

Lesson 01 Demo 02

Exploring MongoDB Atlas Database Collection and Documents

Objective: To explore the MongoDB Atlas database collection and documents by creating a database user and connecting to the database

Tools required: NA

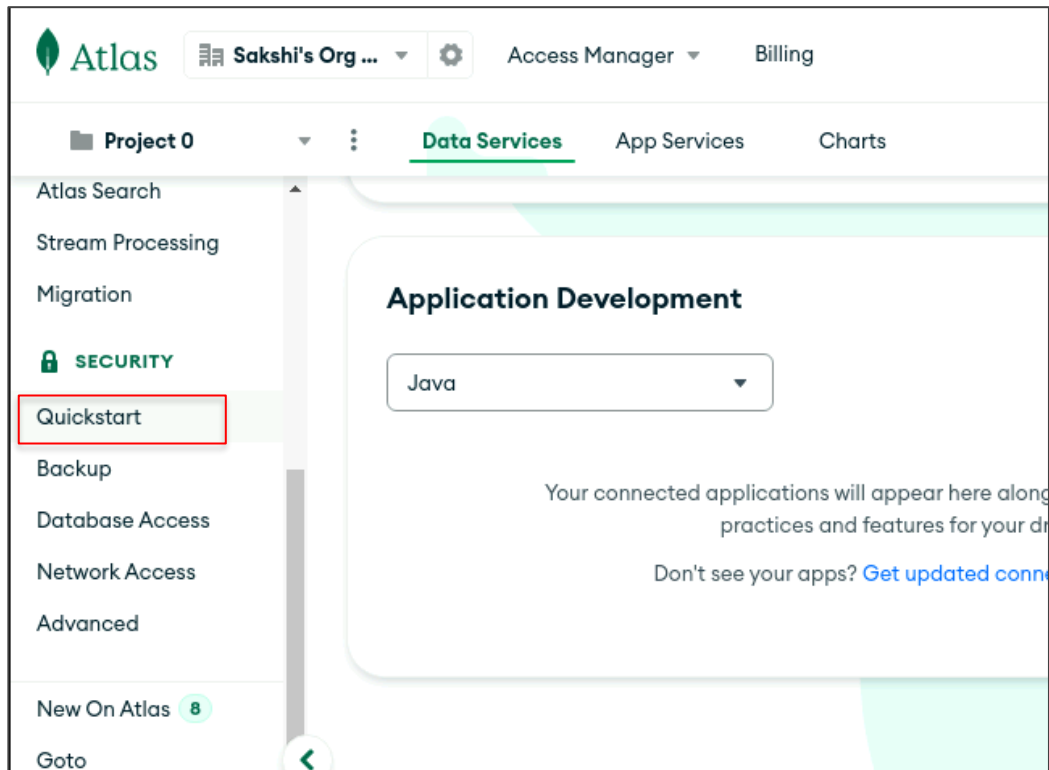
Prerequisites: None

Steps to be followed:

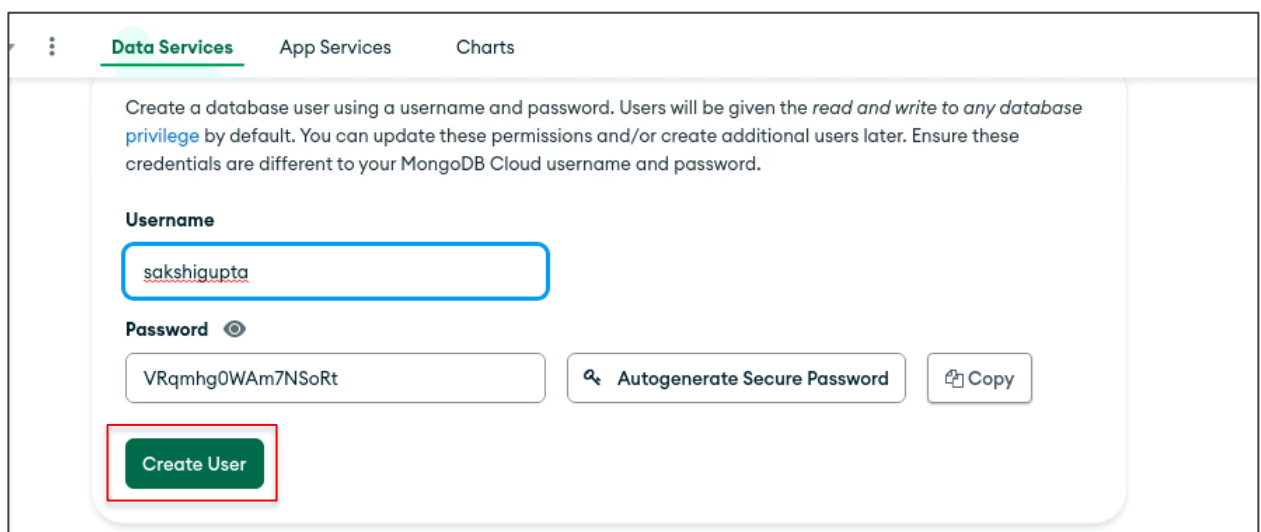
1. Create a database user
2. Connect to the database
3. Load the sample dataset
4. Insert a document
5. Edit the document

Step 1: Create a database user

1.1 Click on **Quickstart** under the **Security** section




1.2 Create a database user by providing a **username** and **password**, then click on **Create User**



Create a database user using a username and password. Users will be given the *read and write to any database privilege* by default. You can update these permissions and/or create additional users later. Ensure these credentials are different to your MongoDB Cloud username and password. You can manage existing users via the [Database Access Page](#).

Username

Password 


Success! Please keep your credentials to connect to your cluster.

1.3 To connect the database to a cluster, scroll down and select **My Local Environment**

✓ Where would you like to connect from?


Enable access for any network(s) that need to read and write data to your cluster.

My Local Environment



Use this to add network IP addresses to the IP Access List. This can be modified at any time.

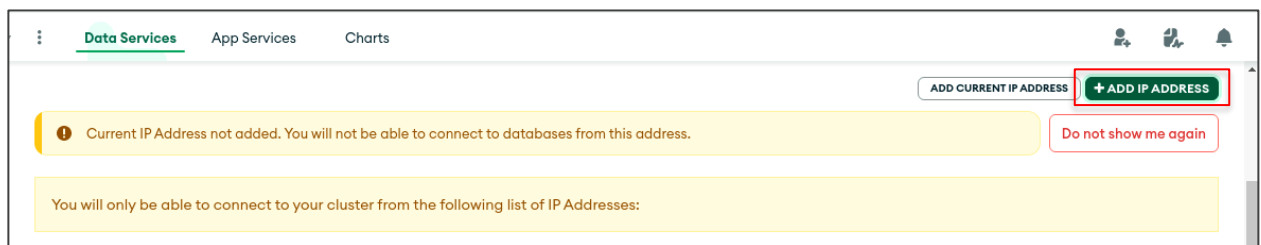
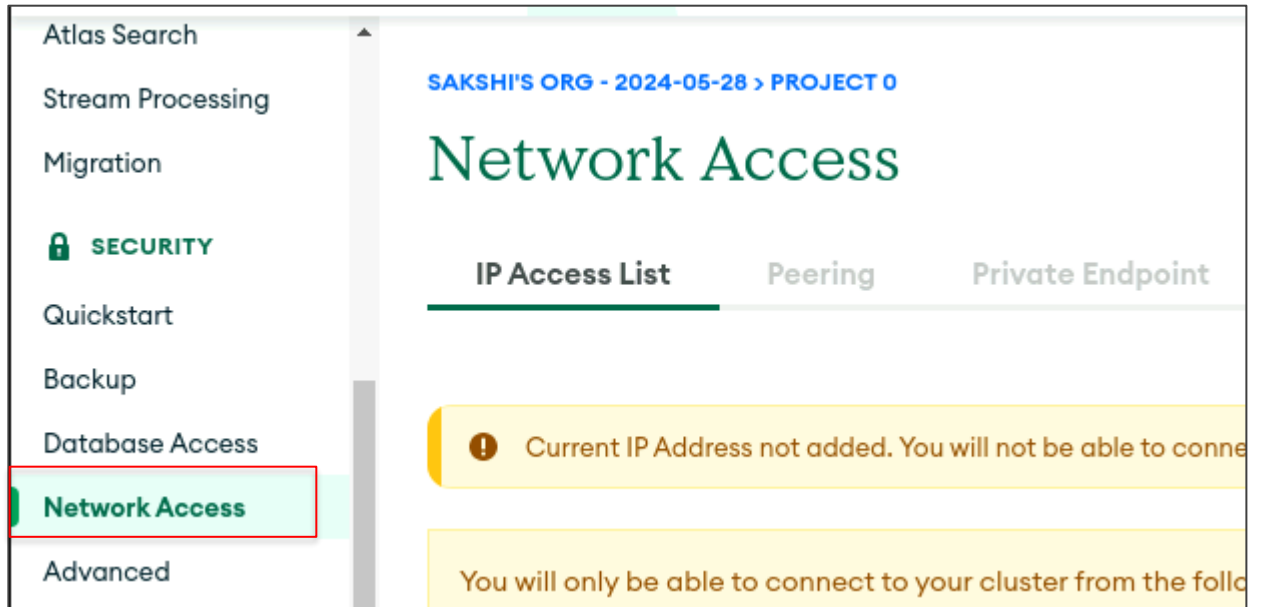
Cloud Environment



