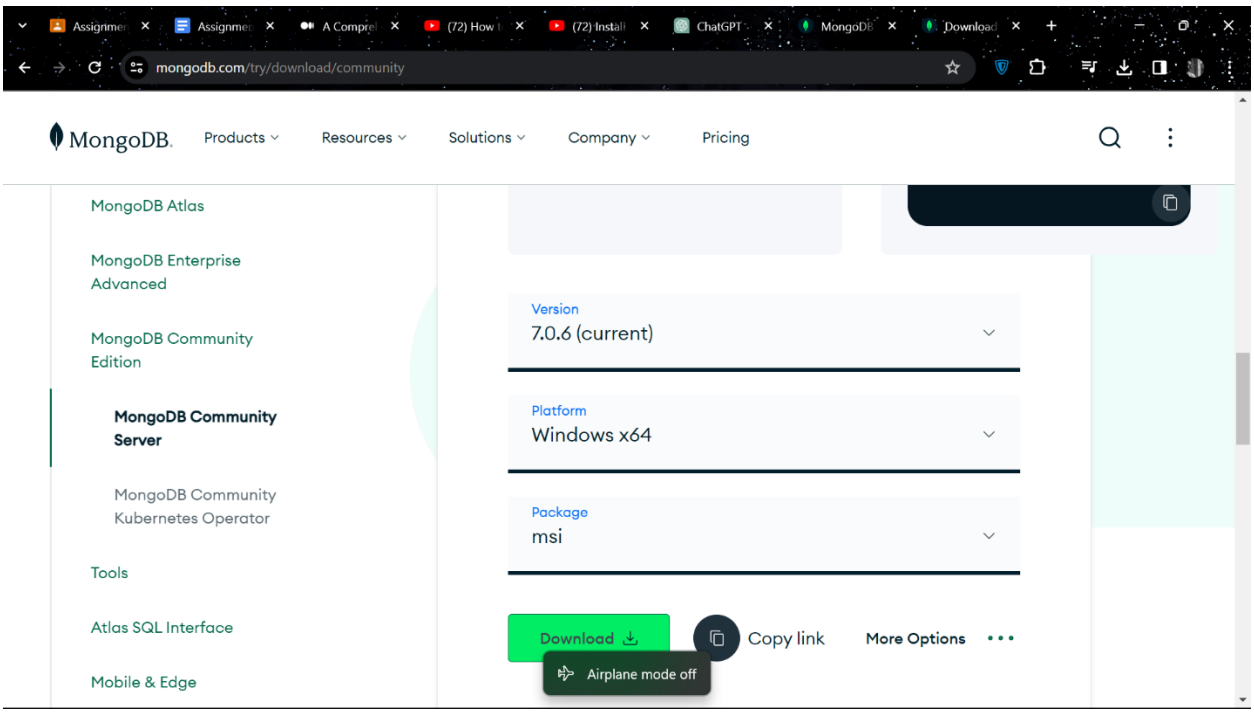
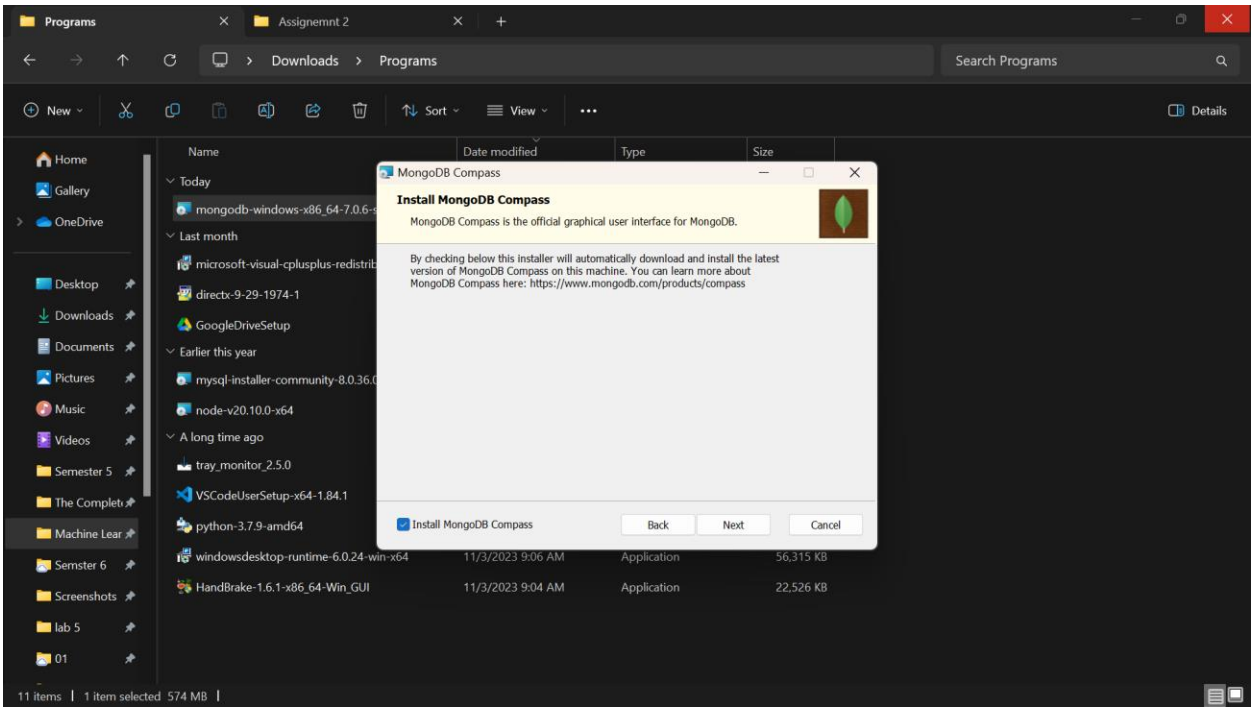
MongoDB

