

Lesson 02 Demo 01

Implementing Schema Guidelines

Objective: To create a database collection in MongoDB and apply schema guidelines for validation

Tools required: MongoDB Compass

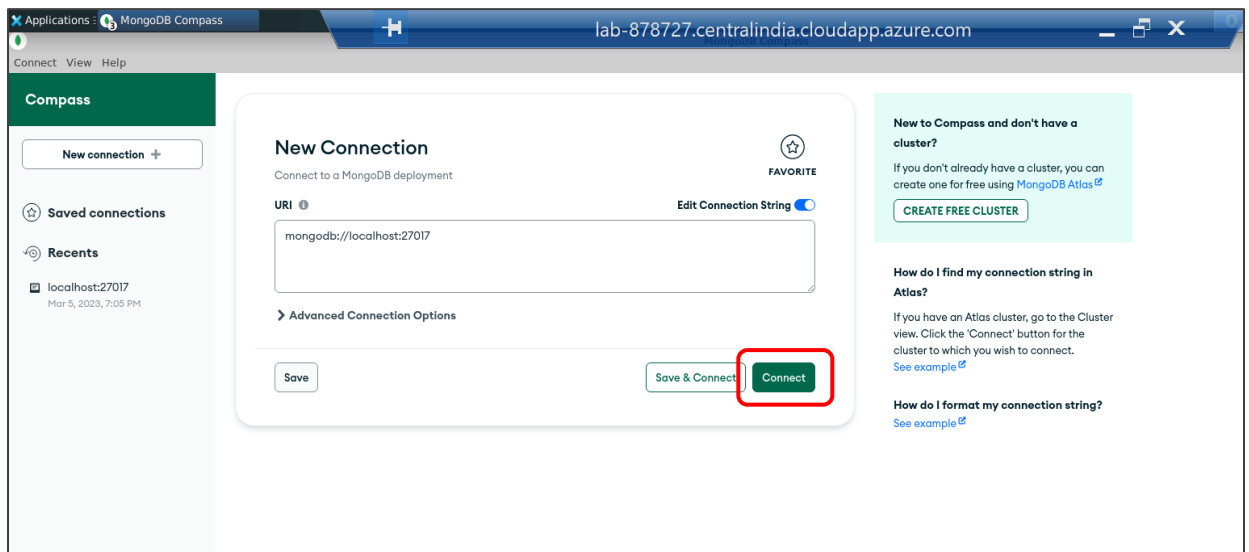
Prerequisites: Knowledge of DBMS and SQL1