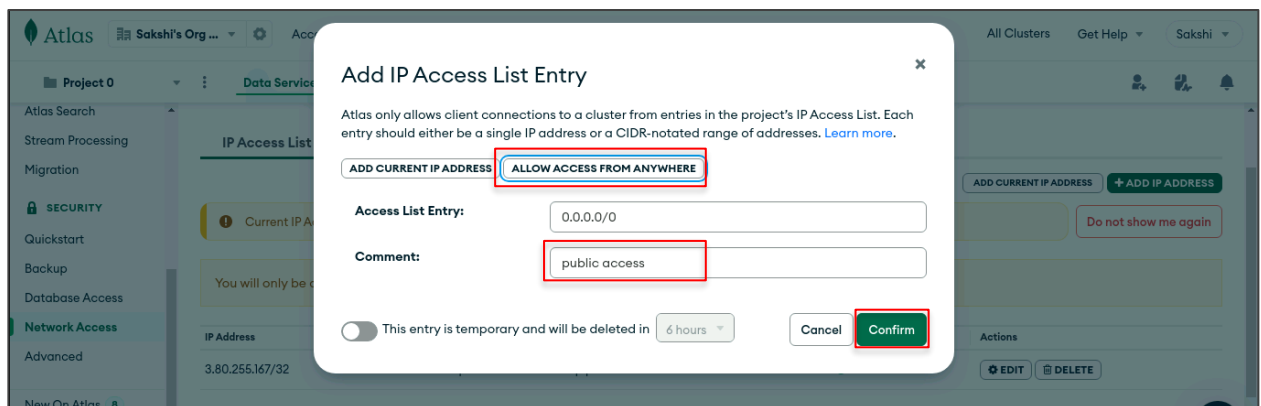
Use this to configure network access between Atlas and your cloud or on-premise environment. Specifically, set up IP Access Lists, Network Peering, and Private Endpoints.

ADVANCED

1.4 Navigate to **Network Access** from the **Security** section on the left and click on **ADD IP ADDRESS**



1.5 Select **ALLOW ACCESS FROM ANYWHERE**, add a comment as **public access**, and click on **Confirm**



IP Address	Comment	Status	Actions
3.80.255.167/32	Created as part of the Auto Setup process	Active	EDIT DELETE
0.0.0.0/0 (includes your current IP address)	public access	Active	EDIT DELETE

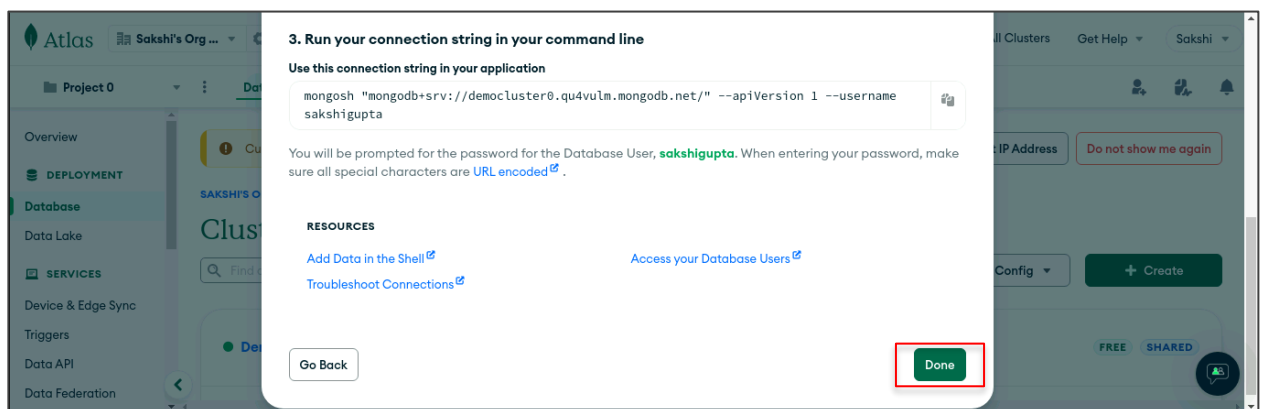
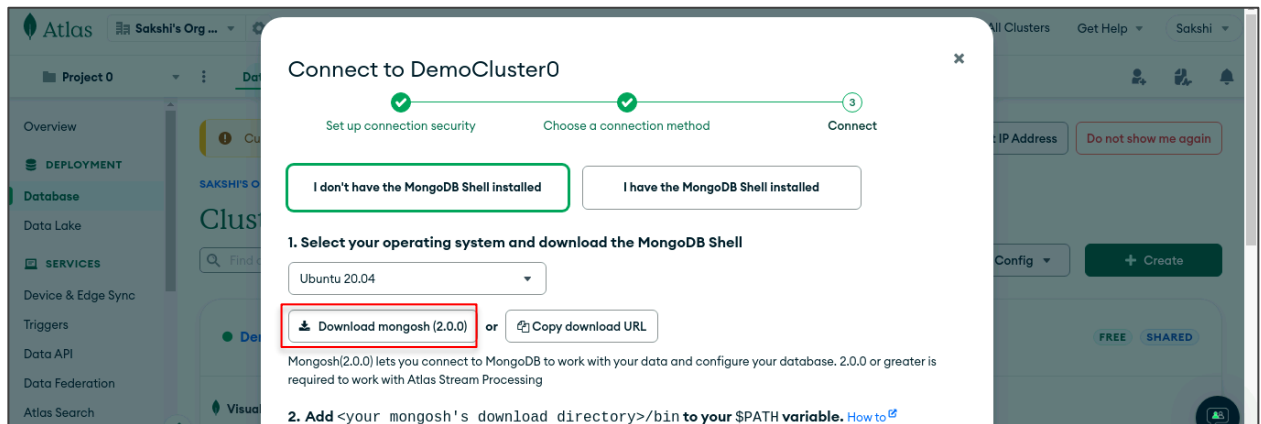
Step 2: Connect to the database

2.1 Navigate to **Database** under the **Deployment** section

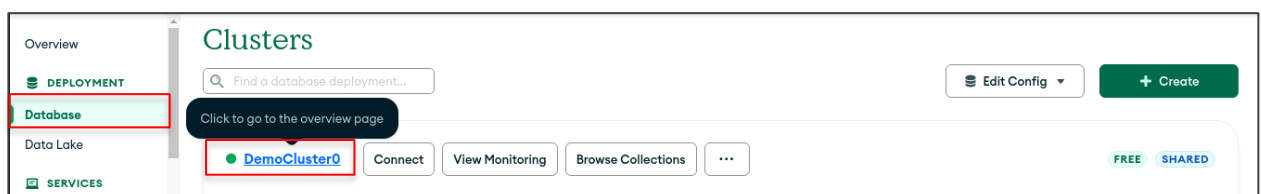
2.2 Click on **Connect**

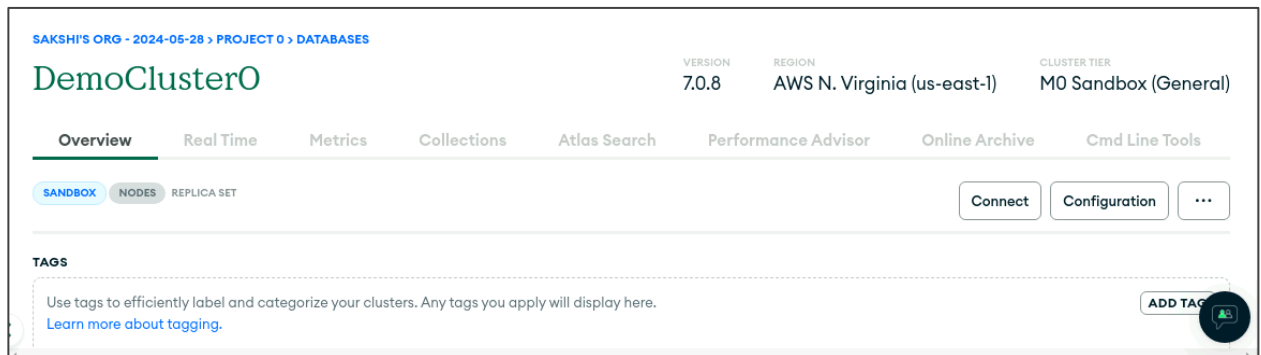
2.3 Choose the **Shell** option to connect with MongoDB Shell