- MongoDB Compass
- MongoDB Shell
- MongoDB Atlas

MongoDB Compass, MongoDB Shell are for local MongoDB (NOSQL) store, then why 2 names? Shell and Compass are just 2 different way to interact with your local store. Shell is do stuff on cmd and Compass just provide a beautiful GUI.

MongoDB installation -- MongoDB Compass




Programs
Assignemnt 2
Downloads > Programs
Search Programs
New
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View
Details
Home
Gallery
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Downloads
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Pictures
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Videos
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Semster 6
Screenshots
lab 5
01
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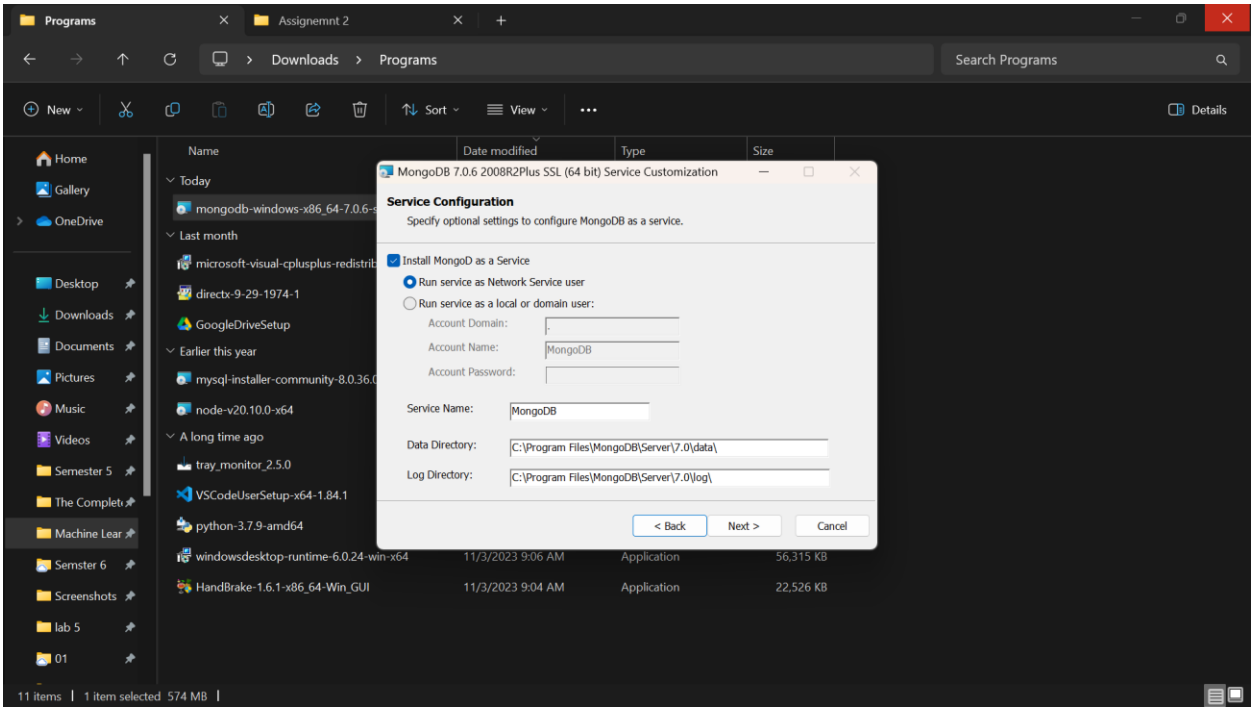
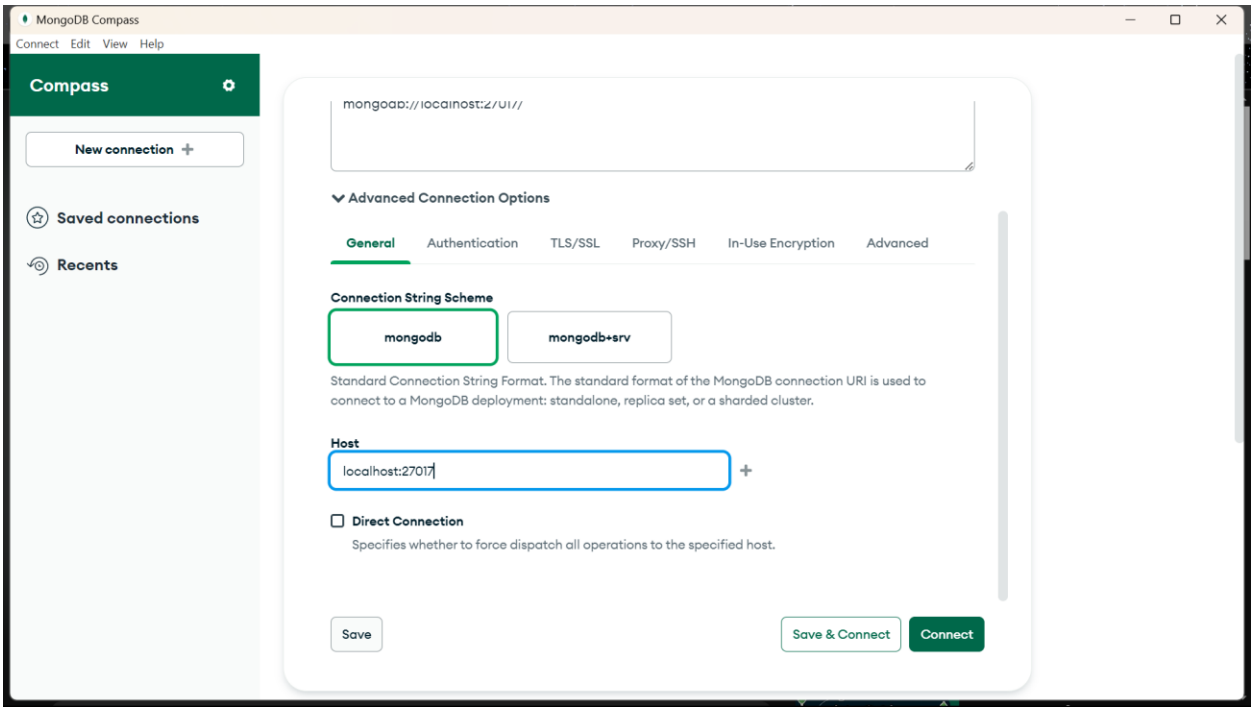