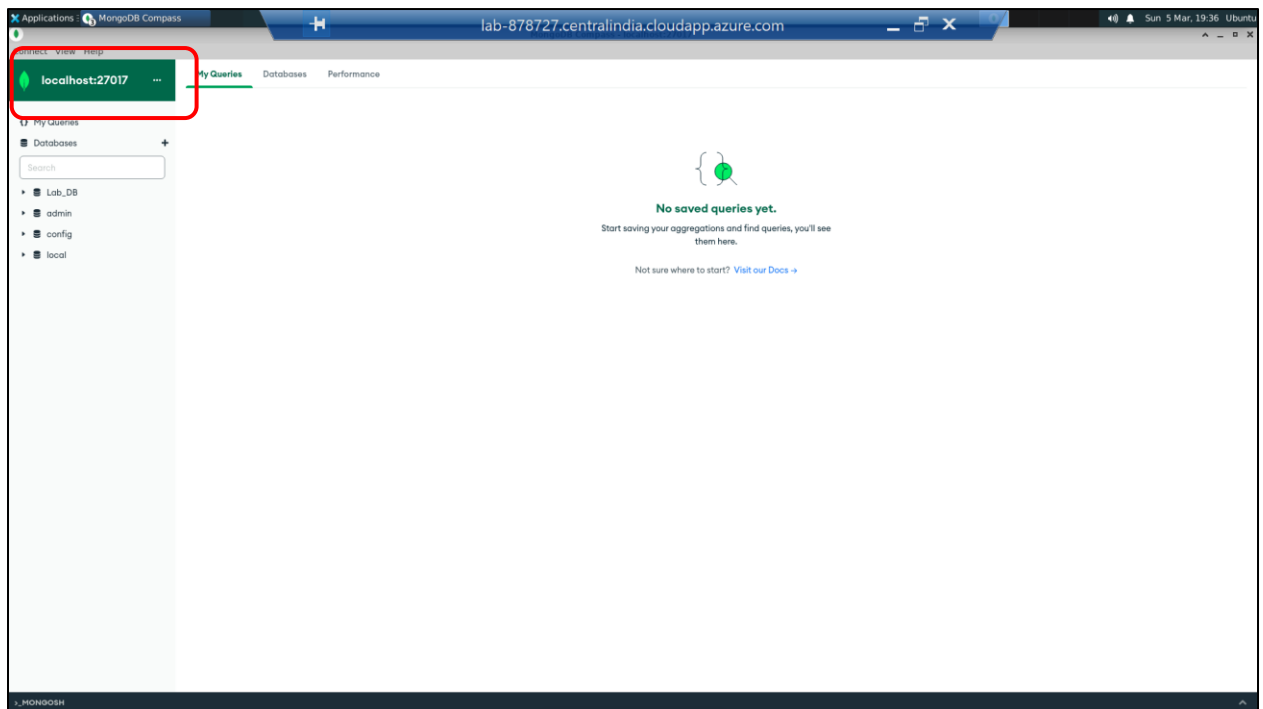
Steps to be followed:

1. Connect to MongoDB Compass using virtual machine extensions
2. Create a database in MongoDB Compass
3. Create collections in a database
4. Validate the schema guidelines