2.4 Select **Download mongosh** to download the MongoDB shell, and then click on **Done**

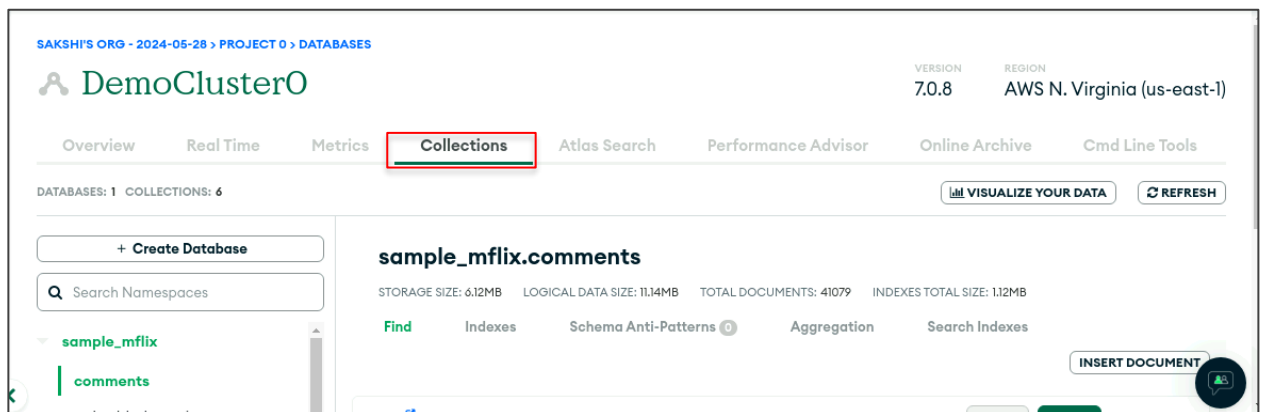


2.5 Go to **Database** within **Deployment** section, and click on **DemoCluster0**



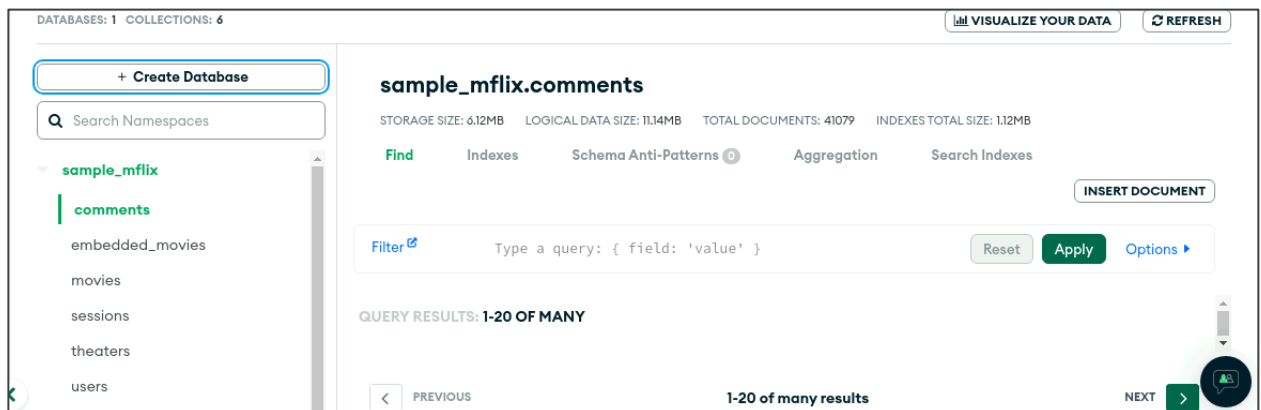


The cluster interface will appear as shown above. The documents are saved in the **Collections** tab.



Step 3: Load the sample dataset

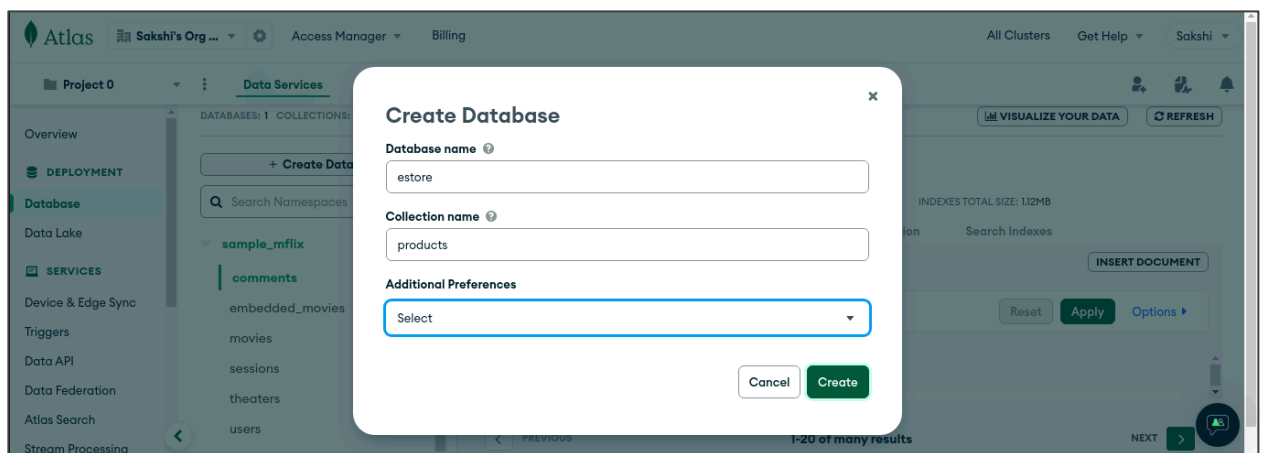
3.1 Scroll down to see a sample dataset generated by MongoDB



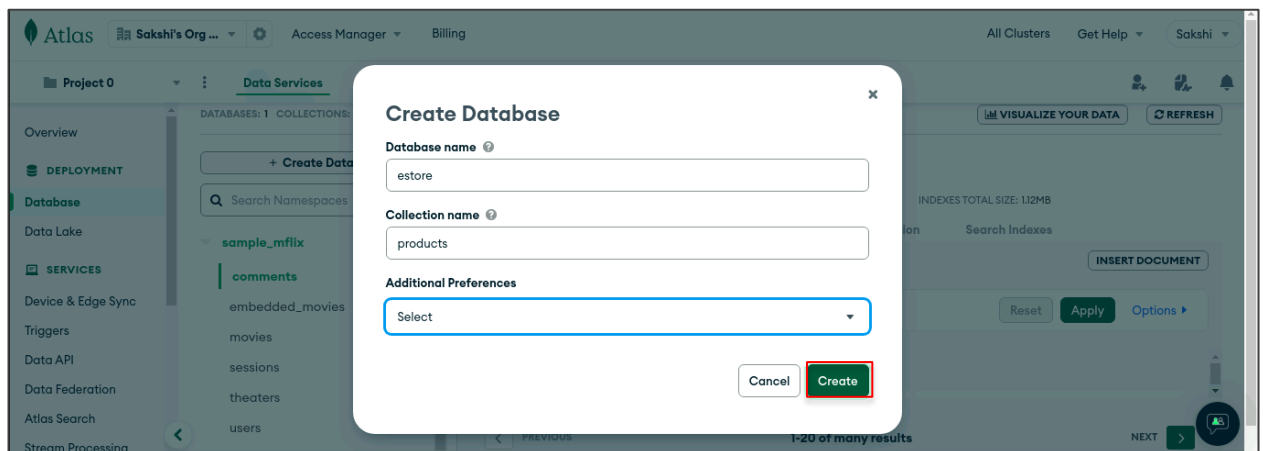
3.2 Click on **Create Database**:



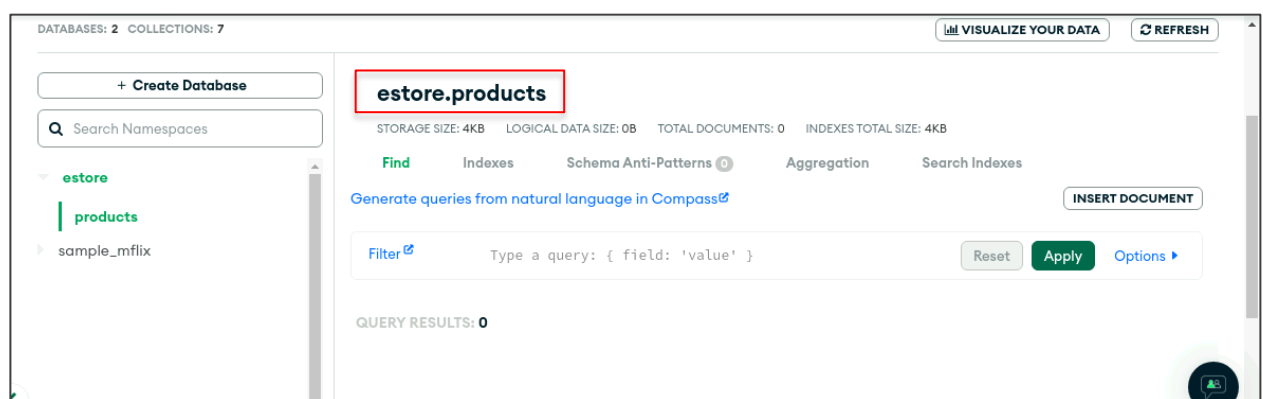
3.3 Add a **Database name** and **Collection name**