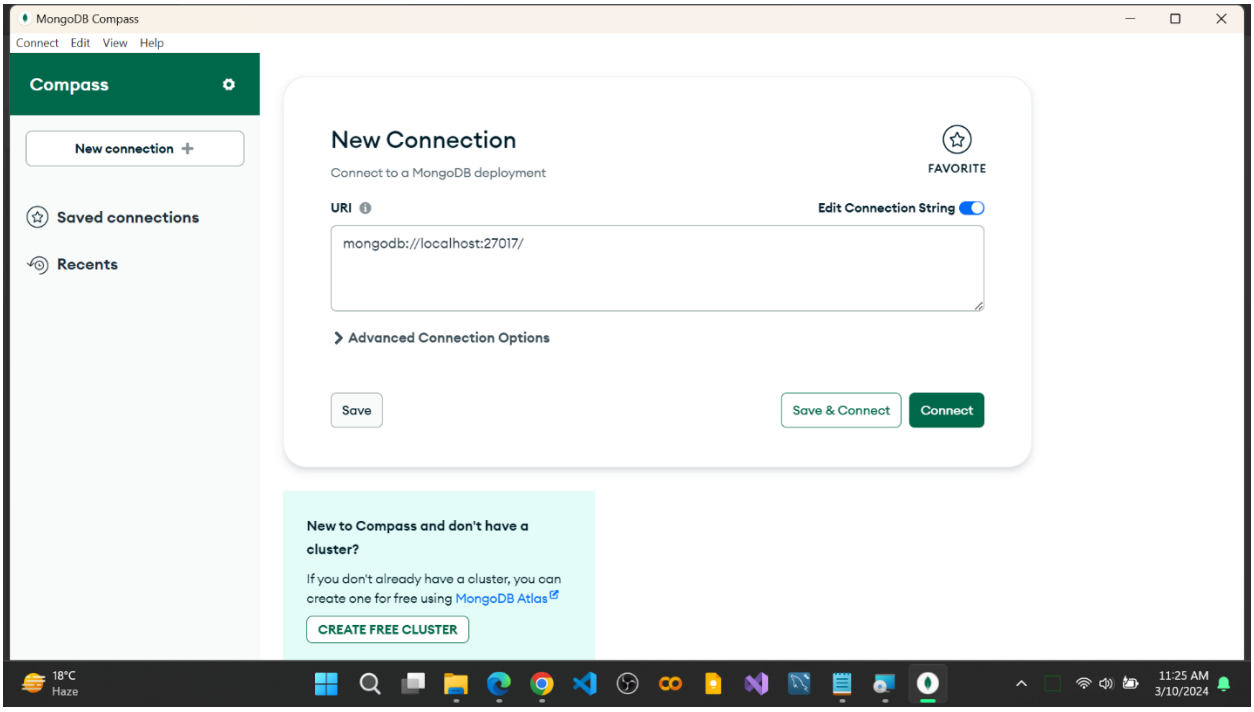
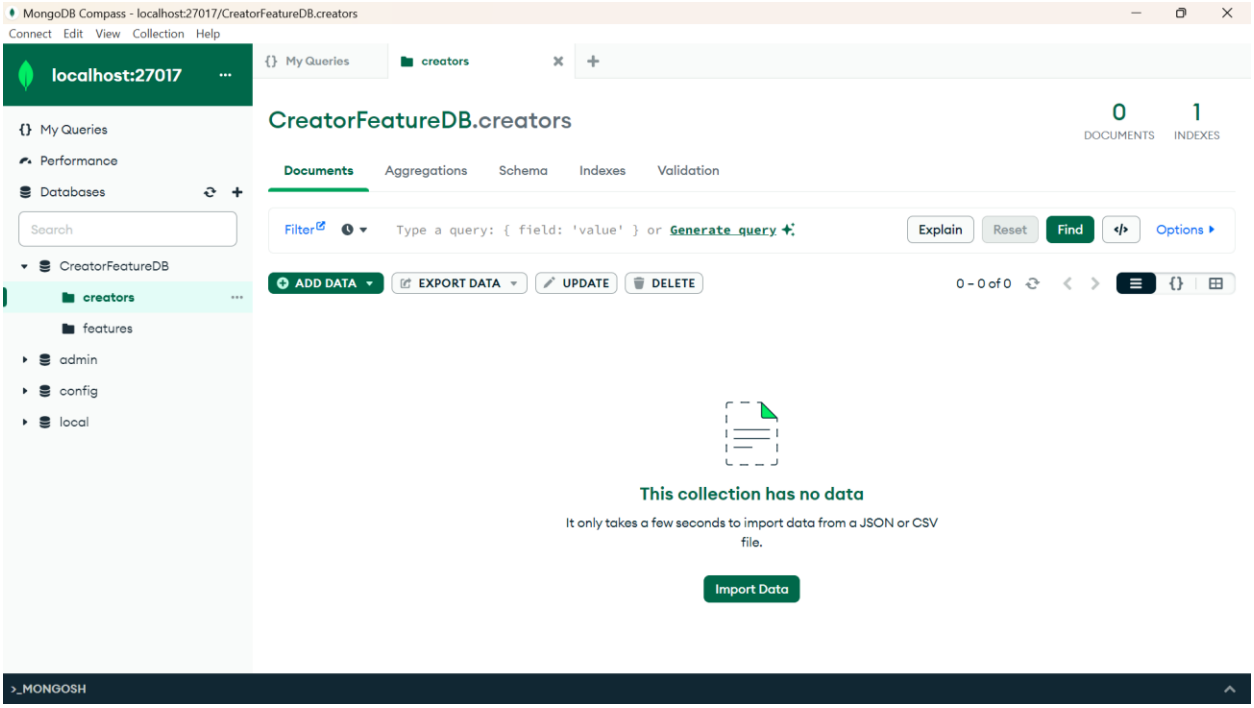
Today
mongodb-windows-x86_64-7.0.6-
Last month
microsoft-visual-cplusplus-redistrib
directx-9-29-1974-1
GoogleDriveSetup
Earlier this year
mysql-installer-community-8.0.36.0
node-v20.10.0-x64
A long time ago
tray_monitor_2.5.0
VSCodeUserSetup-x64-1.84.1
python-3.7.9-amd64
windowsdesktop-runtime-6.0.24-win-x64
11/3/2023 9:06 AM
Application
56,315 KB
HandBrake-1.6.1-x86_64-Win_GUI
11/3/2023 9:04 AM
Application
22,526 KB
MongoDB Compass
Install MongoDB Compass
MongoDB Compass is the official graphical user interface for MongoDB.
By checking below this installer will automatically download and install the latest version of MongoDB Compass on this machine. You can learn more about MongoDB Compass here: https://www.mongodb.com/products/compass
Install MongoDB Compass
Back
Next
Cancel
11 items | 1 item selected 574 MB