Step 1: Connect to MongoDB Compass using virtual machine extensions

1.1 Create a new connection in MongoDB Compass

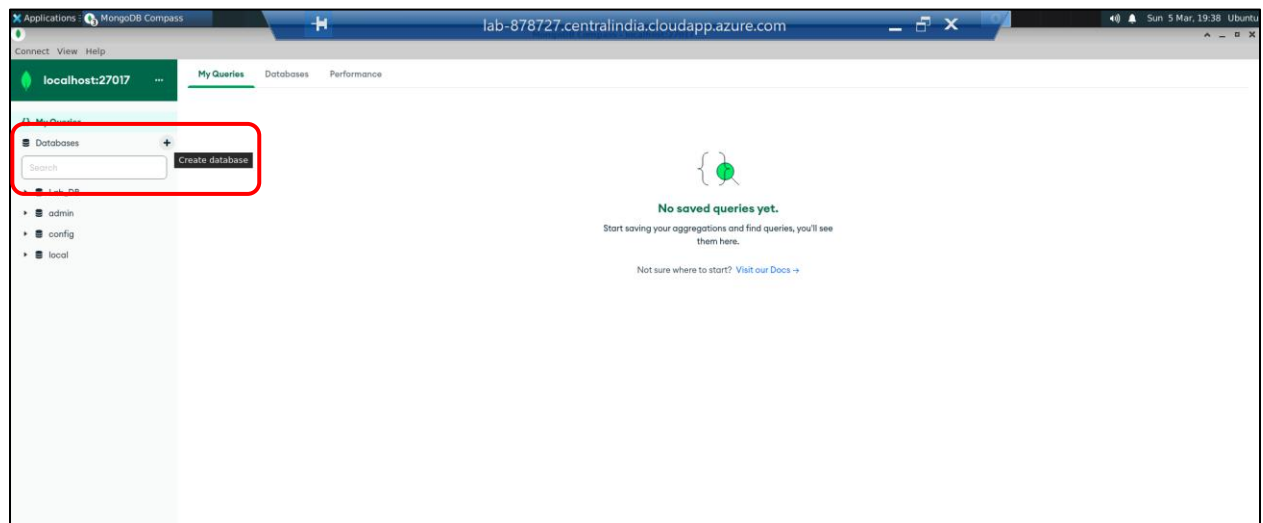




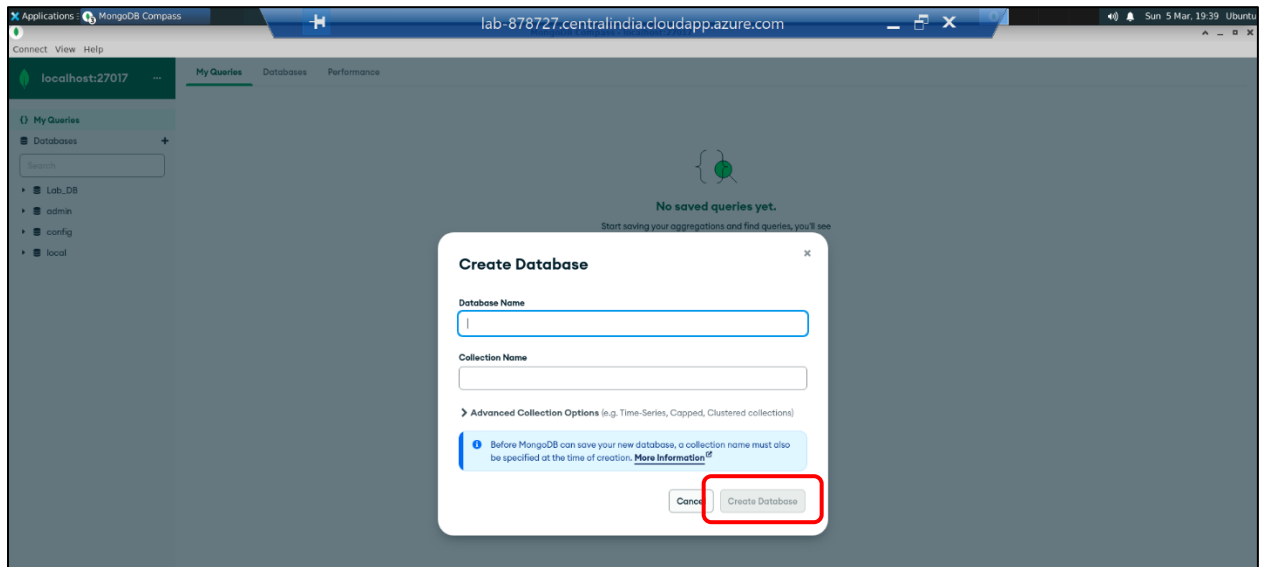
The connection has been established to the localhost in MongoDB Compass.