3.4 Click on **Create**

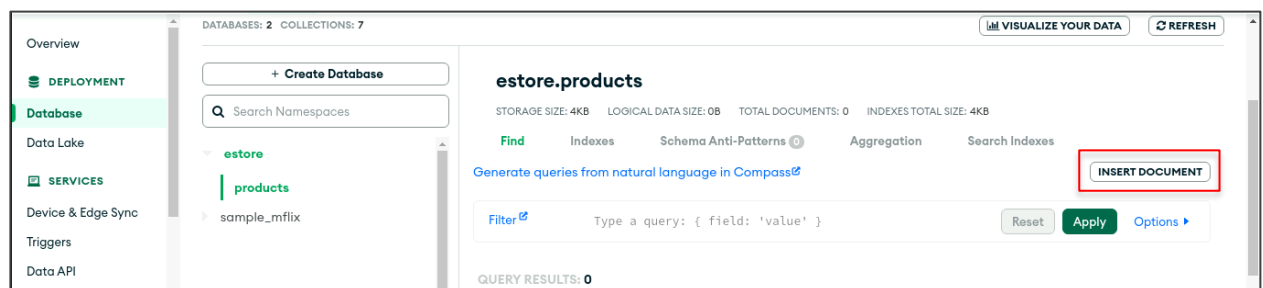


Sample data is now loaded.