Programs
Assignemnt 2
Downloads > Programs
Search Programs
New
Sort
View
Details
Home
Gallery
OneDrive
Desktop
Downloads
Documents
Pictures
Music
Videos
Semester 5
The Complete
Machine Lear
Semster 6
Screenshots
lab 5
01
Name
Date modified
Type
Size
Today
mongodb-windows-x86_64-7.0.6-
Last month
microsoft-visual-cplusplus-redistrib
directx-9-29-1974-1
GoogleDriveSetup
Earlier this year
mysql-installer-community-8.0.36.0
node-v20.10.0-x64
A long time ago
tray_monitor_2.5.0
VSCodeUserSetup-x64-1.84.1
python-3.7.9-amd64
windowsdesktop-runtime-6.0.24-win-x64
11/3/2023 9:06 AM
Application
56,315 KB
HandBrake-1.6.1-x86_64-Win_GUI
11/3/2023 9:04 AM
Application
22,526 KB
MongoDB 7.0.6 2008R2Plus SSL (64 bit) Service Customization
Service Configuration
Specify optional settings to configure MongoDB as a service.
Install MongoD as a Service
Run service as Network Service user
Run service as a local or domain user:
Account Domain:
Account Name:
MongoDB
Account Password:
Service Name:
MongoDB
Data Directory:
C:\Program Files\MongoDB\Server\7.0\data\
Log Directory:
C:\Program Files\MongoDB\Server\7.0\log\
< Back
Next >
Cancel
11 items | 1 item selected 574 MB


