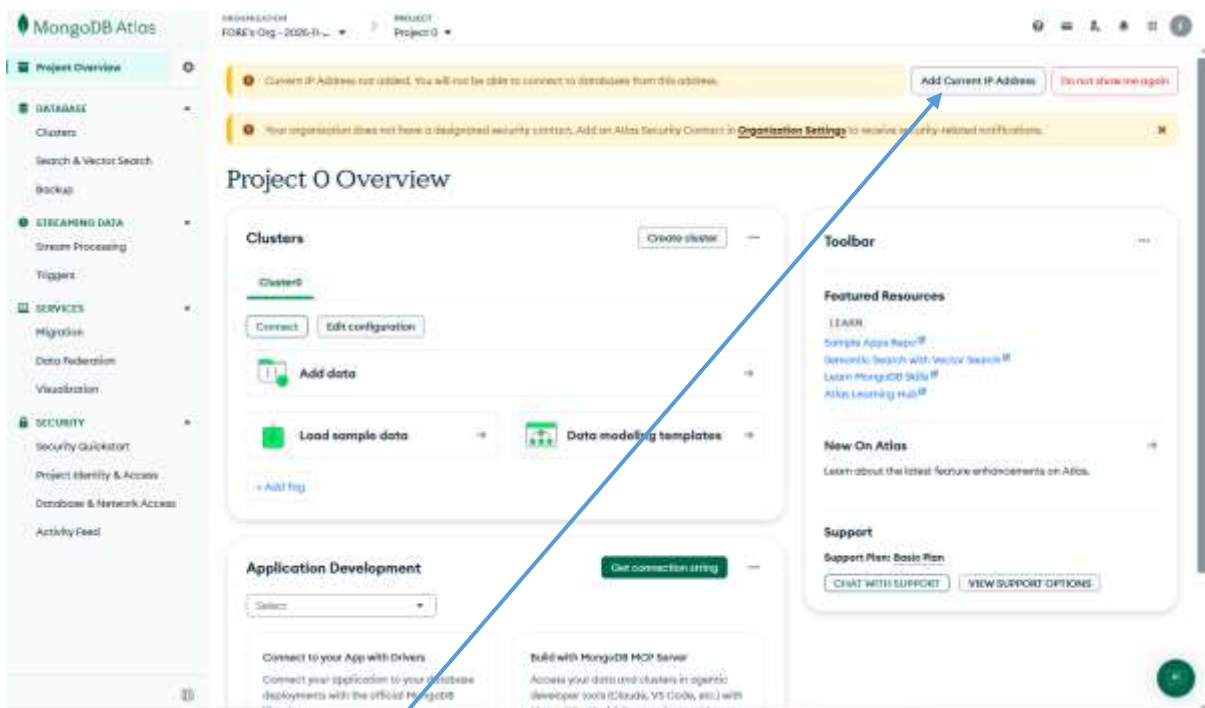
Figure 6: Click the button **'Add current IP address'** *so that you can work from your* **current location. If you intend to work** *from another location***, that IP Address will also have to be added.**
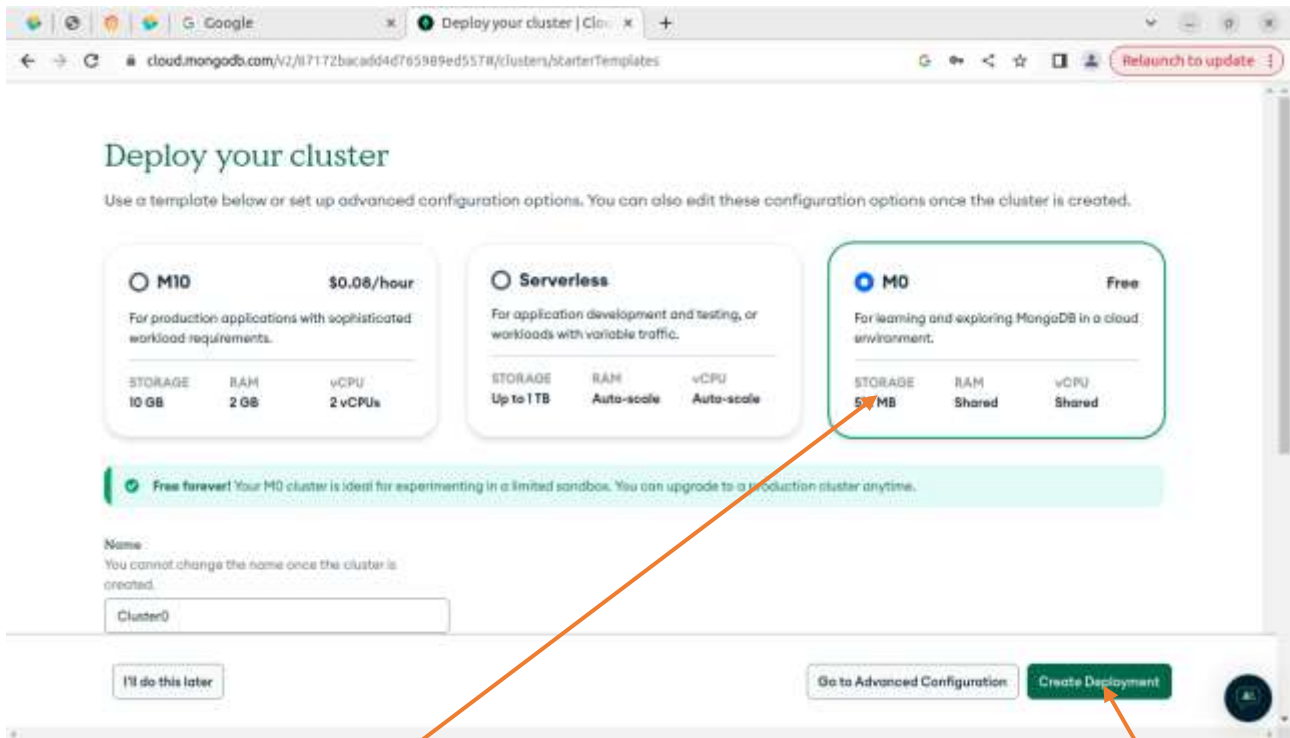
Figure 7: Select the free option M0 and accept all other default options. Click 'Create Deployment' button

8. Database User Creation

Database user is different from the user with which you logged into Atlas. A database user creation and allocating him proper role are a must. Keep your user password simple to remember; Recommended password: *ashok*. This user should be assigned *atlasAdmin* role. You will be able to create/drop a database in *Compass*, only if you have *atlasAdmin* role. See figures below on user creation:
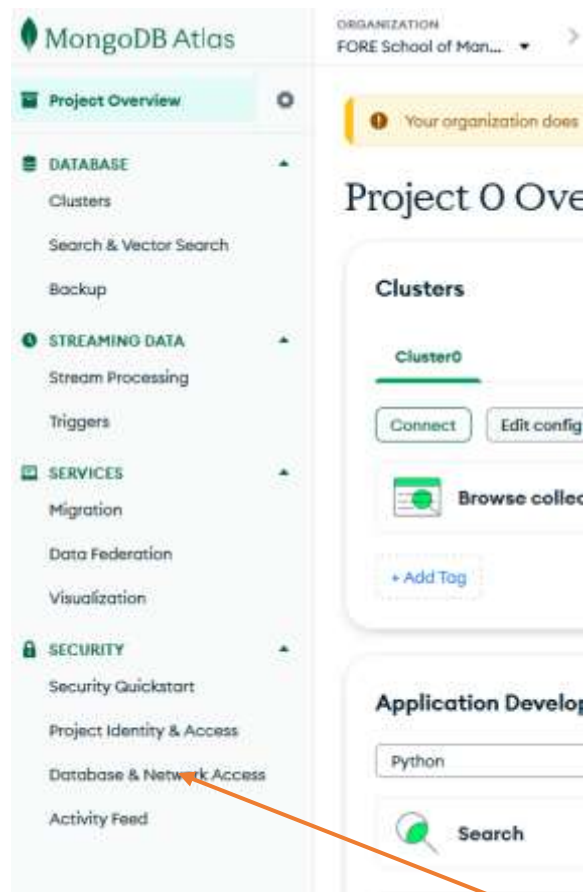
*Figure 8: Database user creation. On the left panel click **Database and Network Access**..*
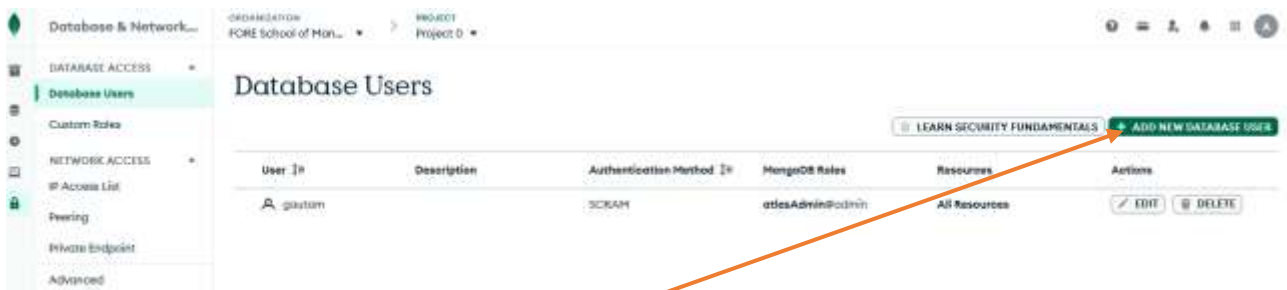
*Figure 9: Click on **Add a New Database User**. You are asked to create a database user. Do it. Keep the password simple.*

Add New Database User

Create a database user to grant an application or user access to databases and collections in your clusters in this project. Granular access control can be configured with default privileges or custom roles. You can grant access to project or organization using the corresponding Access Manager ⧉

Authentication Method

Password	Certificate	AWS IAM	Federated A (MongoDB 7.0 a

MongoDB uses SCRAM as its default authentication method.