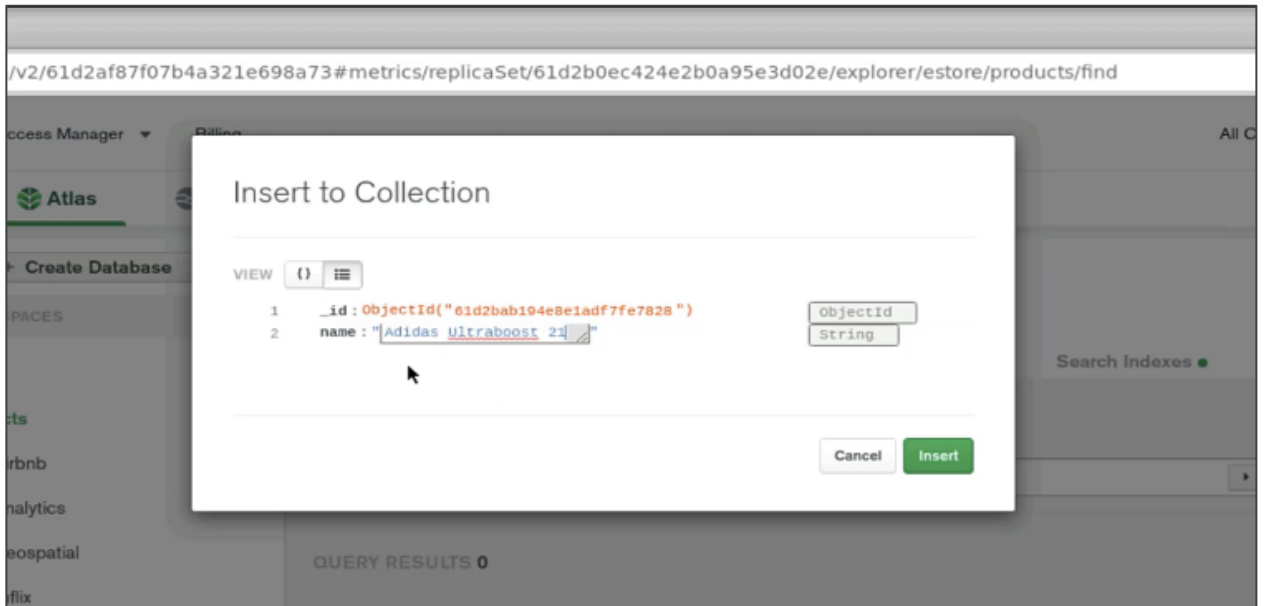


Step 4: Insert a document

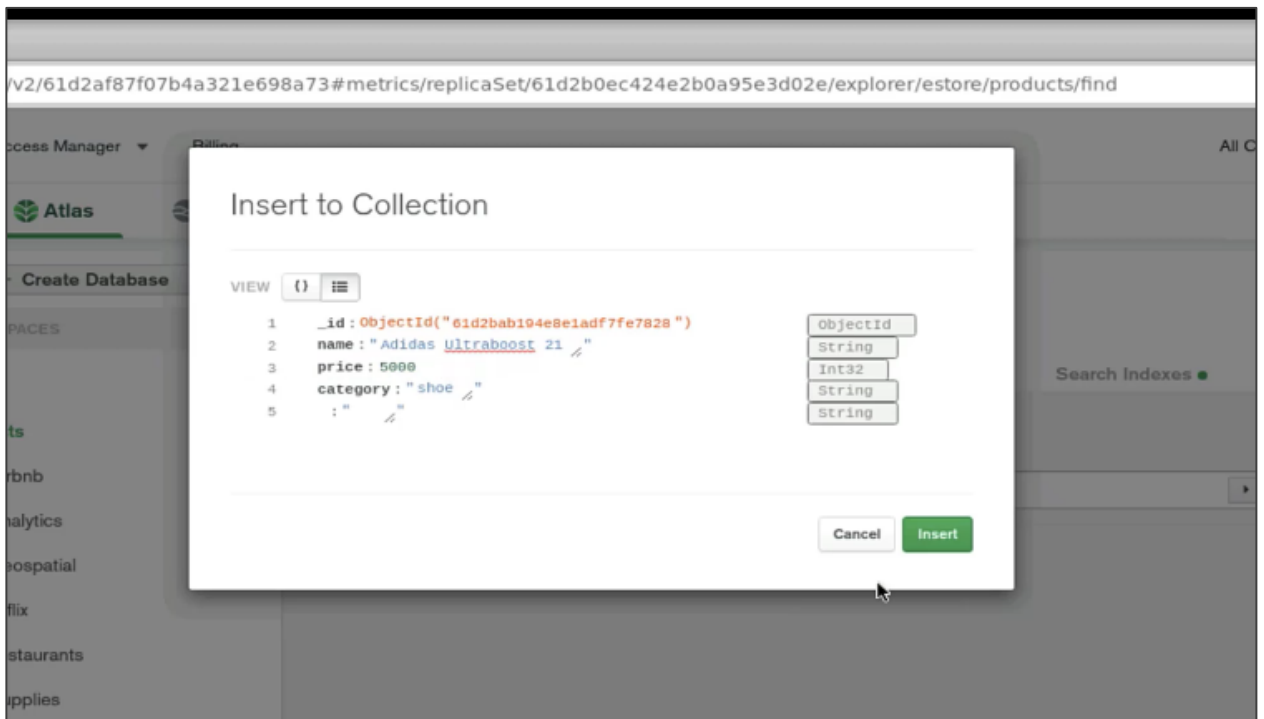
4.1 Click on **INSERT DOCUMENT**



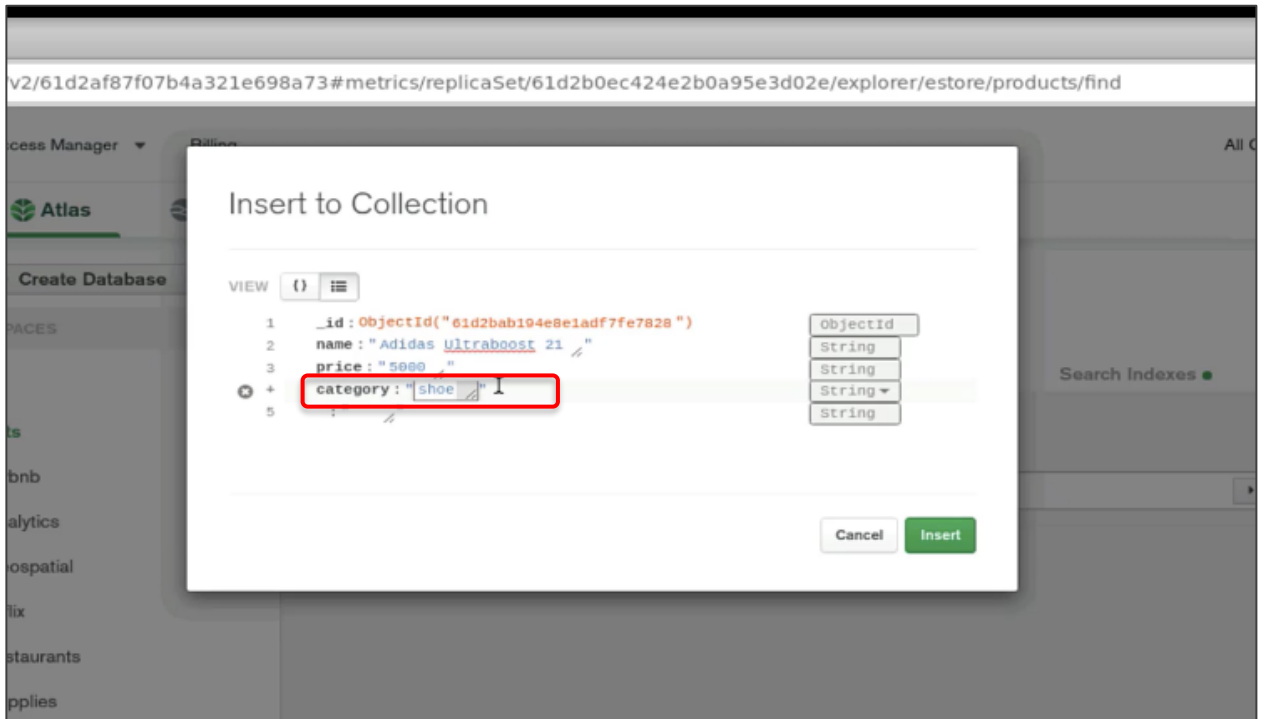
4.2 Enter the **name** and **key** for a product document



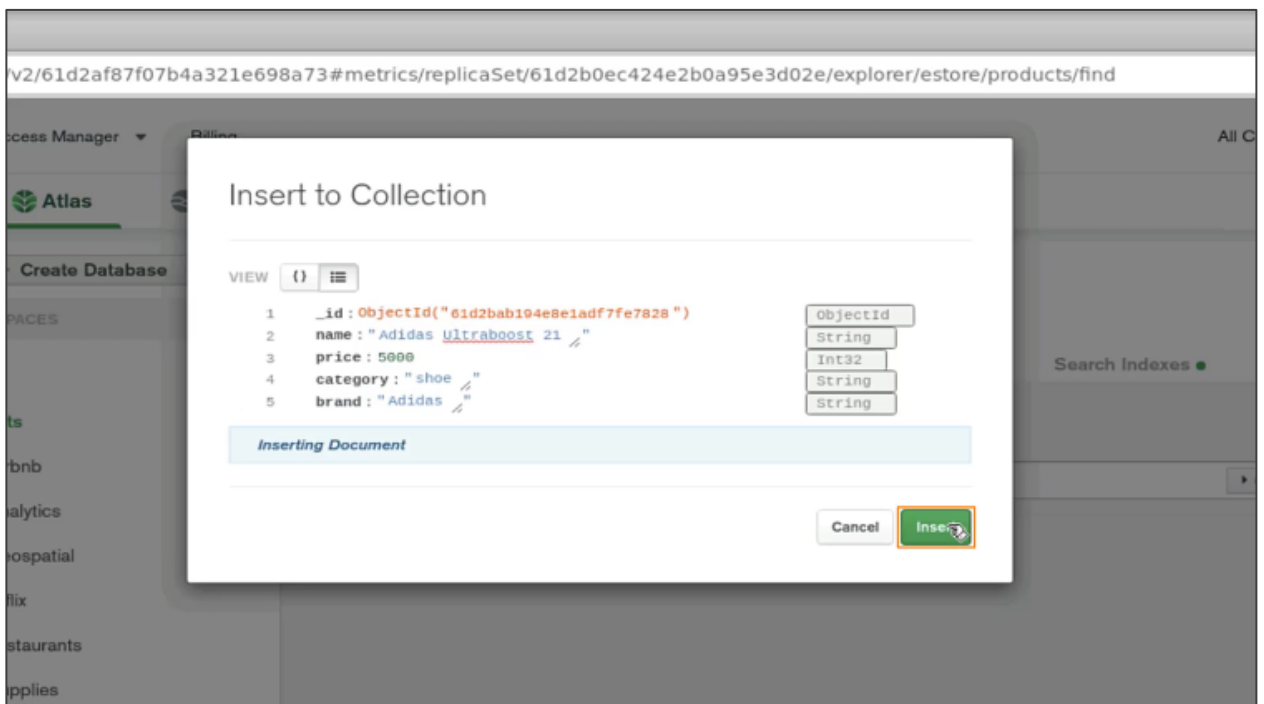
4.3 Add one more attribute named **price** and set the data type to **Integer**



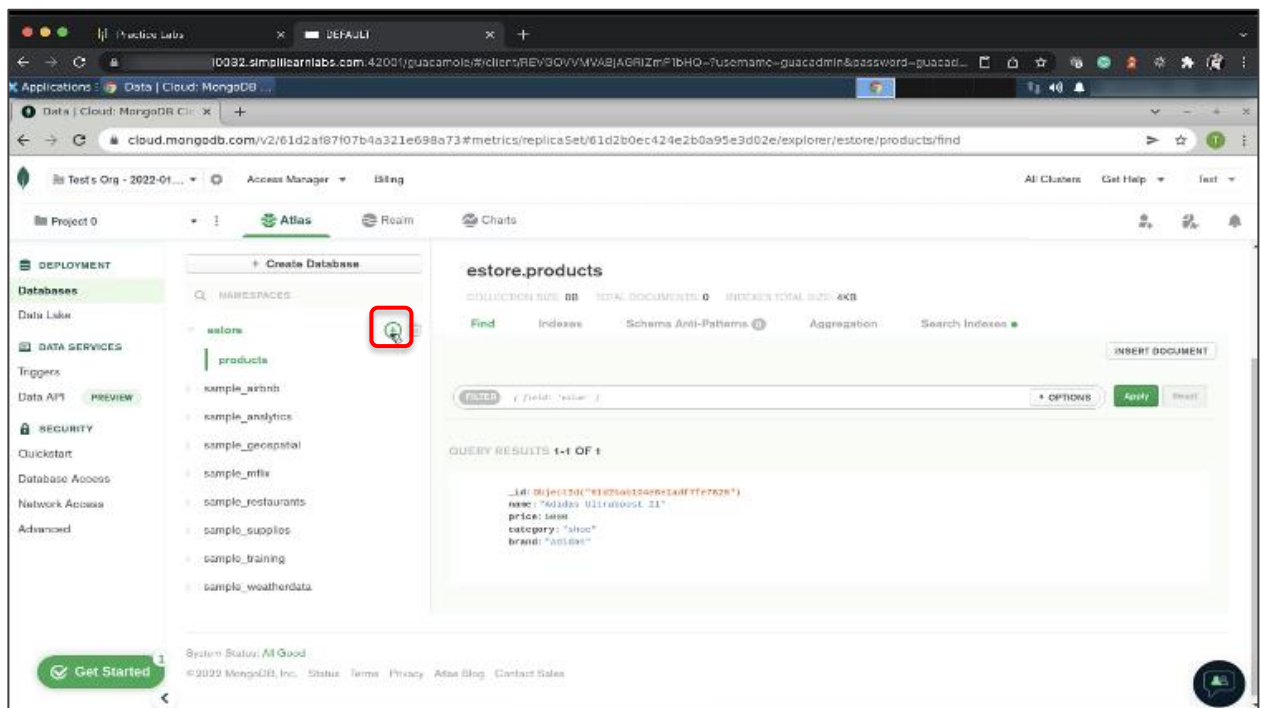
4.4 Add an attribute called **category**