MongoDB Compass
Connect Edit View Help
Compass
New connection
Saved connections
Recents
mongodb://localhost:27017/
Advanced Connection Options
General
Authentication
TLS/SSL
Proxy/SSH
In-Use Encryption
Advanced
Connection String Scheme
mongodb
mongodb+srv
Standard Connection String Format. The standard format of the MongoDB connection URI is used to connect to a MongoDB deployment: standalone, replica set, or a sharded cluster.
Host
localhost:27017
Direct Connection
Specifies whether to force dispatch all operations to the specified host.
Save
Save & Connect
Connect


MongoDB Compass
Connect Edit View Help
Compass
New connection
Saved connections
Recents
New Connection
Connect to a MongoDB deployment
FAVORITE
URI
Edit Connection String
mongodb://localhost:27017/
Advanced Connection Options
Save
Save & Connect
Connect
New to Compass and don't have a cluster?
If you don't already have a cluster, you can create one for free using MongoDB Atlas
CREATE FREE CLUSTER
18°C
Haze
11:25 AM
3/10/2024



MongoDB Shell

1st go ahead https://www.mongodb.com/try/download/shell

Download and install

Commands:

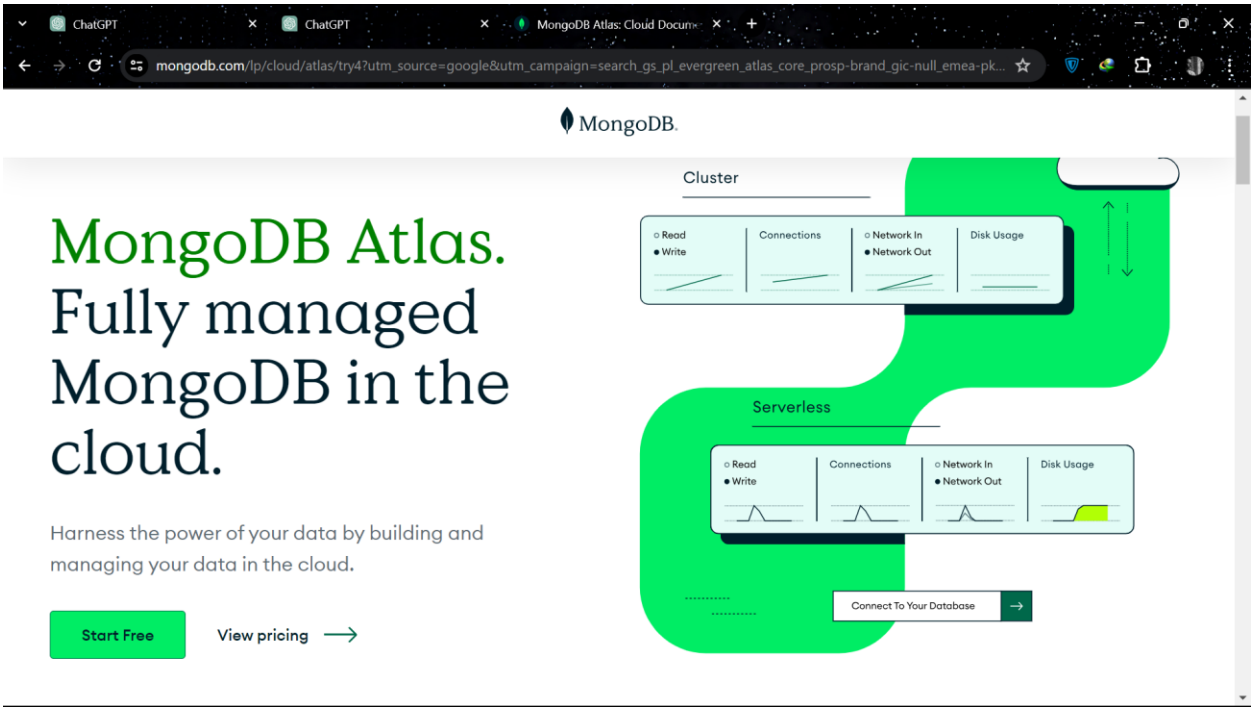
- mongosh
- show databases
- use New_Database //if already existing switch to it, if not create and switch
- db.creatcollection(name)
- show collections
- db.collection_name.find() This will return all documents in the " collection_name " collection.
- db.<collection_name>.findOne(): Retrieves a single document from the specified collection.
- db.<collection_name>.insertOne(): Inserts a single document into the specified collection.
- db.<collection_name>.insertMany(): Inserts multiple documents into the specified collection.
- db.<collection_name>.updateOne(): Updates a single document in the specified collection.