Password Authentication

ashokharnal

••••••••

SHOW

This password contains special characters which will be URL-encoded.

🔑 Autogenerate Secure Password   📋 Copy

User Description

Add an optional description to your user.

Admin user

Figure 10: Select the Password method of login, name the user and his password, write User Description and select a role (see below figure)

User Description

Add an optional description to your user.

Admin user

Database User Privileges

Configure role based access control by assigning database user a mix of one built-in role, multiple custom roles, and multiple specific privileges. A user will gain access to all actions within the roles assigned to them, not just the actions those roles share in common. **You must choose at least one role or privilege.** Learn more about roles.

Built-in Role   1 SELECTED ∧
Select one built-in role for this user.

Atlas admin   ▼
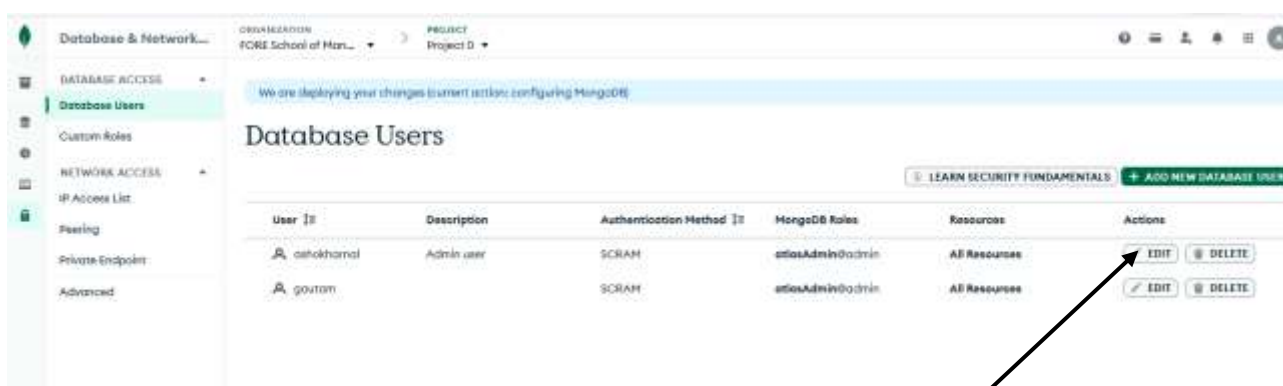
Custom Roles   ∨
Select your pre-defined custom role(s). Create a custom role in the Custom Roles ⧉ tab.

Specific Privileges   ∨
Select multiple privileges and what database and collection they are associated with.
Leaving collection blank will grant this role for all collections in the database.

Figure 11: In the same window as above, select role as Atlas admin role. This is very important.

Figure 12: Two users are here with atlasAdmin roles. You can click on Edit button to amend roles, if required.

9. IP access list

IP access list is important. You can access your project only from the listed IPs.

Figure 13: You can work in Atlas only from these listed IPs. If you change your working place, Add that IP also. This done, click on Clusters on the left panel to reach below.
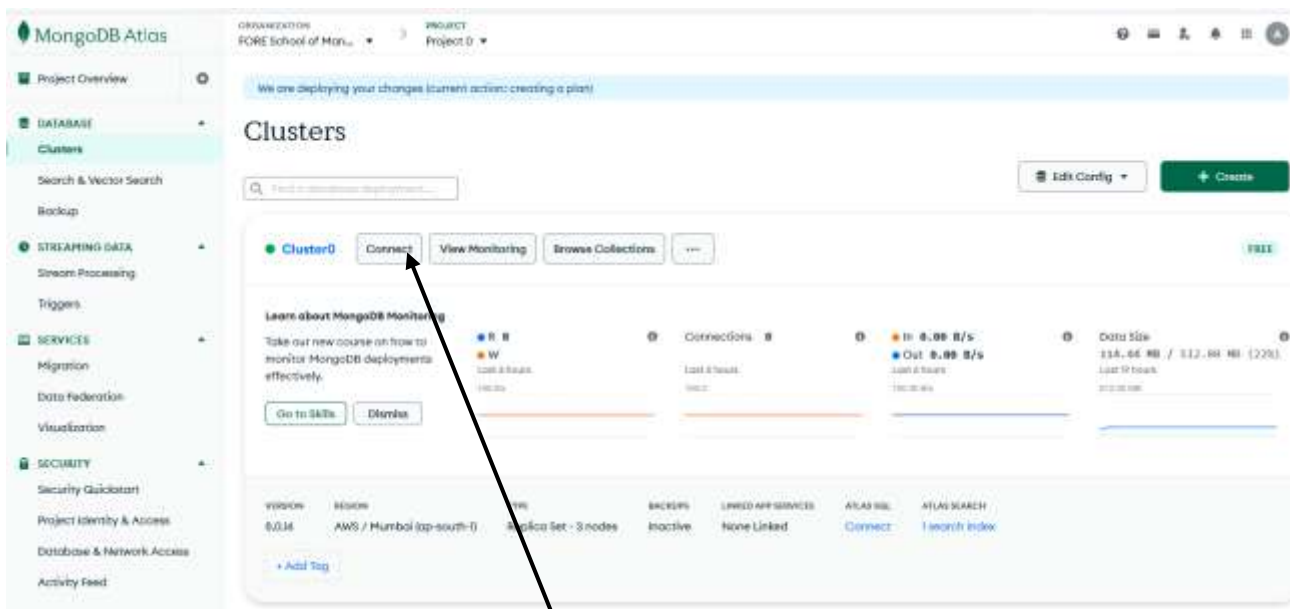
10. Back to our Cluster

Figure 14: Click on Clusters on the left panel to reach here. This page gives a brief overview of cluster0 resource utilization. Then click Connect button, a Window will open (see figure below).

11. Getting Connection string (Connection URL) for Compass

We have to get URL for Compass on Windows to connect to Atlas on Cloud. Compass provides an excellent interface to many tasks in Atlas cloud. First, ensure that Compass is started. Then, back in Atlas, in the Connect window proceed as below:

Figure 15: In the Connect window, click on Compass method of connection

Connect to Cluster0

Set up connection security ✓ — Choose a connection method ✓ — ③ Connect

Connecting with MongoDB Compass

| I don't have MongoDB Compass installed | I have MongoDB Compass installed |

1. Select your operating system and download MongoDB Compass

Ubuntu 64-bit (20.04+) ▼

⬇ Download Compass (1.48.2)   or   ⧉ Copy download URL

Compass is an interactive tool for querying, optimizing, and analyzing your MongoDB data.

2. Copy the connection string, then open MongoDB Compass
Use this connection string in your application

```
mongodb+srv://<db_username>:<db_password>@cluster0.hzcbfrs.mongodb.net/
```

Replace **<db_password>** with the password for the **<db_username>** user. Ensure any options are URL encoded. ☑
You can edit your database user password in Database Access. ☑

RESOURCES

Connect with Compass ☑   Import and Export Data ☑

Access your Database Users ☑   Troubleshoot Connections ☑

Go Back   Done

Figure 16: Forget, Step 1, as your Compass is already installed. Come to Step 2 and copy the connection string to notepad. In the notepad, in the connection string, you have to replace db_username and its password with actuals (read below).

Here is the modified connection string:

Original Copied one
```
mongodb+srv://<db_username>:<db_password>@cluster0.hzcbfrs.mongodb.net/
```
Modified one
```
mongodb+srv://ashokharnal:Gautam*8@cluster0.hzcbfrs.mongodb.net/
```

12. In Compass: Connect compass and create Database

Figure 17: In Compass, click Add new connection and supply the connection URL (overwrite any other connection url). Click Save and Connect. Compass should now connect with Atlas.
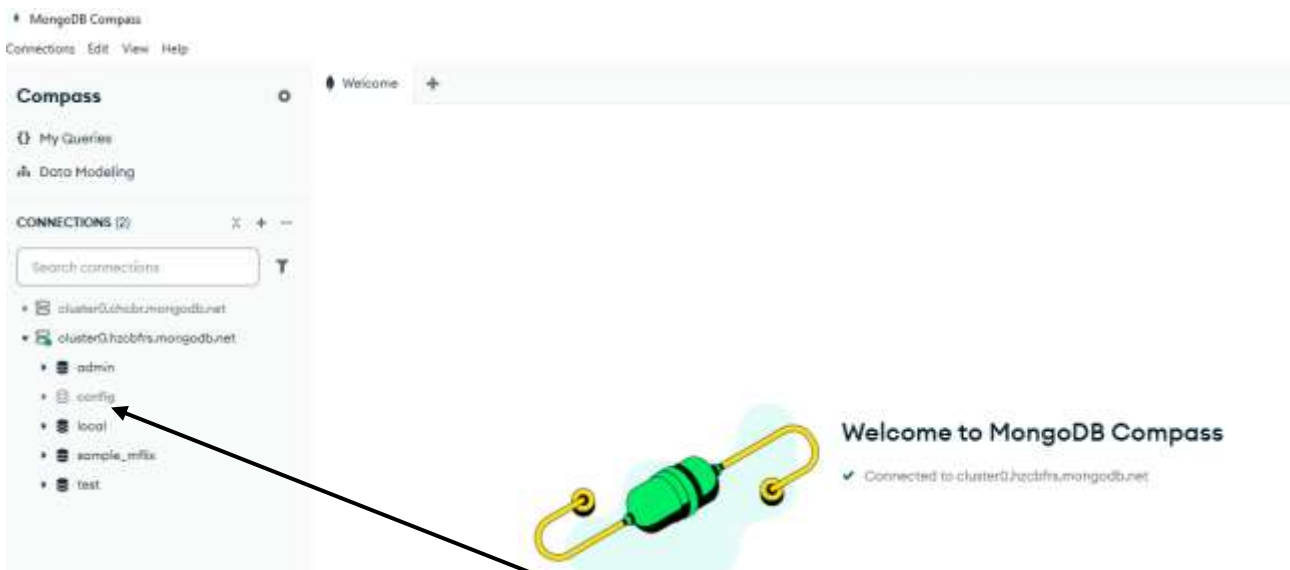

Figure 18: After connection, we get some new objects coming into Compass from Atlas. Your objects may be different.