Step 2: Create a database in MongoDB Compass

2.1 Click on **Create Database** to create a database



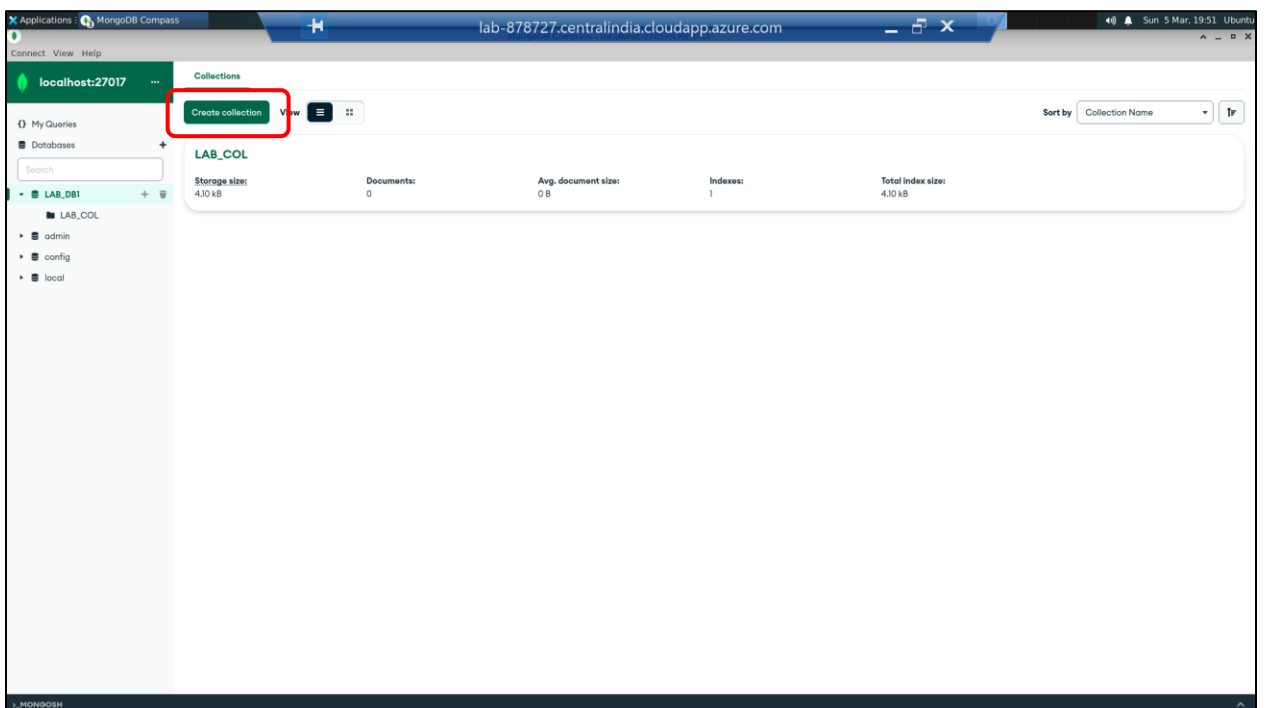
2.2 Enter the **Database Name** and **Collection Name**, then click on **Create Database**



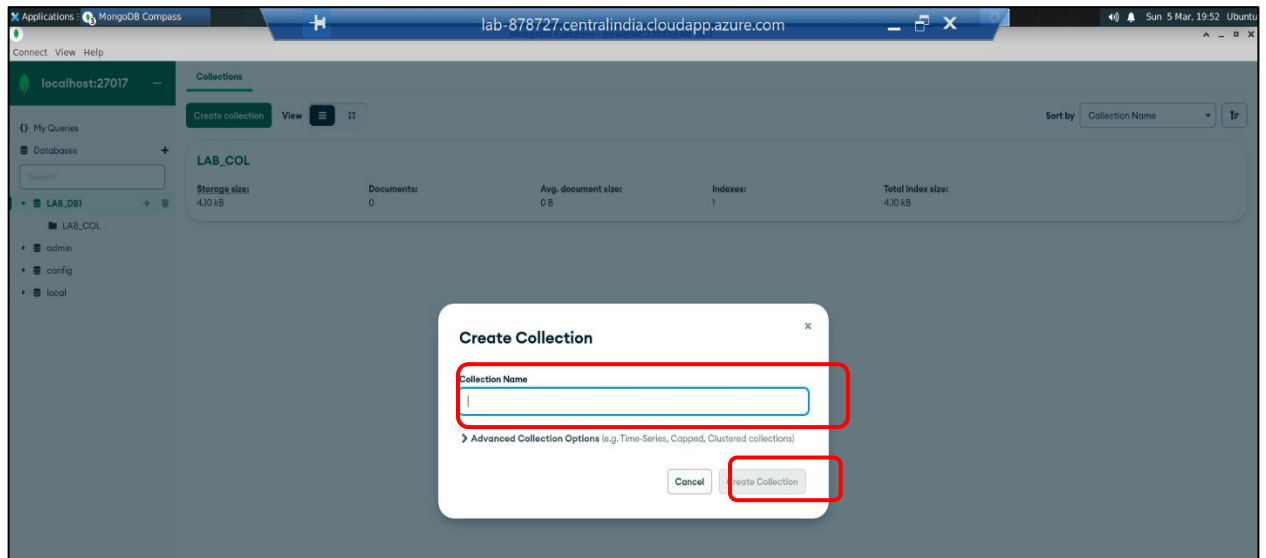
The database is created.