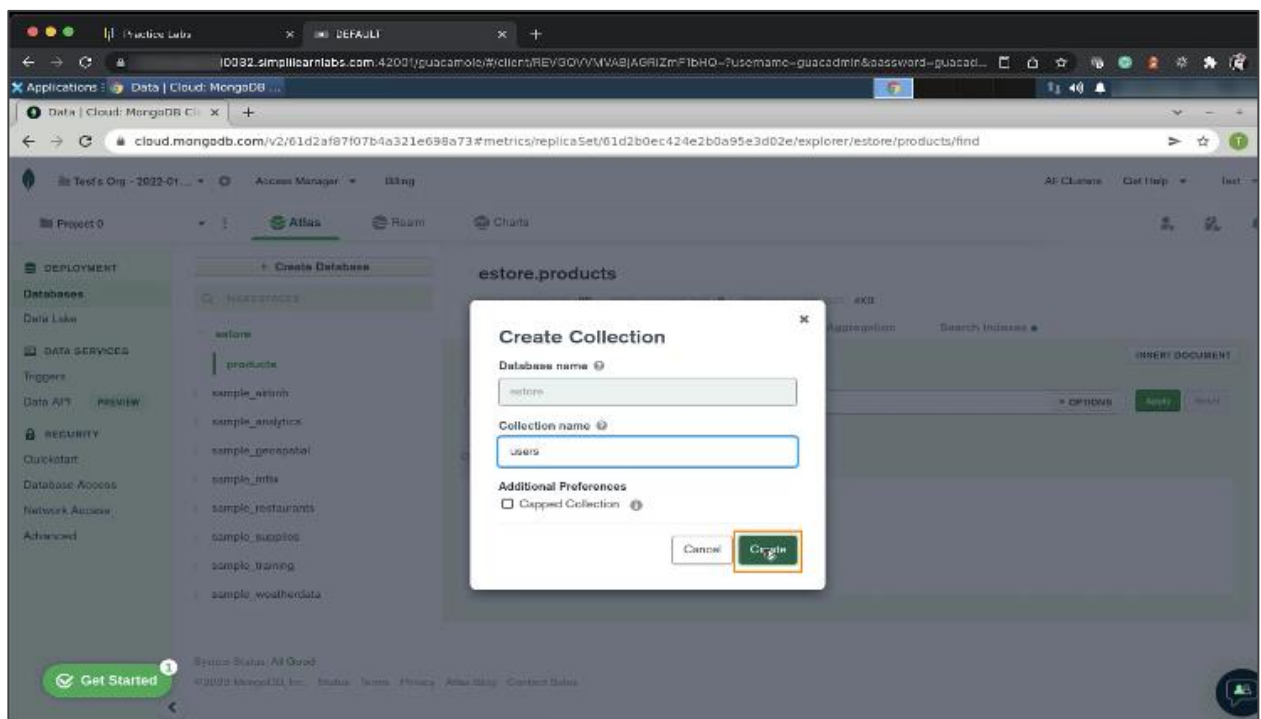
4.5 Add a brand with a key and click on the **Insert** button



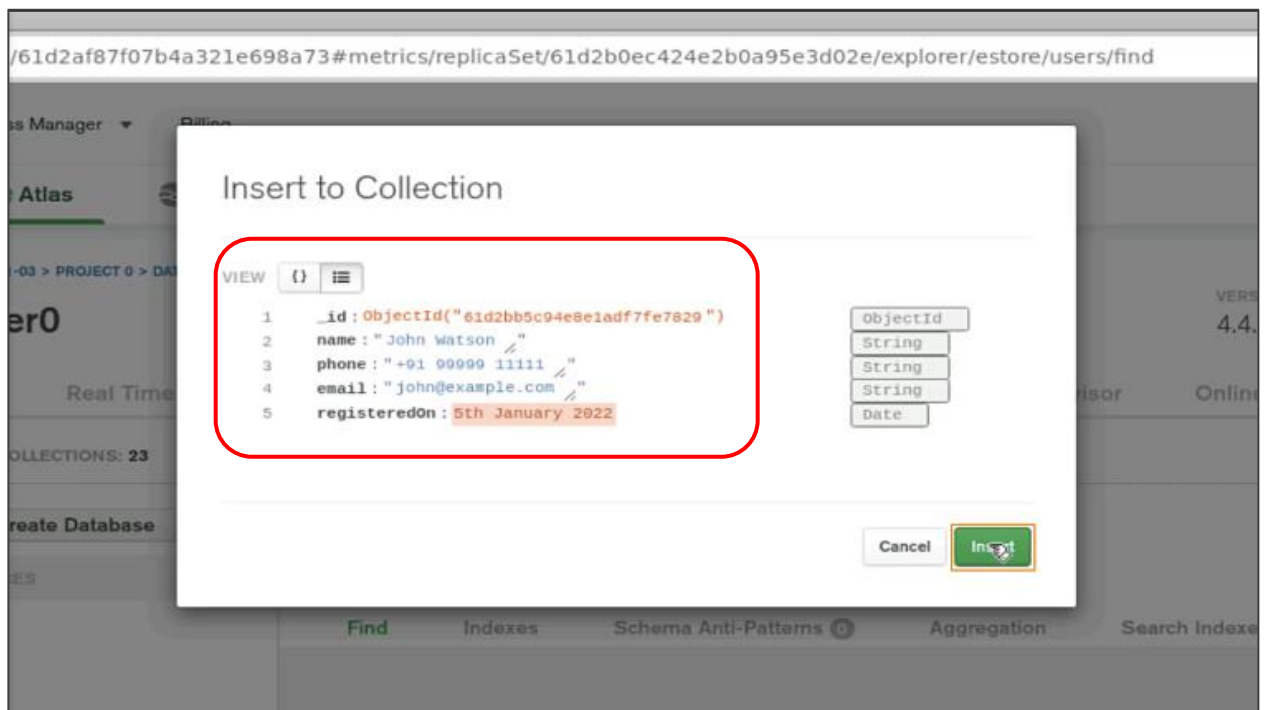
4.6 Click the + button to create another collection in the database