At times Compass does not connect to Atlas. Here are some hints to problems:

```
Solving Compass Atlas Connection String problems
==================================================
1. Check database user privileges under Data Access page
   Should be 'atlasAdmin'
2. Check database user password or better change it
   under Data Access page
3. Under Network Access tab, permit connections from all IPs.
```

4. Check your firewall/ant-virus software
5. Lastly, create a login account from a different email.
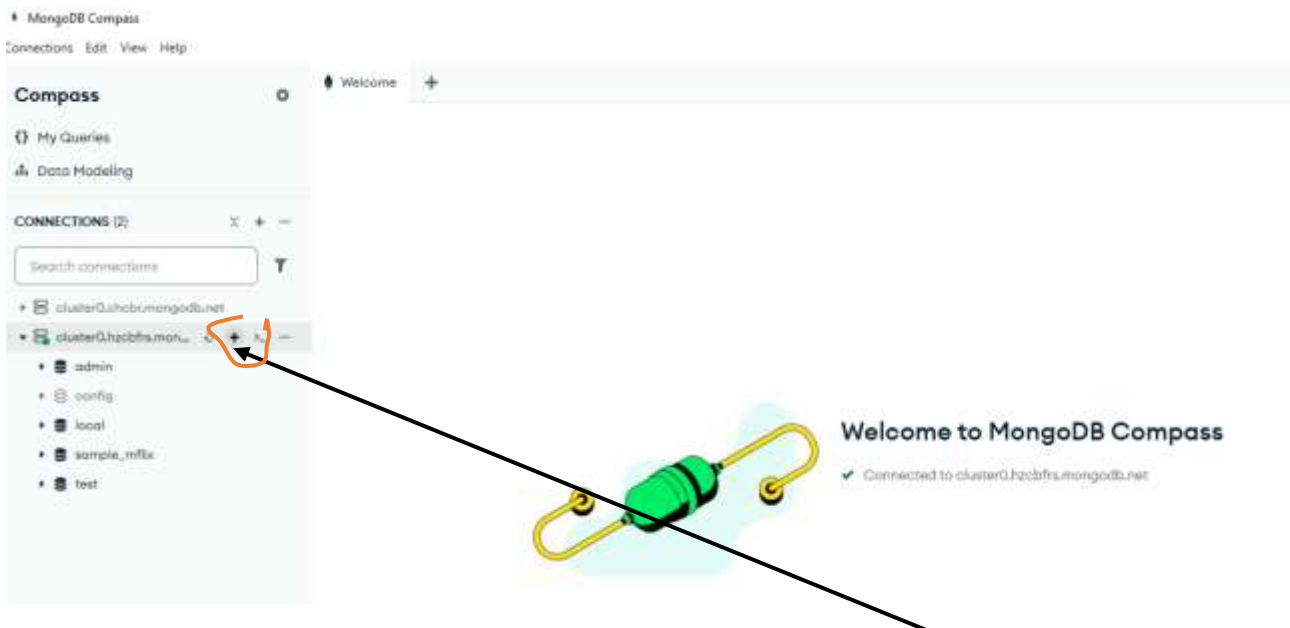
Figure 19: To create a database and within it a collection, click on this ✚ sign against the connection name to create a database in Compass (See fig below).

13. Create Database in Compass

A database in MongoDB may have a number of collections. Collections are akin to tables in SQL databases.

Figure 20: Name your database and collection and click Create Database button.

14. Compass: Importing data into Collection

You can import into MongoDB collection, any csv file or any json file.
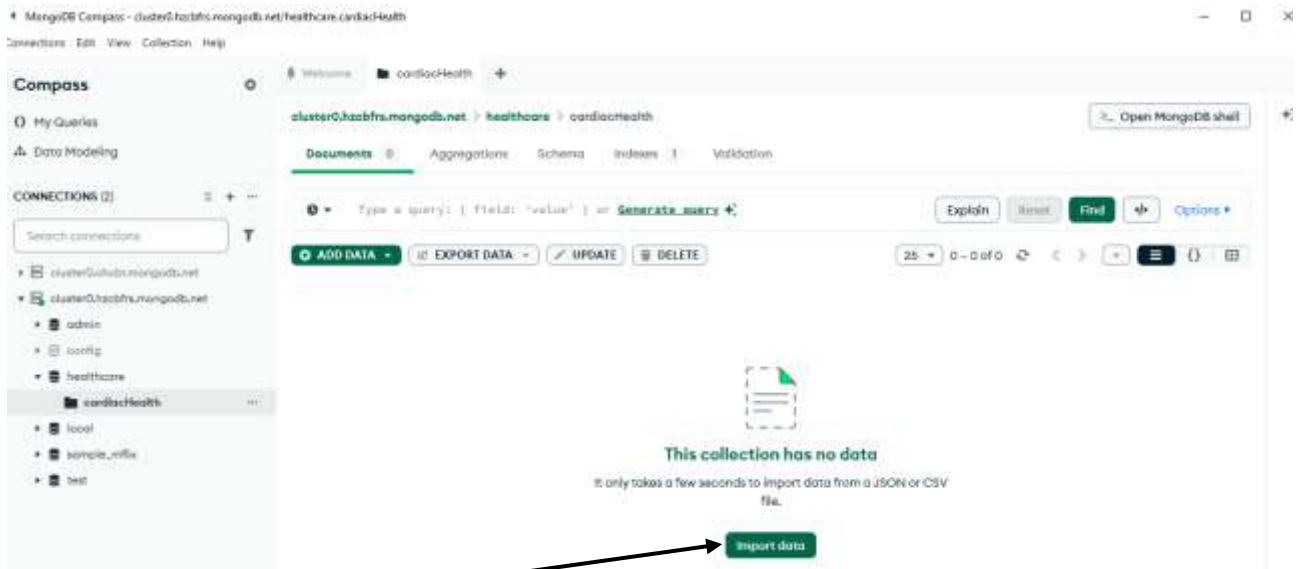
Figure 21: Click Import Data button to import any csv file or JSON file in the Collection cardiaHealth.
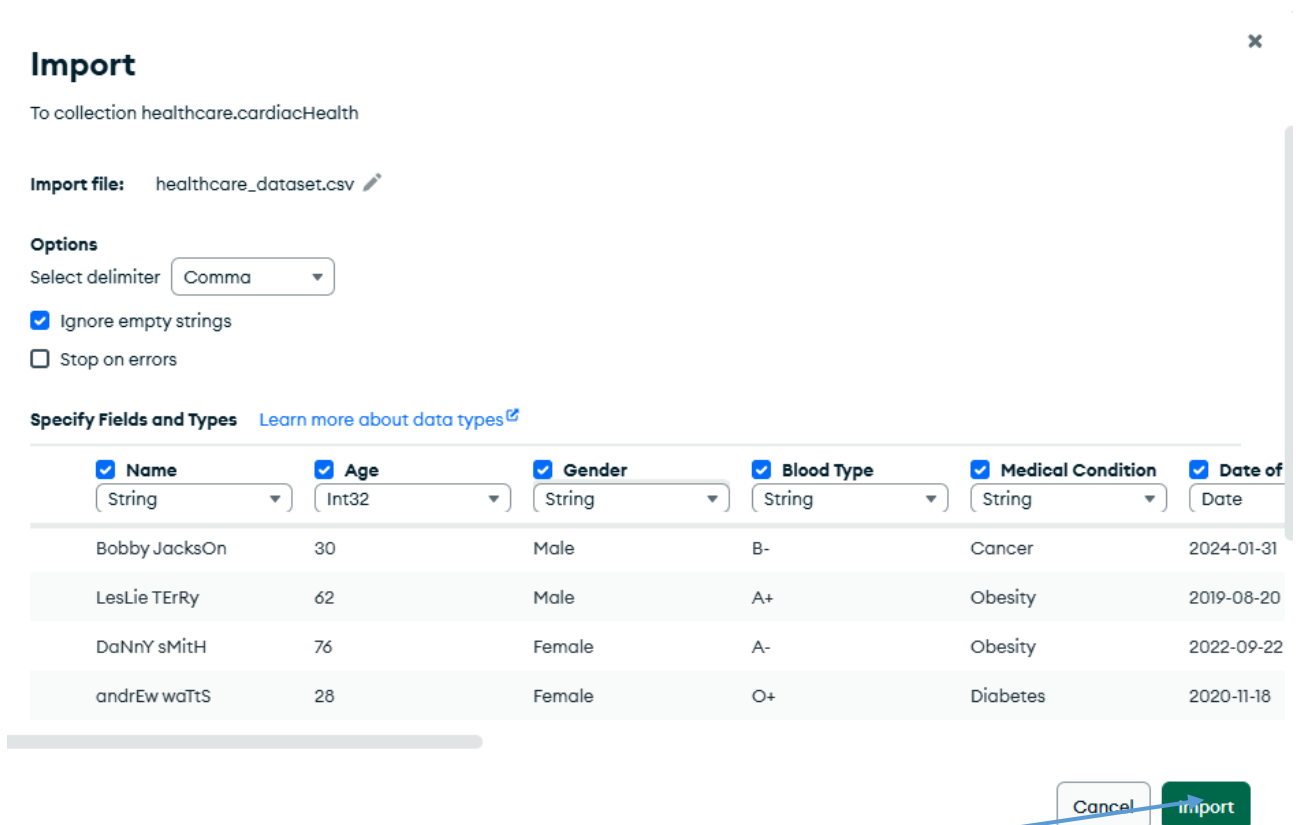
Figure 22: Status after importing. Click again on Import button to commit.
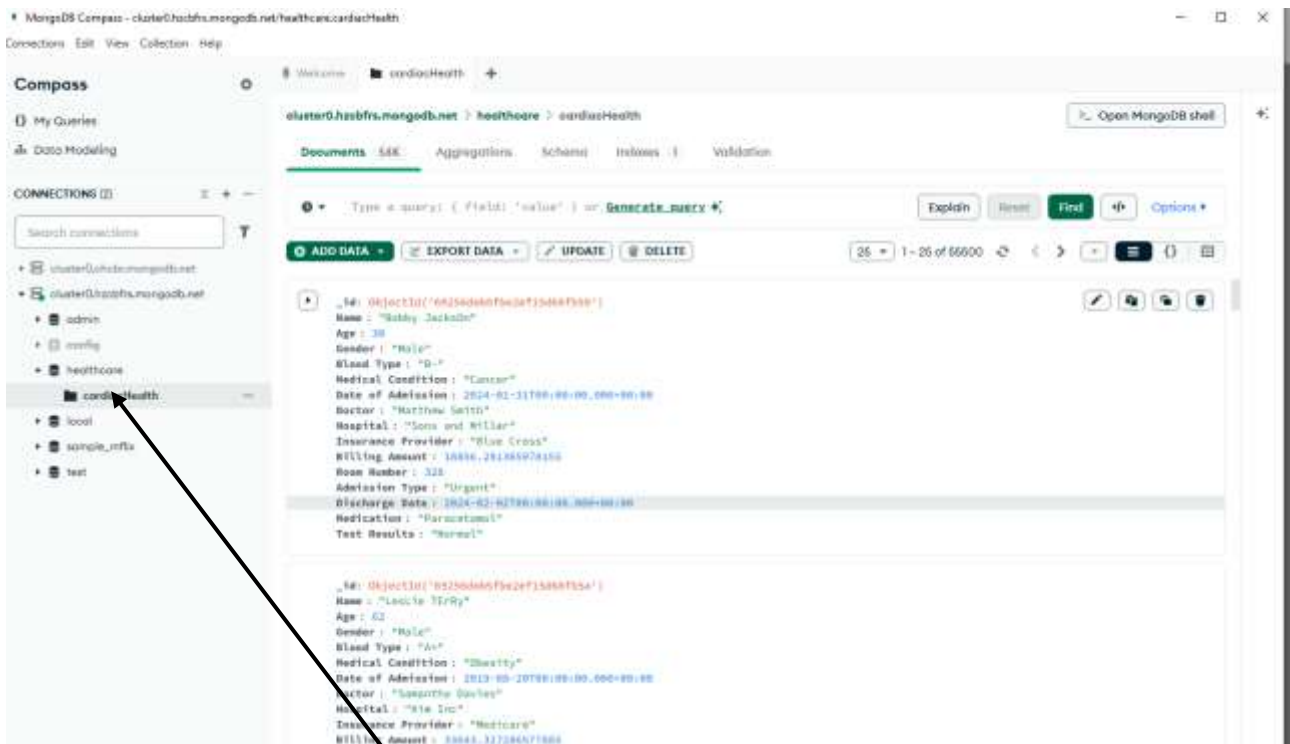
Figure 23: Compass: Our data as it is in in the collection. Note that csv file has been imported but the collection takes it as a json file.