Step 3: Create collections in a database

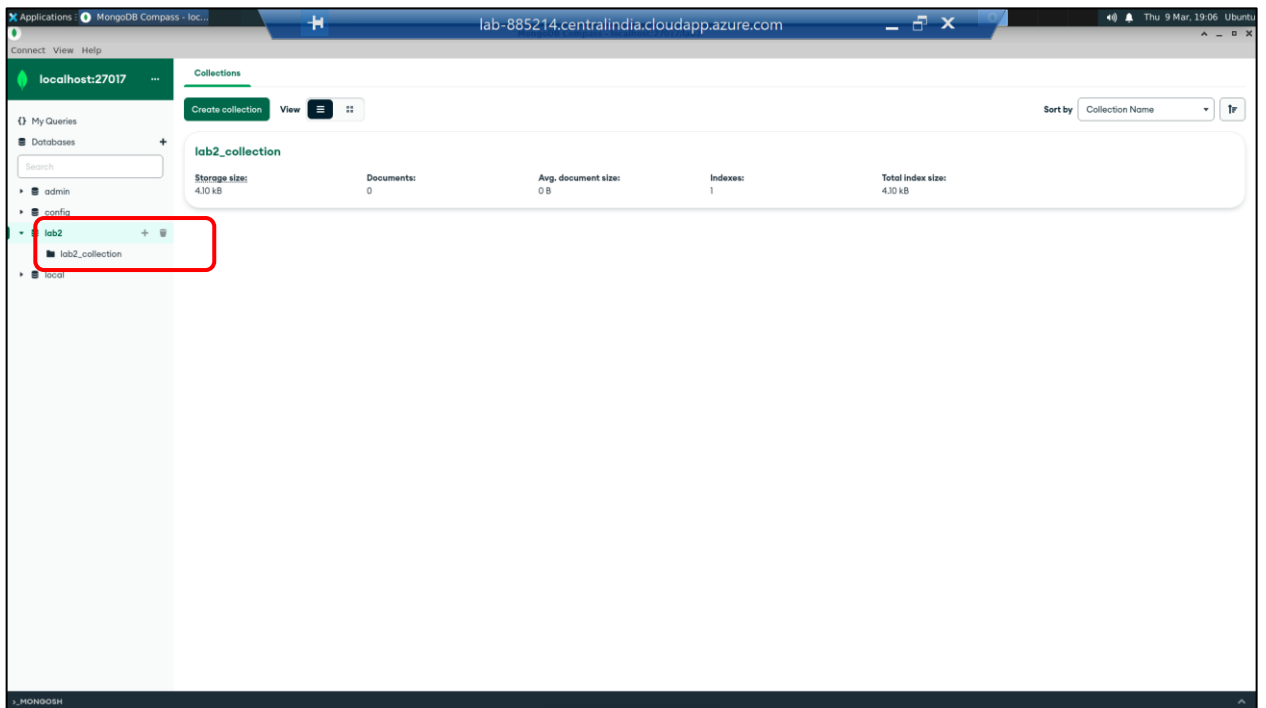
3.1 Click the **Create collection** button to create a new collection