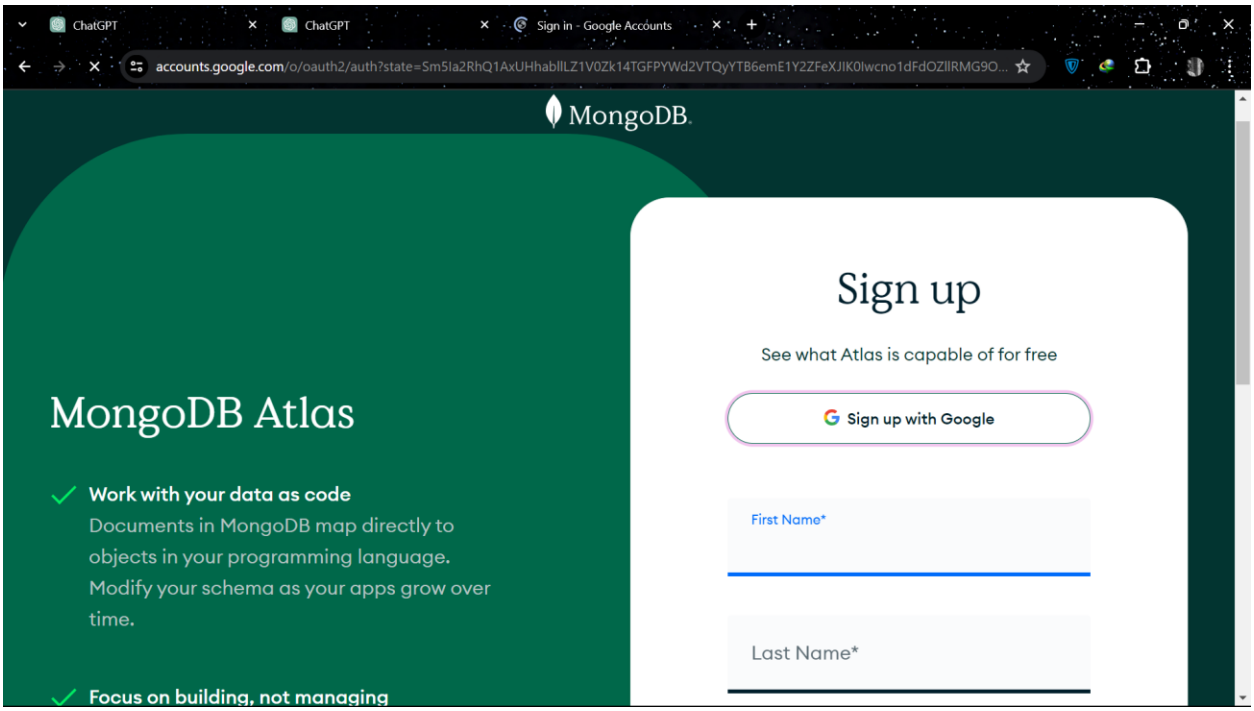
- db.<collection_name>.updateMany(): Updates multiple documents in the specified collection.
- db.<collection_name>.deleteOne(): Deletes a single document from the specified collection.
- db.<collection_name>.deleteMany(): Deletes multiple documents from the specified collection.
- db.<collection_name>.aggregate(): Performs aggregation operations on the documents in the specified collection.
- db.dropDatabase(): Deletes the current database.
- db.<collection_name>.drop(): Deletes the specified collection.
- db.stats(): Provides statistics about the current database.