15. Back in Atlas

Back in Atlas, click on cluster0 within the Clusters.
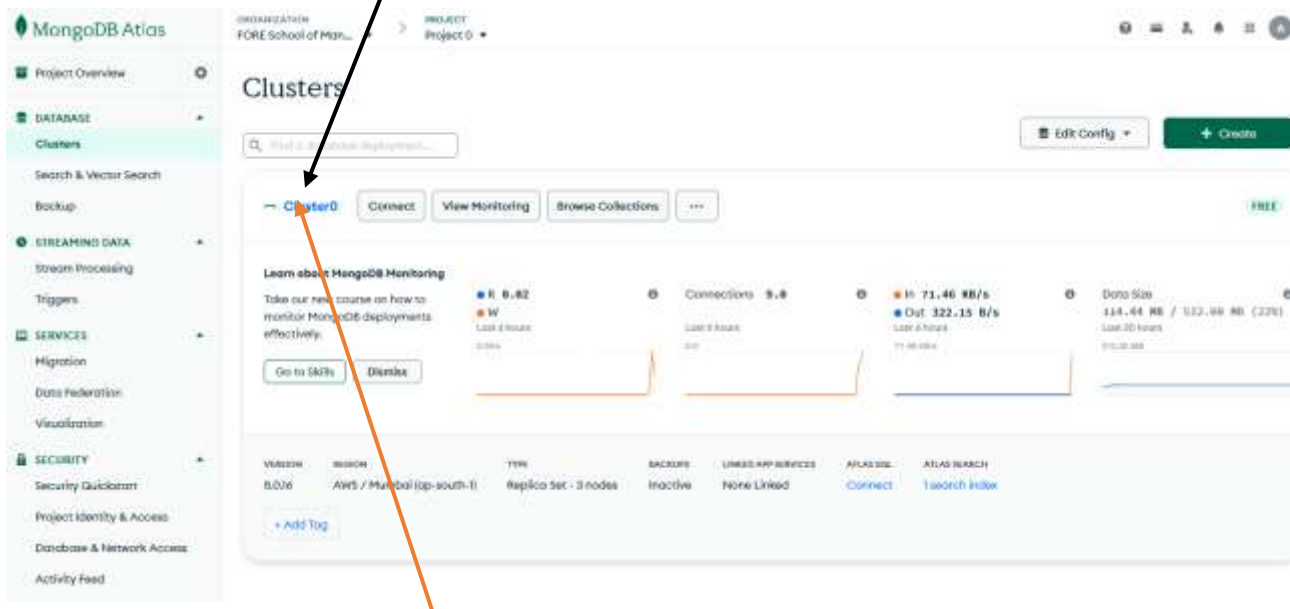
Figure 24: Back in Atlas, Click cluster0
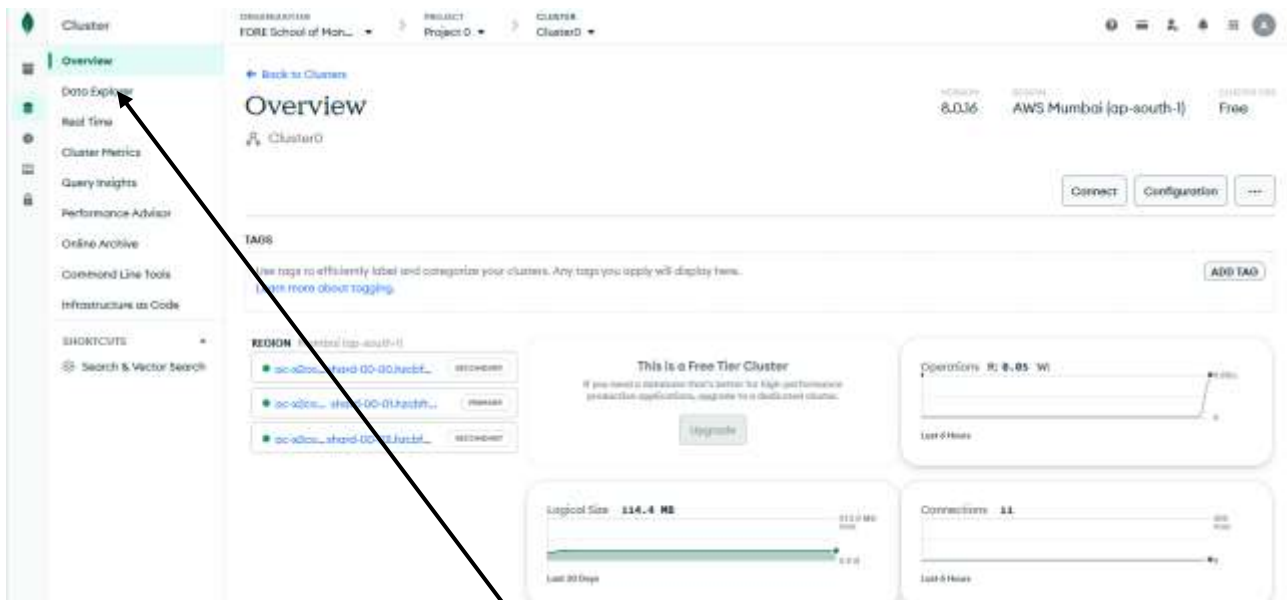
Figure 25: Cluster0 opens. Click Data Explorer to see data.