3.2 Enter the **Collection Name**, and click on **Create Collection**

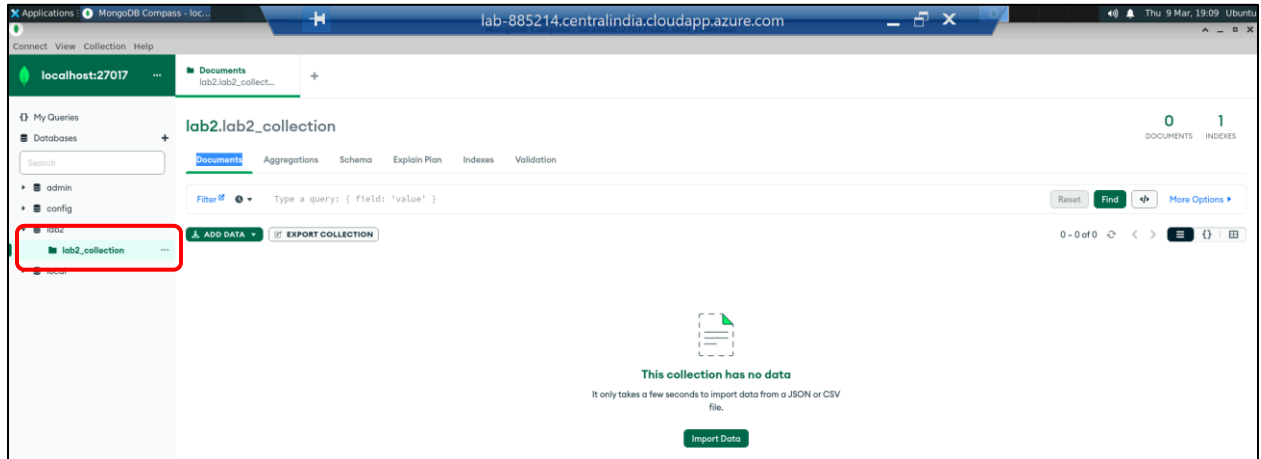


The created database and collection are visible on the left pane.



Step 4: Validate the schema guidelines

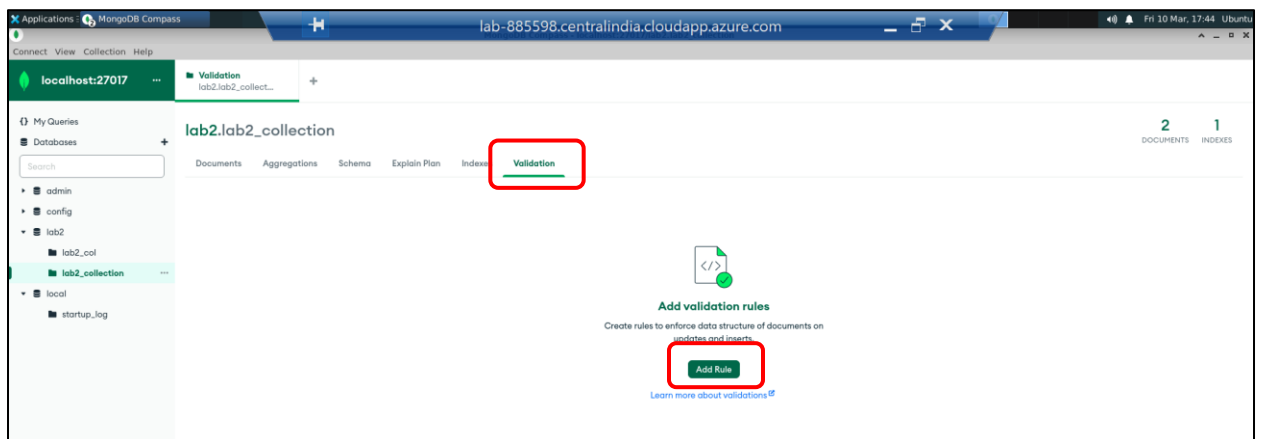
4.1 Select the collection that contains the desired data