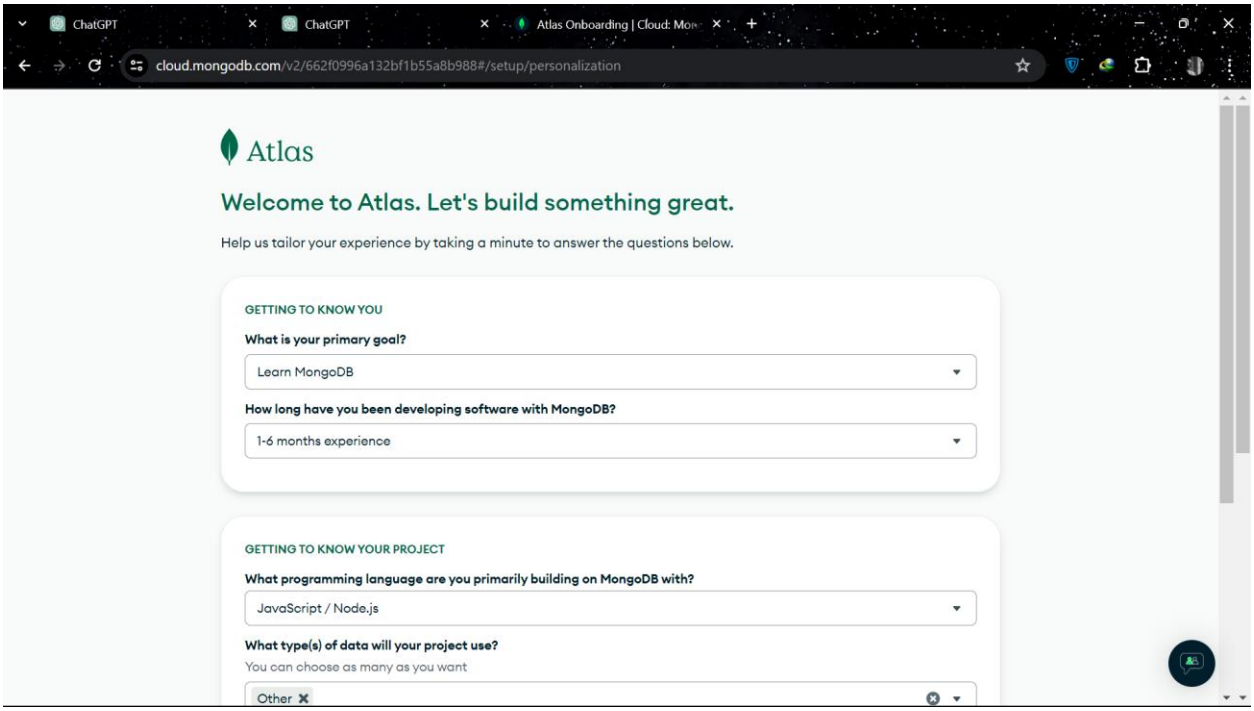
```
mongosh mongodb://127.0.0.
Using Mongosh:          2.1.5

For mongosh info see: https://docs.mongodb.com/mongodb-shell/


To help improve our products, anonymous usage data is collected and sent to MongoDB periodically (https://www.mongodb.com/legal/priva
cy-policy).
You can opt-out by running the disableTelemetry() command.

------
   The server generated these startup warnings when booting
   2024-03-10T11:24:46.651+05:00: Access control is not enabled for the database. Read and write access to data and configuration is
unrestricted
------

test> show dbs
CreatorFeatureDB    8.00 KiB
admin              40.00 KiB
config            108.00 KiB
local              40.00 KiB
test> use CreatorFeatureDB
switched to db CreatorFeatureDB
CreatorFeatureDB> show dbs
CreatorFeatureDB    8.00 KiB
admin              40.00 KiB
config            108.00 KiB
local              40.00 KiB
CreatorFeatureDB> db.createCollection("creators")
{ ok: 1 }
CreatorFeatureDB> db.createCollection("features")
{ ok: 1 }
CreatorFeatureDB> show collections
creators
features
CreatorFeatureDB>
```

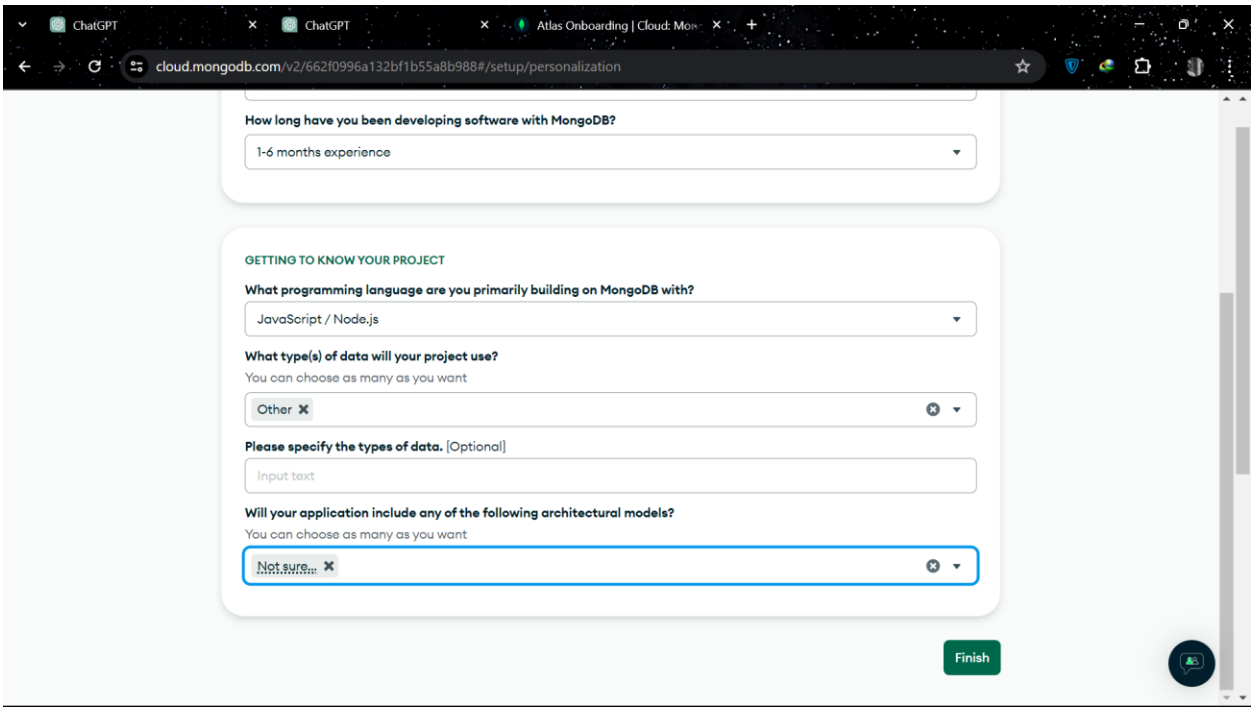
```
mongosh mongodb://127.0.0.

test> show dbs
Assignment04      120.00 KiB
CreatorFeatureDB   28.67 MiB
admin              40.00 KiB
config             60.00 KiB
curd                8.00 KiB
local              72.00 KiB
test> use Assignment04
switched to db Assignment04
Assignment04> show collections
customer
product
transaction
Assignment04> db.product.find()
[
  {
    _id: ObjectId('6625e28aca4bc6436ac7c7a3'),
    product_id: 1,
    category: 'Electronics',
    description: 'handcrafted classic',
    price: 460
  },
  {
    _id: ObjectId('6625e28aca4bc6436ac7c7a4'),
    product_id: 2,
    category: 'Clothing',
    description: 'exquisite versatile',
    price: 306
  },
  {
    _id: ObjectId('6625e28aca4bc6436ac7c7a5'),
    product_id: 3,
    category: 'Clothing',
    description: 'fashionable trendy',
```