16. Data Visualization

To visualize data, click on *Visualize* your data button.
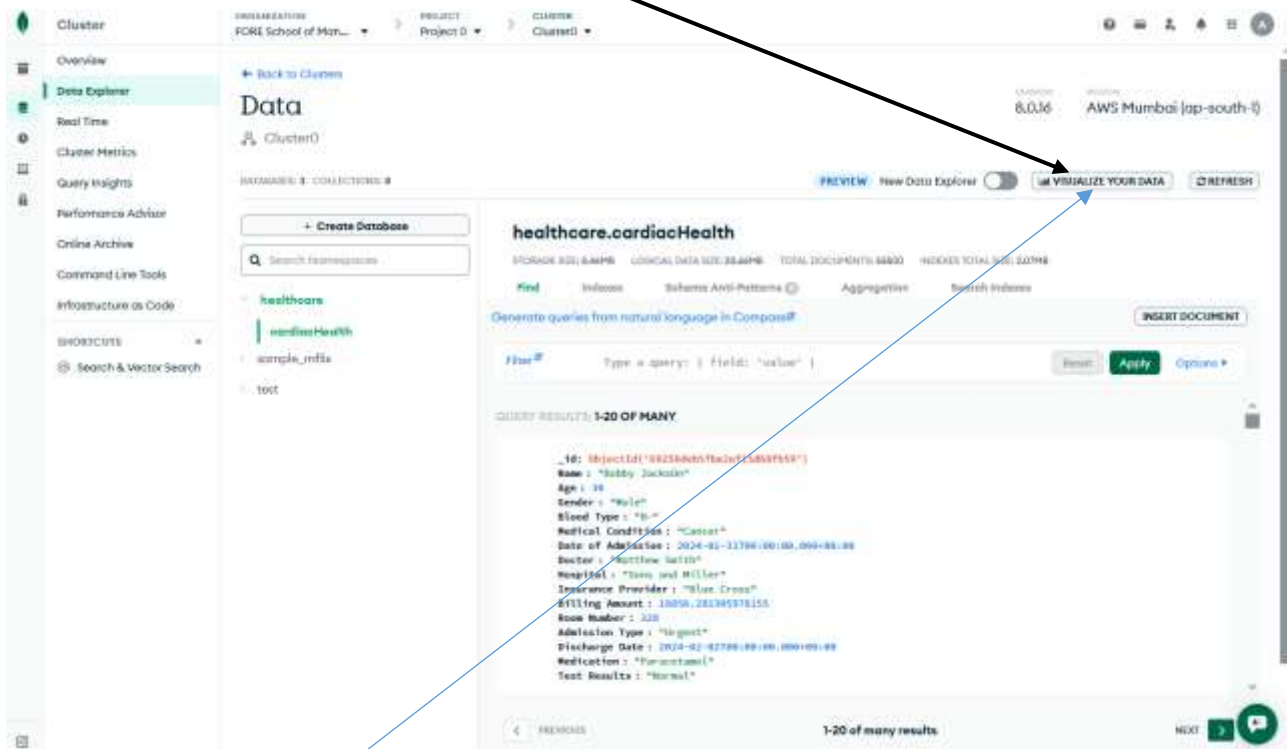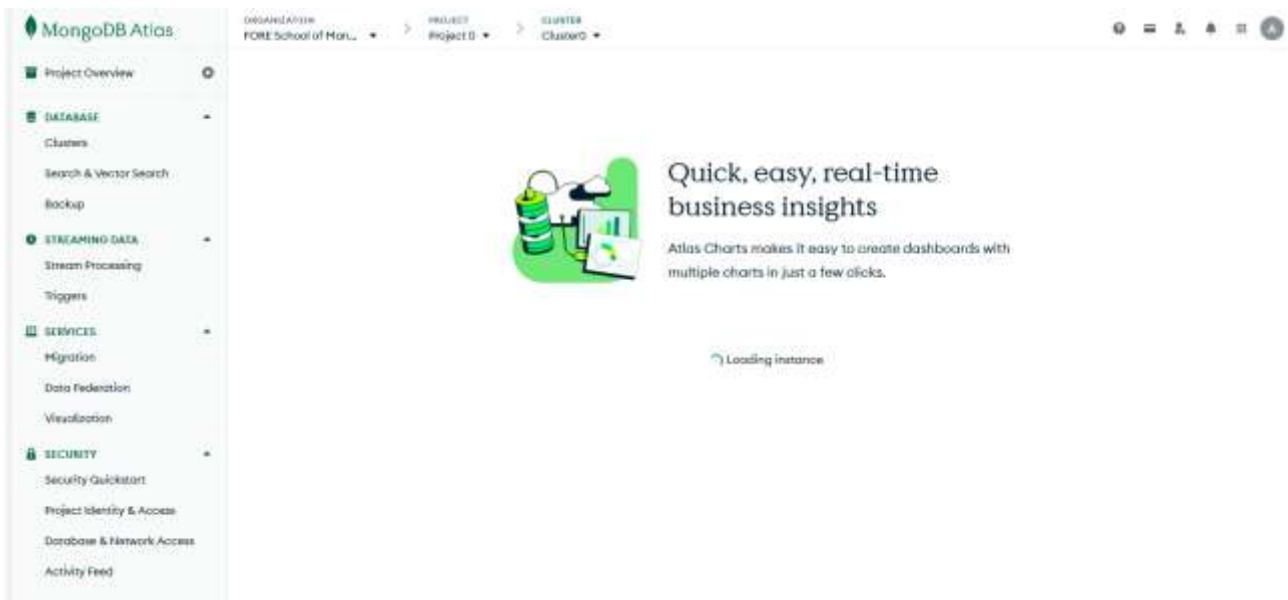

Figure 26: Click on Visualize your data

Figure 27: Visualization takes time to open as it first takes a random sample of data and then only creates visualization from that sample. All the data is NOT used to create visualization.
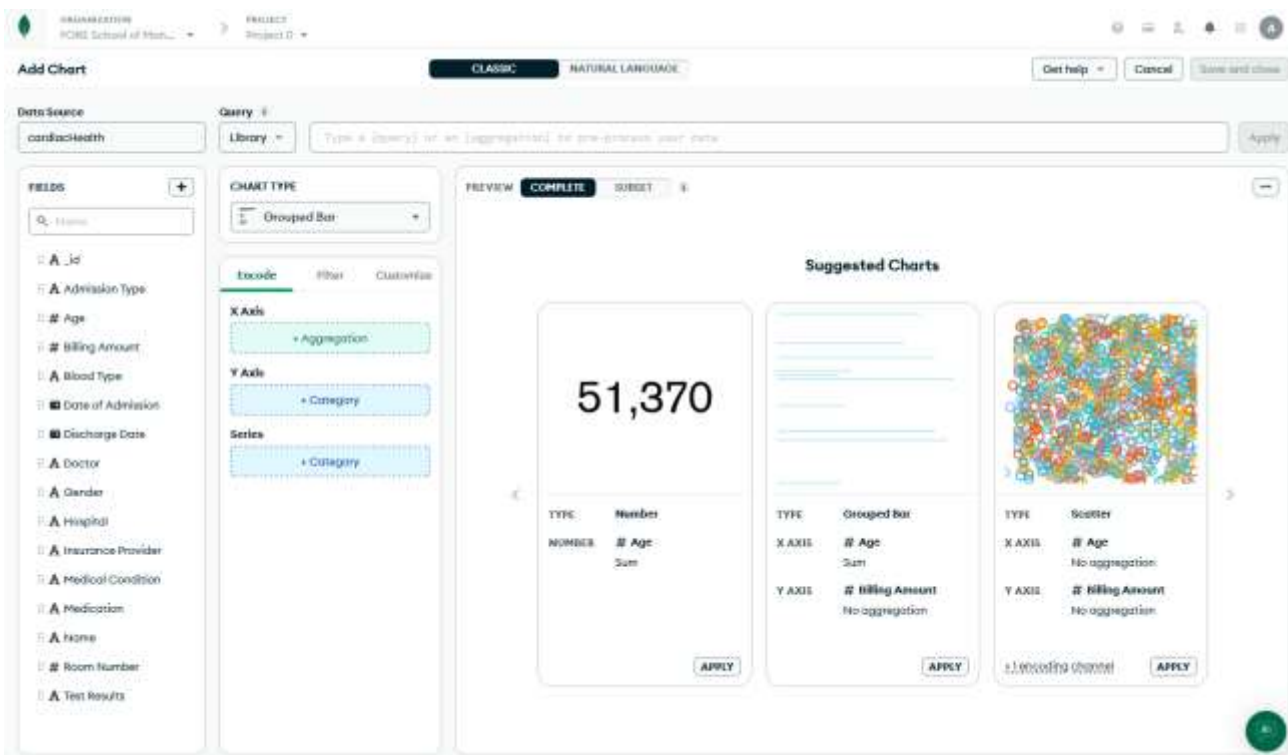
Figure 28: A sample visualization is created from a sample dataset of cardiacHealth collection.