4.7 Add the collection name and select the Create button

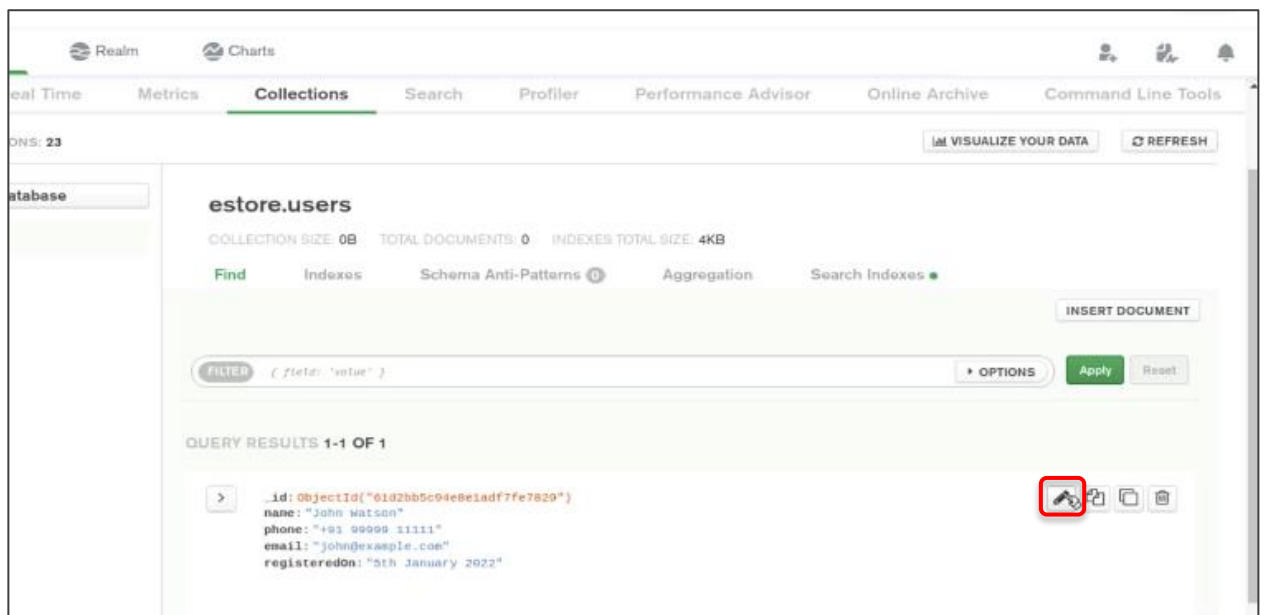


4.8 Insert the attributes under the user's collection and click **Insert**

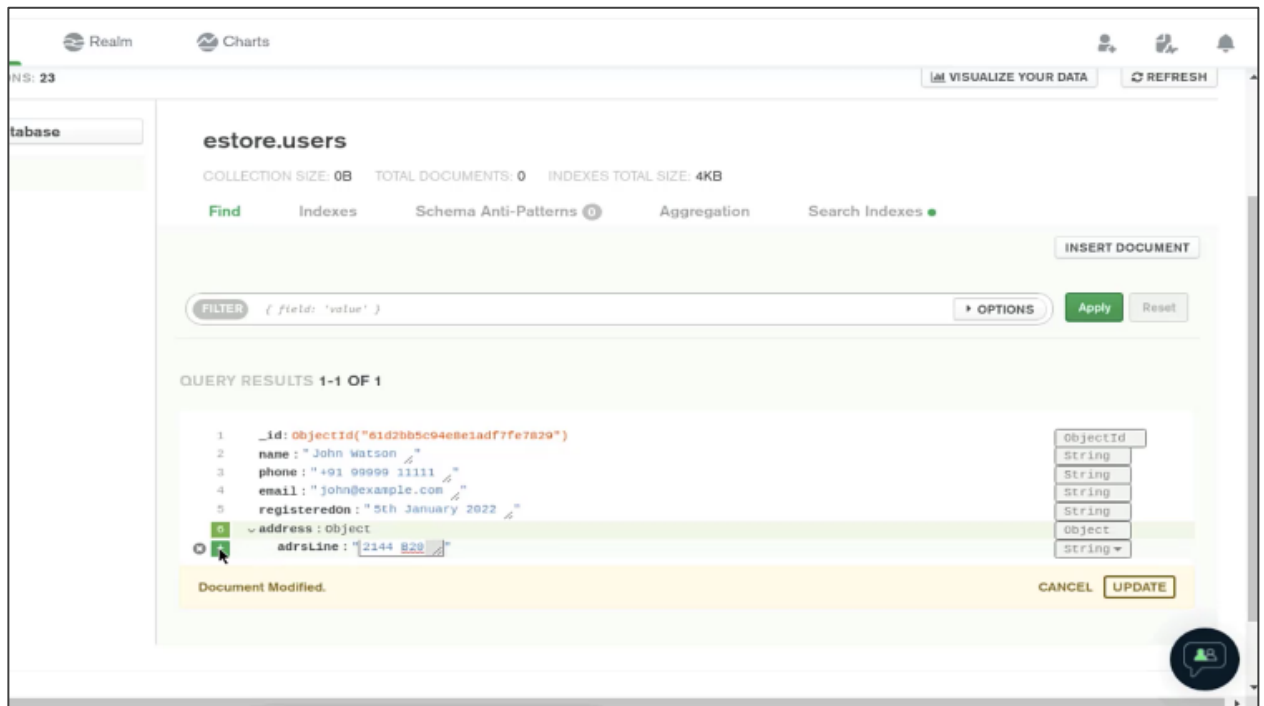


Step 5: Edit the document

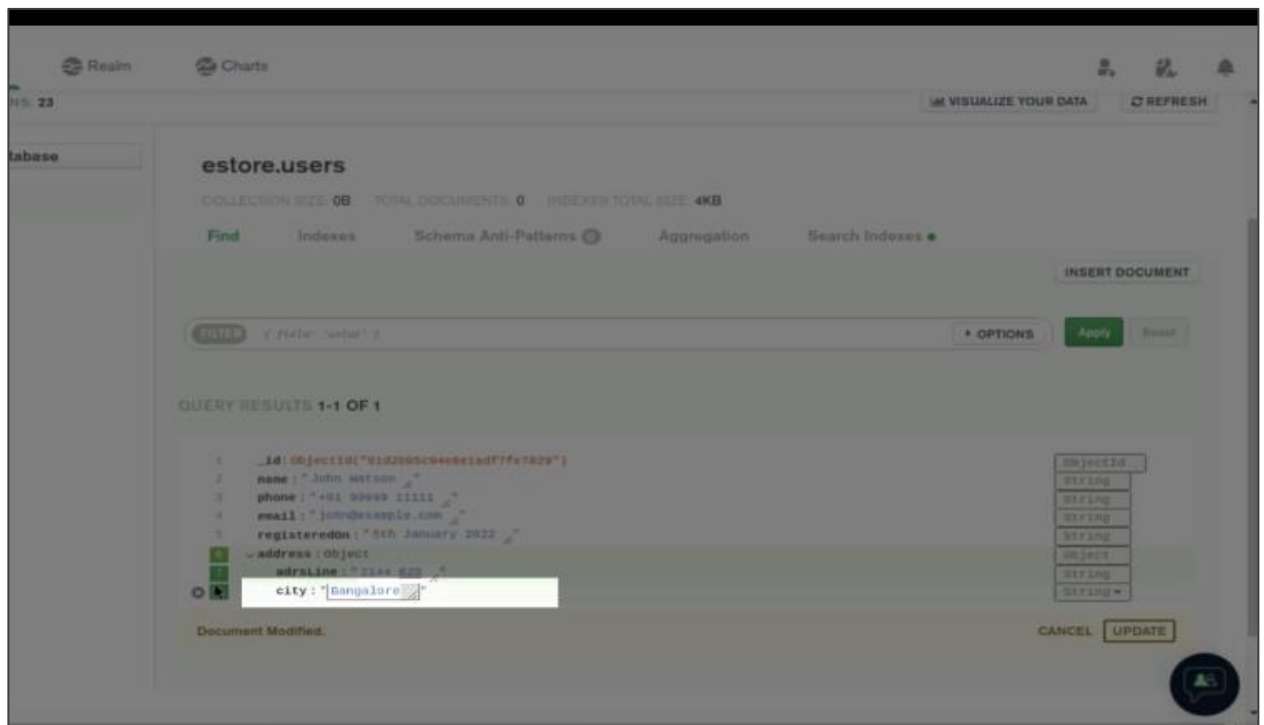
5.1 Click on the edit icon to edit the document



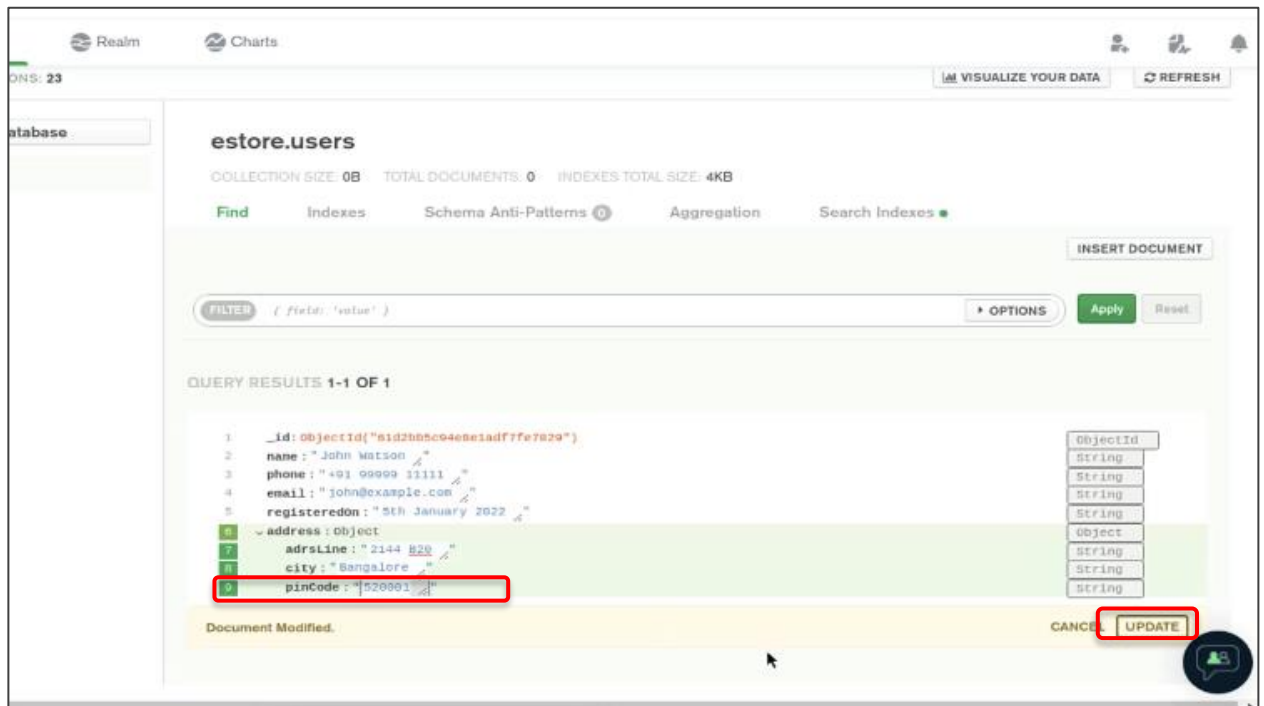
5.2 Create address object for the users



5.3 Add a field in the address as a city



5.4 Add a **pincode** field and click on **Update**



The screenshot shows the Realm Studio interface for the 'estore.users' collection. The document is being edited, and the 'pinCode' field is highlighted in red. The 'UPDATE' button is also highlighted in red.