4.2 Click on the **Documents** tab

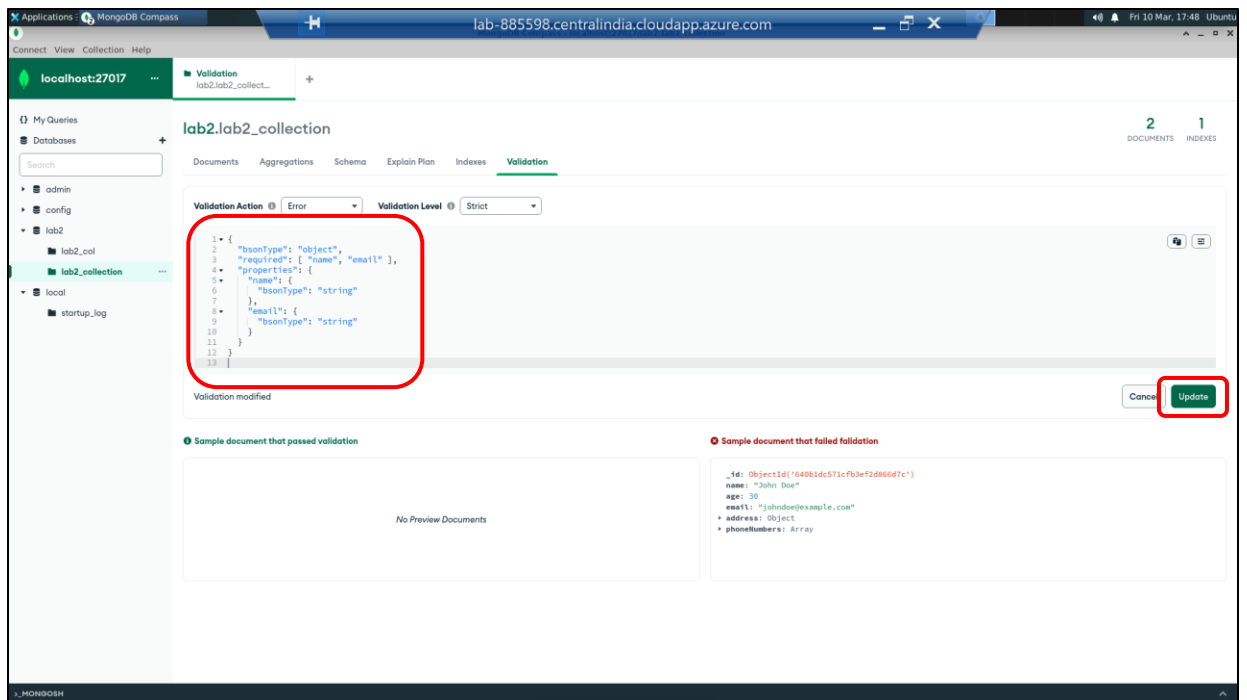


4.3 Now, click on the **Validation** tab and then on **Add Rule**



4.4 Add the validation code and click on **Update**

```
{
  "bsonType": "object",
  "required": [ "name", "email" ],
  "properties": {
    "name": {
      "bsonType": "string"
    },
    "email": {
      "bsonType": "string"
    }
  }
}
```



localhost:27017

lab2.lab2_collection

Documents Aggregations Schema Explain Plan Indexes **Validation**

Validation Action: Error Validation Level: Strict

```

1 {
2   "bsonType": "object",
3   "required": [ "name", "email" ],
4   "properties": {
5     "name": {
6       "bsonType": "string"
7     },
8     "email": {
9       "bsonType": "string"
10    }
11  }
12 }
13

```

Validation modified

Cancel Update

Sample document that passed validation

No Preview Documents

Sample document that failed validation

```

{
  "_id": ObjectId("648b1dc571cf33ef2d866d7c"),
  "name": "John Doe",
  "age": 38,
  "email": "johndoe@example.com",
  "address": {
    "city": "New York",
    "state": "NY",
    "zip": "10001"
  },
  "phoneNumbers": [
    { "type": "home", "number": "212 555 1234" },
    { "type": "work", "number": "212 555 5678" }
  ]
}

```

By following these steps, you have successfully created a database collection in MongoDB and applied schema guidelines for validation.