17. Project0 page

A cluster occurs under a Project. Our *Cluster0* occurs under *Project0*.
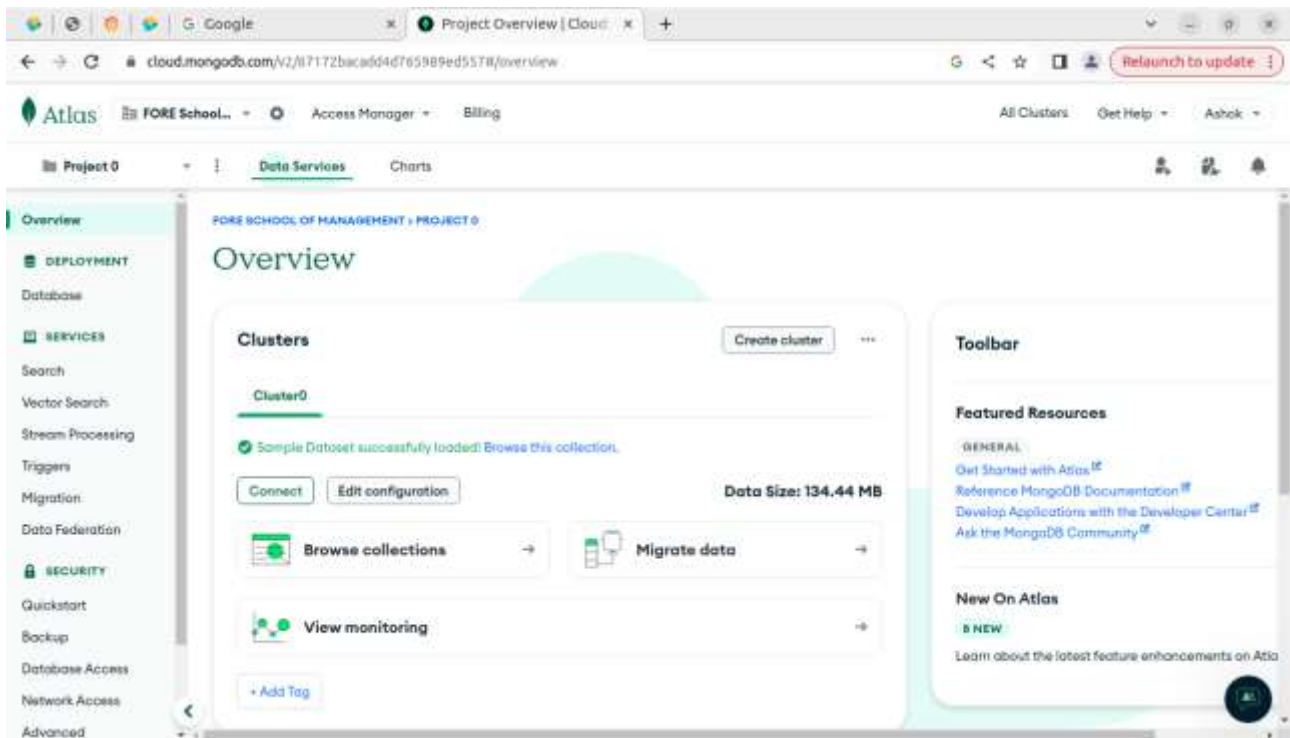
Figure 11: Cluster0 occurs under Project0. Note the total Data Size of database sample_mflix as 134mb

18. Working without Compass

One can directly create databases and, within it, collections from Atlas only. But large document ingestion poses problems and also csv files cannot be uploaded. Here is a step-by-step process:
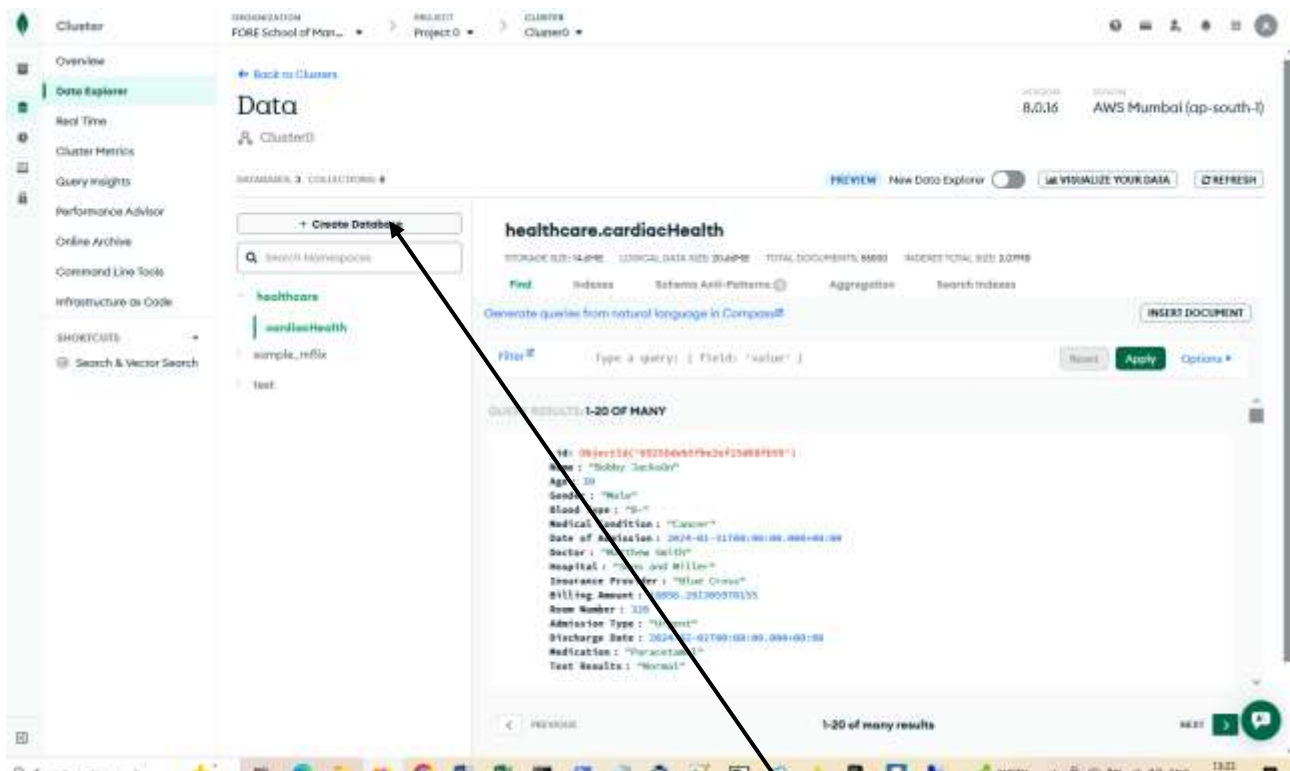
Figure 29: This is where we are. Click on the button Create Database to begin.

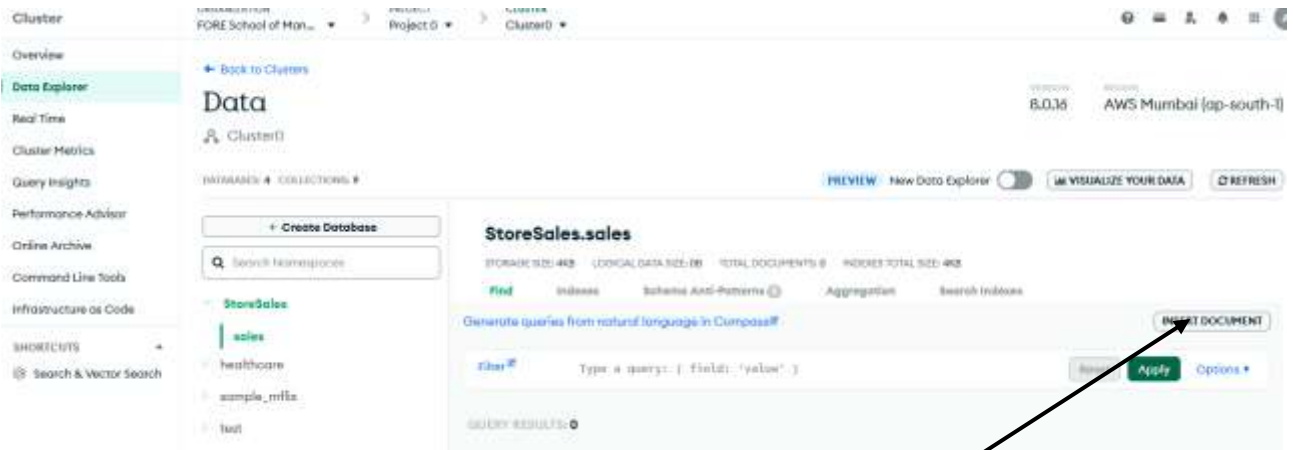*Figure 30Supply Database name and collection name and click Create.*

Figure 31: Database and collection are created. Click on the button, Insert Documents to insert data.
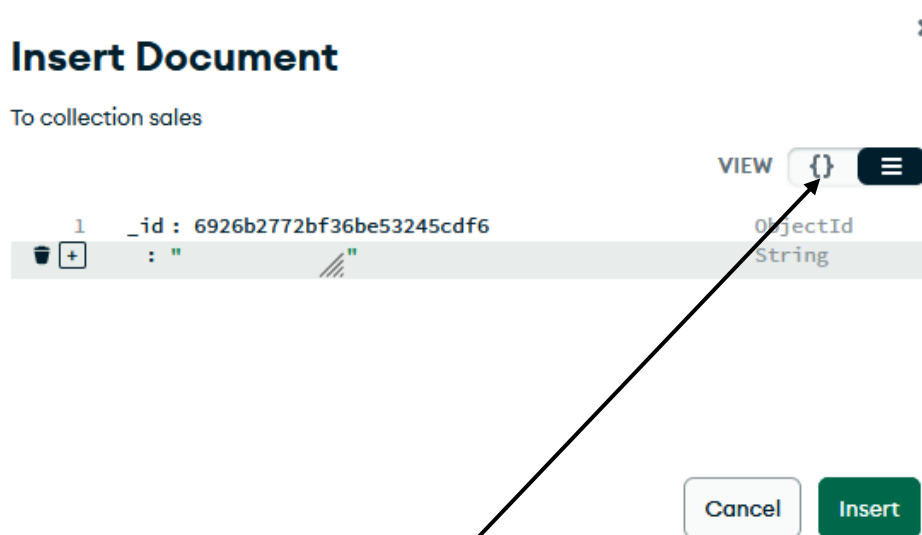

Figure 32: Here click on the curly braces {} and then remove everything that appears (see below).

Insert Document

To collection sales

VIEW {} ≡

1

⚠ Insert not permitted while document contains errors.

Cancel   Insert

Figure 33: We have now a blank page. We will copy and paste here an array of JSON documents.

Figure 34: JSON file opened in notepad++. Copy the contents. DO NOT COPY VERY LARGE DOCUMENTs.