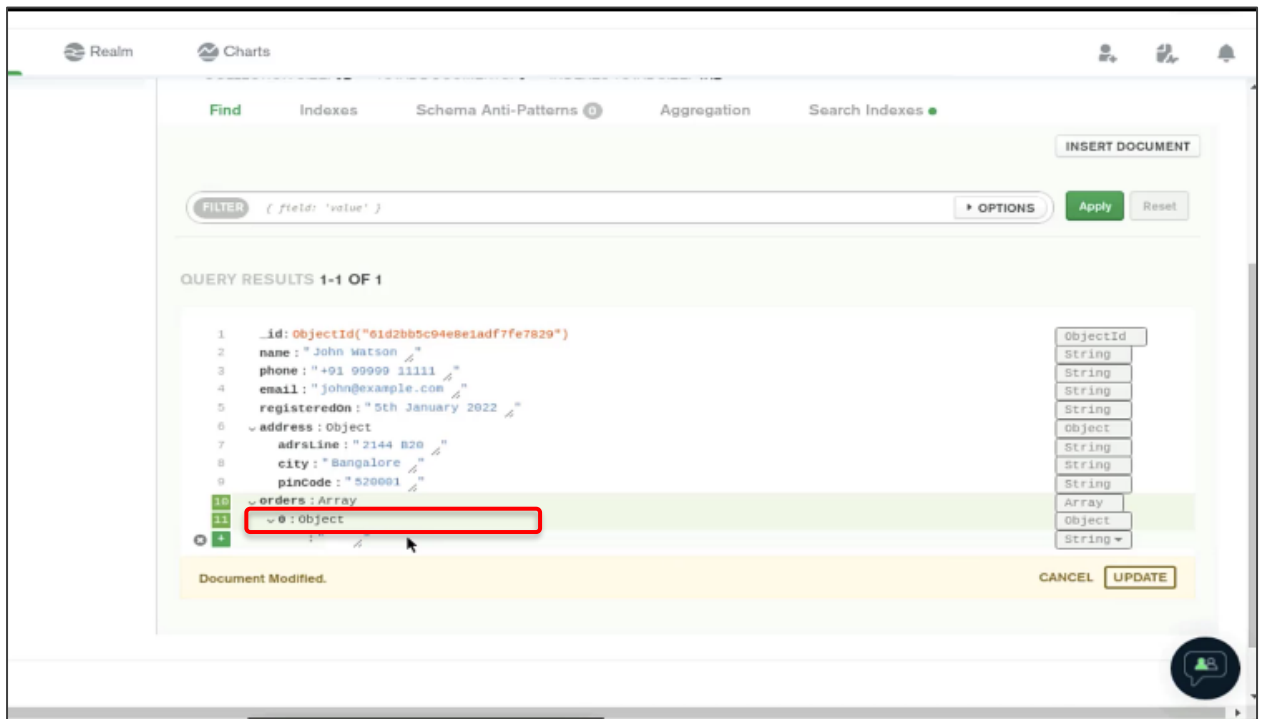
```

1  _id: ObjectId("61d2bb5c94e8e1adf7fe7829")
2  name: "John Watson"
3  phone: "+91 99999 11111"
4  email: "john@example.com"
5  registeredOn: "5th January 2022"
6  address: Object
7    adrLine: "2144 B20"
8    city: "Bangalore"
9    pinCode: "520001"

```

Document Modified. [CANCEL] [UPDATE]

5.5 Add an **orders** attribute



The screenshot shows the Realm Studio interface for the 'estore.users' collection. The document is being edited, and the 'orders' field is highlighted in red. The 'UPDATE' button is also highlighted in red.

```

1  _id: ObjectId("61d2bb5c94e8e1adf7fe7829")
2  name: "John Watson"
3  phone: "+91 99999 11111"
4  email: "john@example.com"
5  registeredOn: "5th January 2022"
6  address: Object
7    adrLine: "2144 B20"
8    city: "Bangalore"
9    pinCode: "520001"
10 orders: Array
11   0: Object

```

Document Modified. [CANCEL] [UPDATE]

5.6 Add an object with an **order id**

The screenshot shows the MongoDB Atlas Find interface. The document being viewed is:

```

1  _id: ObjectId("61d2bb5c94e8e1adf7fe7829")
2  name: "John Watson"
3  phone: "+91 99999 11111"
4  email: "john@example.com"
5  registeredOn: "5th January 2022"
6  address: Object
7    adrLine: "2144 B20"
8    city: "Bangalore"
9    pinCode: "520001"
10  orders: Array
11    0: Object
12      oid: 1

```

The 'oid' field in the 'orders' array is highlighted with a red box. A dropdown menu on the right shows the type 'String' selected. At the bottom, there is a 'Document Modified' message and 'CANCEL' and 'UPDATE' buttons.

5.7 Add a field named **amount**

The screenshot shows the MongoDB Atlas Find interface. The document being viewed is:

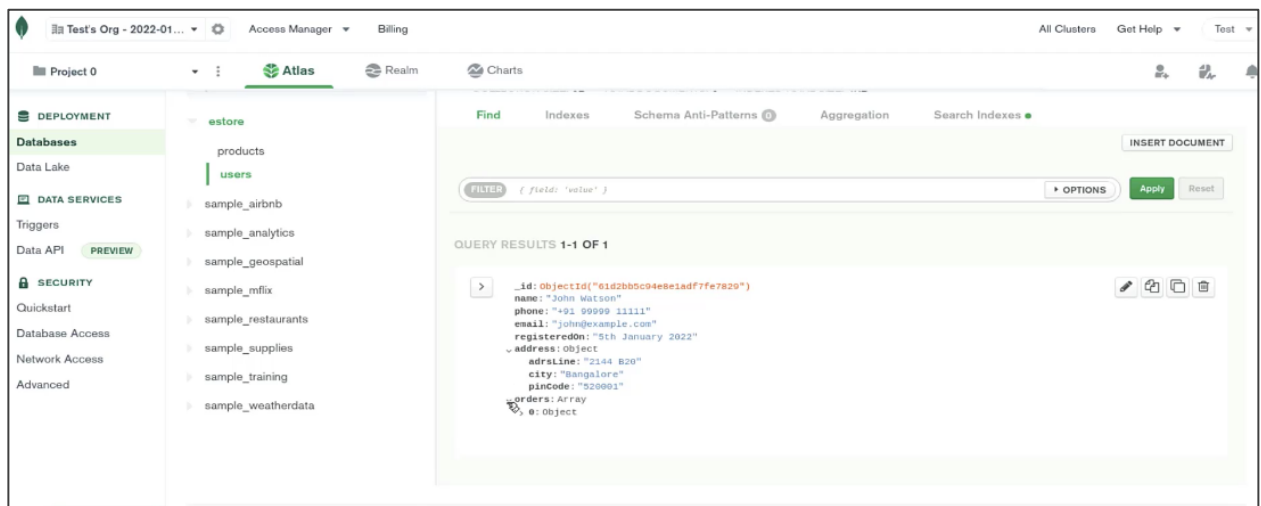
```

> _id: ObjectId("61d2bb5c94e8e1adf7fe7829")
  name: "John Watson"
  phone: "+91 99999 11111"
  email: "john@example.com"
  registeredOn: "5th January 2022"
  address: Object
    adrLine: "2144 B20"
    city: "Bangalore"
    pinCode: "520001"
  orders: Array
    0: Object
      oid: 1
      amount: 3000
      orderDate: "10th January 2022"

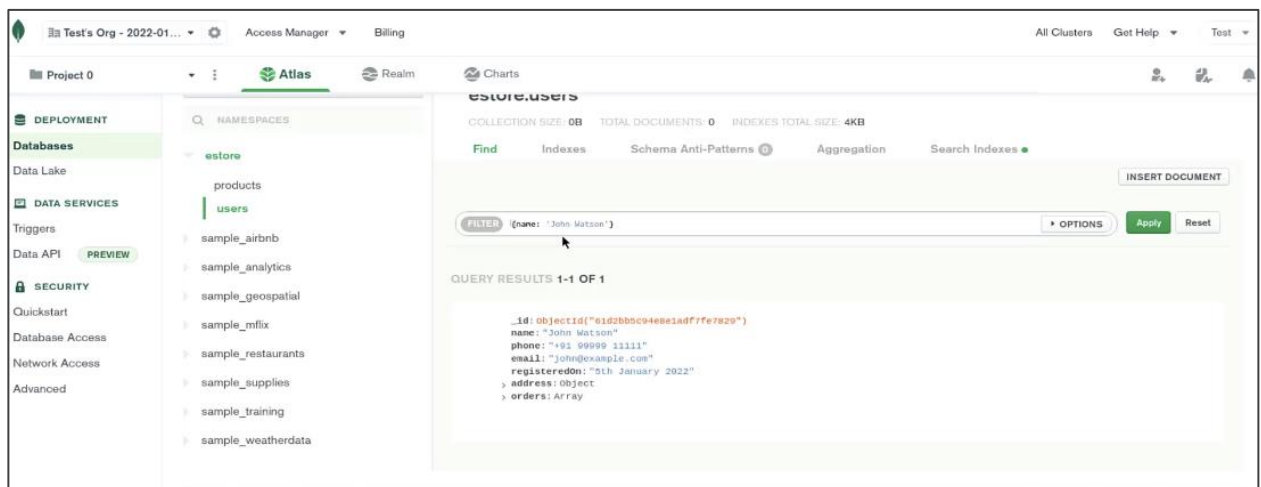
```

The 'amount' field in the 'orders' array is highlighted with a red box. The 'orderDate' field is also visible below it. The interface includes a sidebar with navigation options like 'DEPLOYMENT', 'Databases', 'DATA SERVICES', and 'SECURITY'.

5.8 Add another field named **orderDate** and click on **UPDATE**



5.9 Use **FILTER** to sort the data according to your needs



We can explore the MongoDB Atlas database collection and documents by creating a database user and connecting it to the database. We can also create multiple filters to filter out data based on the requirement.

By following these steps, you have successfully explored the MongoDB Atlas database collection and documents by creating a database user and connecting to the database.