Insert Document

✕

To collection sales

```
190990        "Product Name": "Fellowes Lockers, Industrial",
190991        "Sales": "519.525",
190992        "Quantity": "5",
190993        "Discount": "0.5",
190994        "Profit": "-394.875",
190995        "Shipping Cost": "46.41",
190996        "Order Priority": "Critical"
190997      },
190998      {
190999        "Row ID": "32433",
191000        "Order ID": "CA-2013-152170",
191001        "Order Date": "13-11-2013",
191002        "Ship Date": "16-11-2013",
191003        "Ship Mode": "Second Class",
191004        "Customer ID": "FH-14275",
191005        "Customer Name": "Frank Hawley",
191006        "Segment": "Corporate",
191007        "City": "La Porte",
191008        "State": "Indiana",
191009        "Country": "United States",
191010        "Postal Code": "46350",
191011        "Market": "US",
191012        "Region": "Central",
191013        "Product ID": "OFF-EN-10002831",
191014        "Category": "Office Supplies",
191015        "Sub-Category": "Envelopes",
191016        "Product Name": "Tyvek  Top-Opening Peel & Seel
191017        "Sales": "287.52",
191018        "Quantity": "8",
191019        "Discount": "0",
191020        "Profit": "129.384",
191021        "Shipping Cost": "46.41",
191022        "Order Priority": "High"
191023      }
191024    ]
191025
```

Cancel   Insert

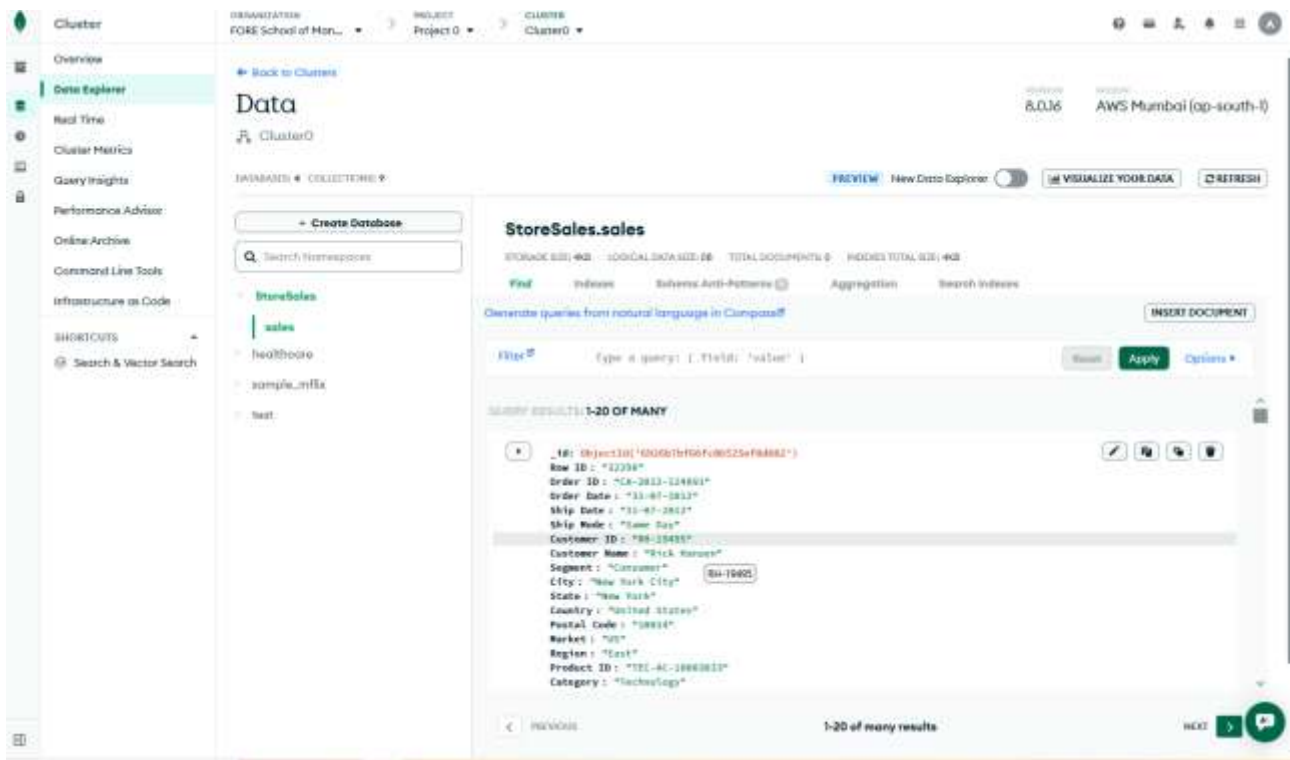*Figure 35: Paste the file contents here. Click Insert button. Insertion takes time. So WAIT…*

Figure 36: Inserted data into the collection.

19. Dropping collection and database from Atlas

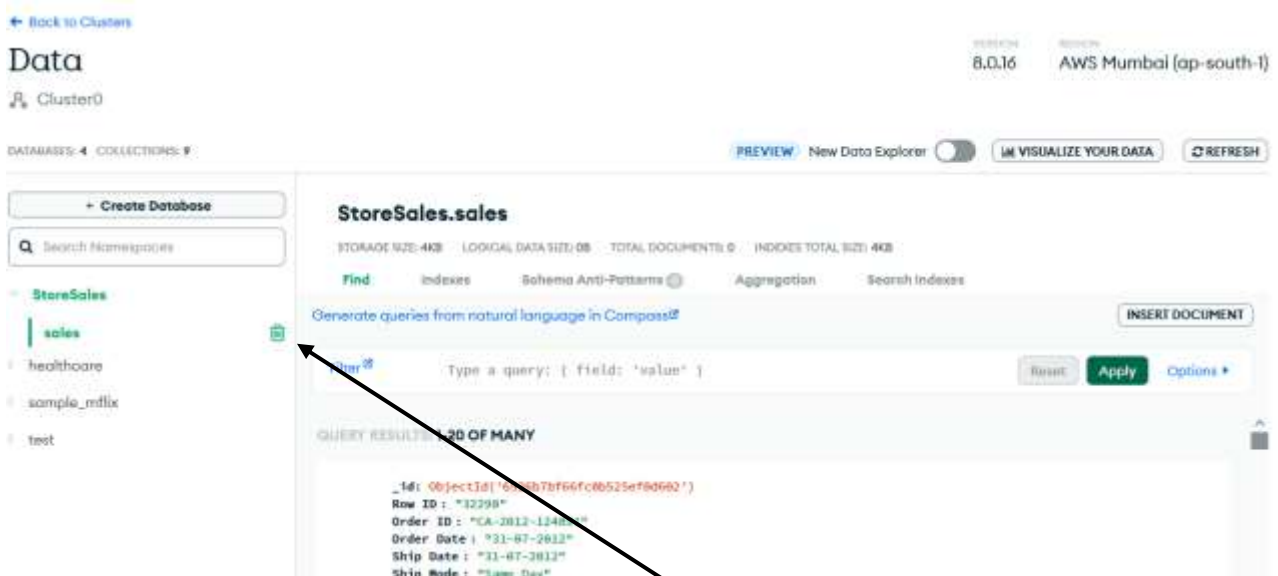This collection can be dropped by clicking on the trash icon against it. (See below)

Figure 37: Drop the collection by clicking against the trash icon against it.

Similarly, StoreSales database can also be dropped by clicking on the trash icon against it.

20. Drop database in Compass

You will be able to drop a database in Compass, only if you have *atlasAdmin* role. You can check your role by going to *Database Access* page in Atlas.
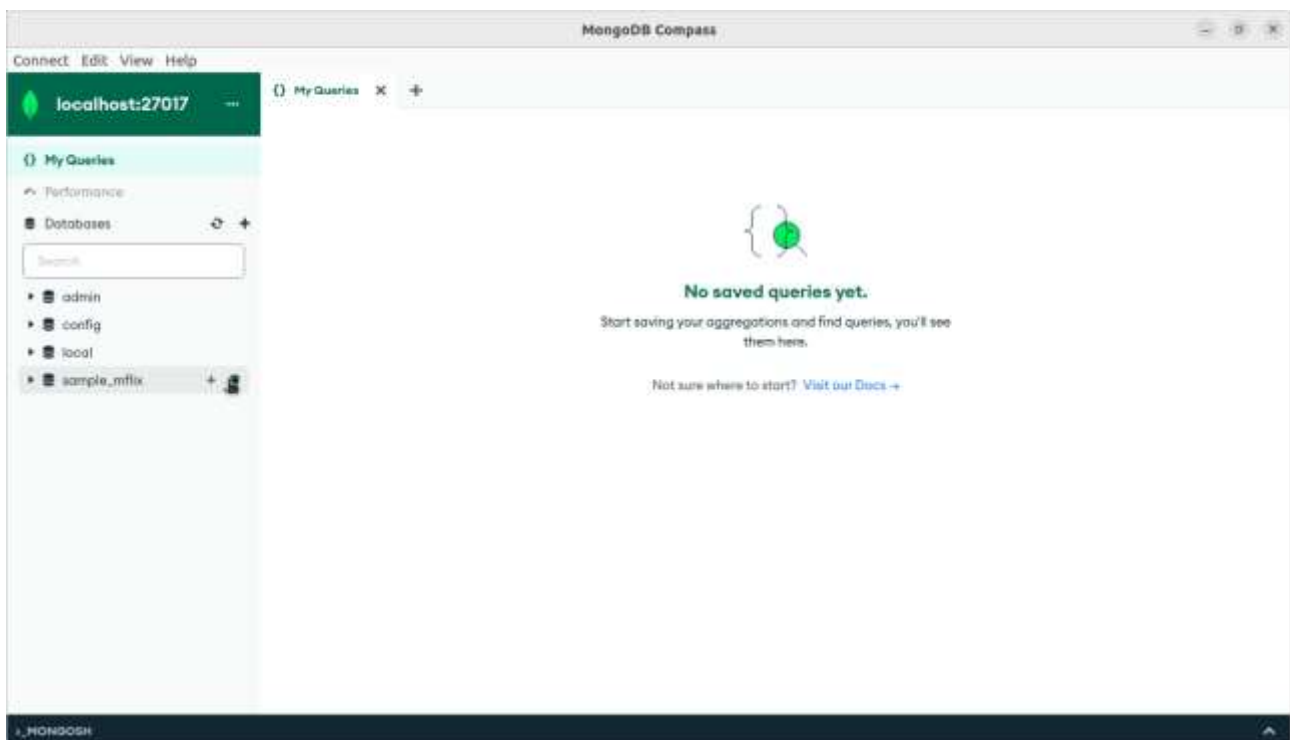

*Figure 12: Back in **compass**, let us drop this database by clicking on the trash icon against it.*
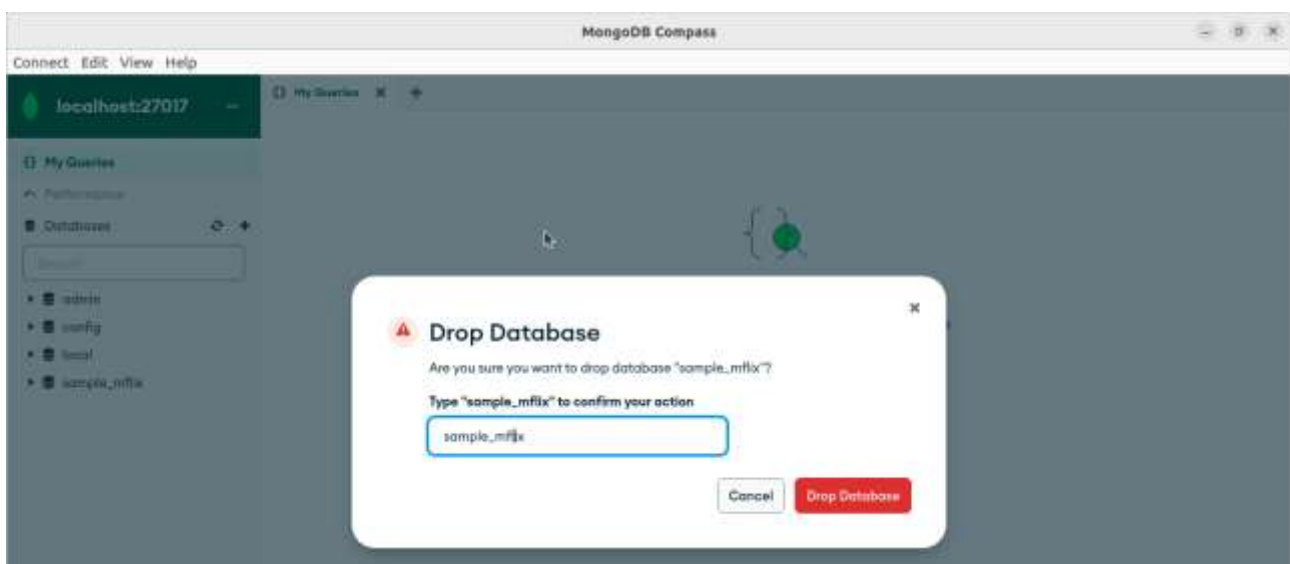

Figure 13: Click Drop database button

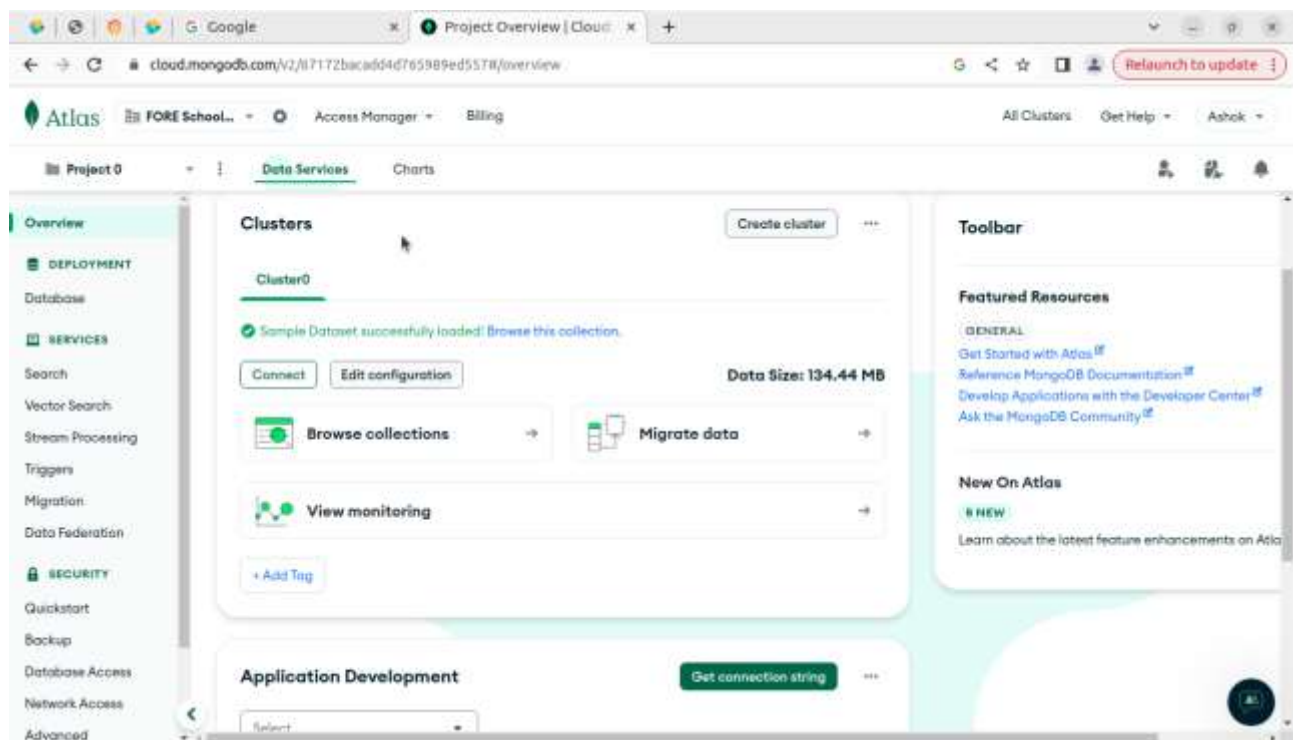Back in Atlas, observe if database will be dropped?

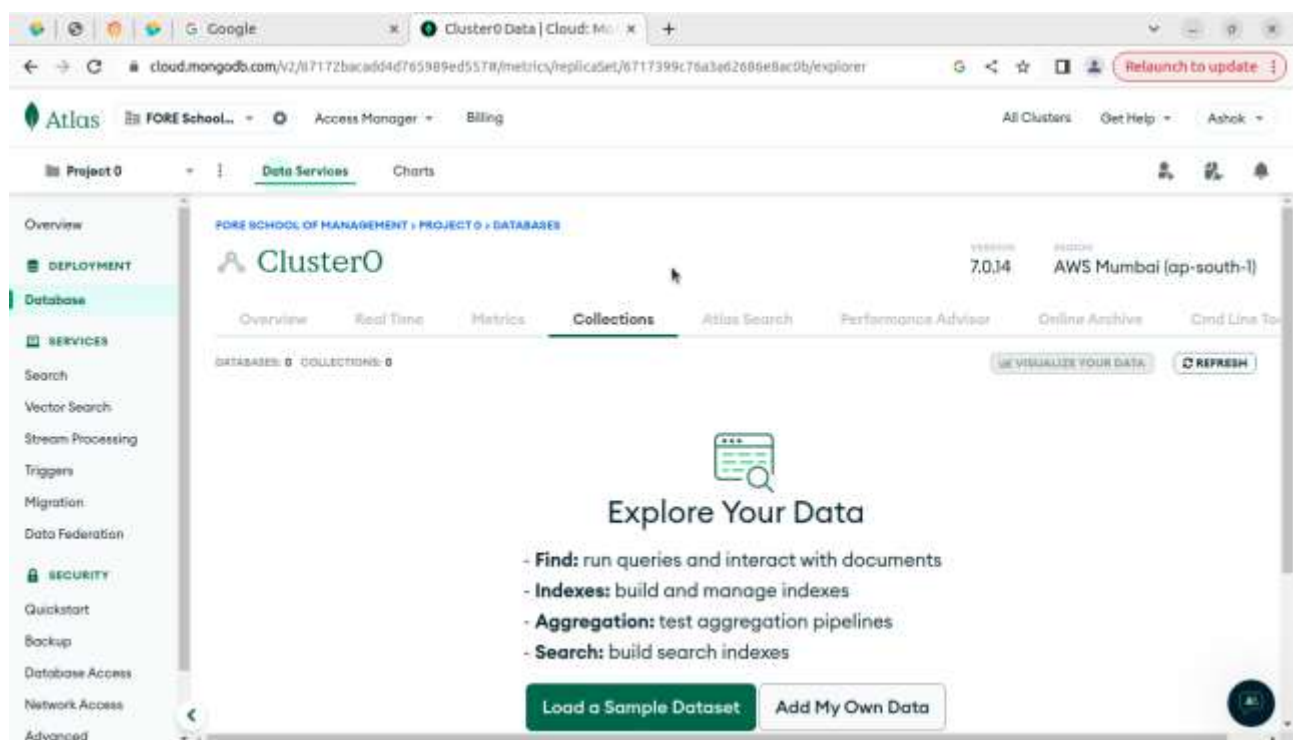*Figure 14: In **Project0** page, Click on **Browse Collections** again.*

Figure 15: No database or collection is available in Cluster0.

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