MongoDB Atlas

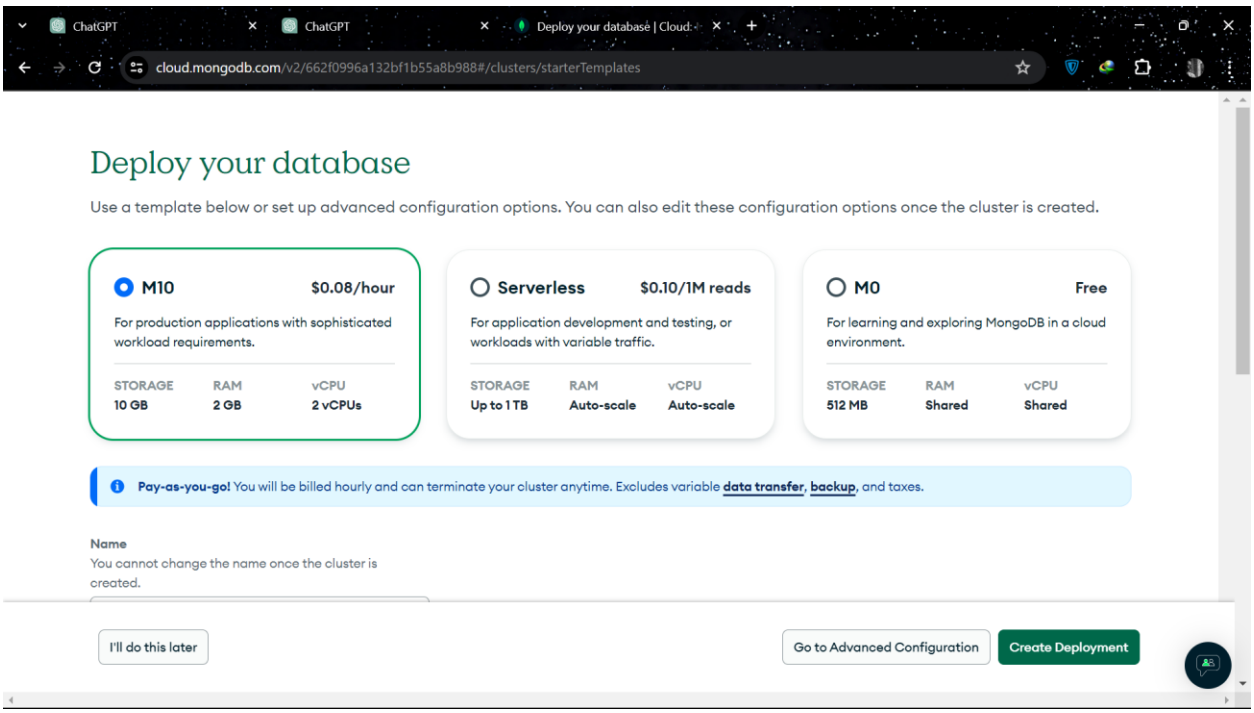



ChatGPT
ChatGPT
Sign in - Google Accounts
accounts.google.com/o/oauth2/auth?state=Sm5Ia2RhQ1AxUHhablILZ1V0Zk14TGFPYWd2VTQyYTB6emE1Y2ZFeXJIK0Iwcno1dFdOZlIRMG9O...
MongoDB.
MongoDB Atlas
Work with your data as code
Documents in MongoDB map directly to objects in your programming language. Modify your schema as your apps grow over time.
Focus on building, not managing
Sign up
See what Atlas is capable of for free
Sign up with Google
First Name*
Last Name*

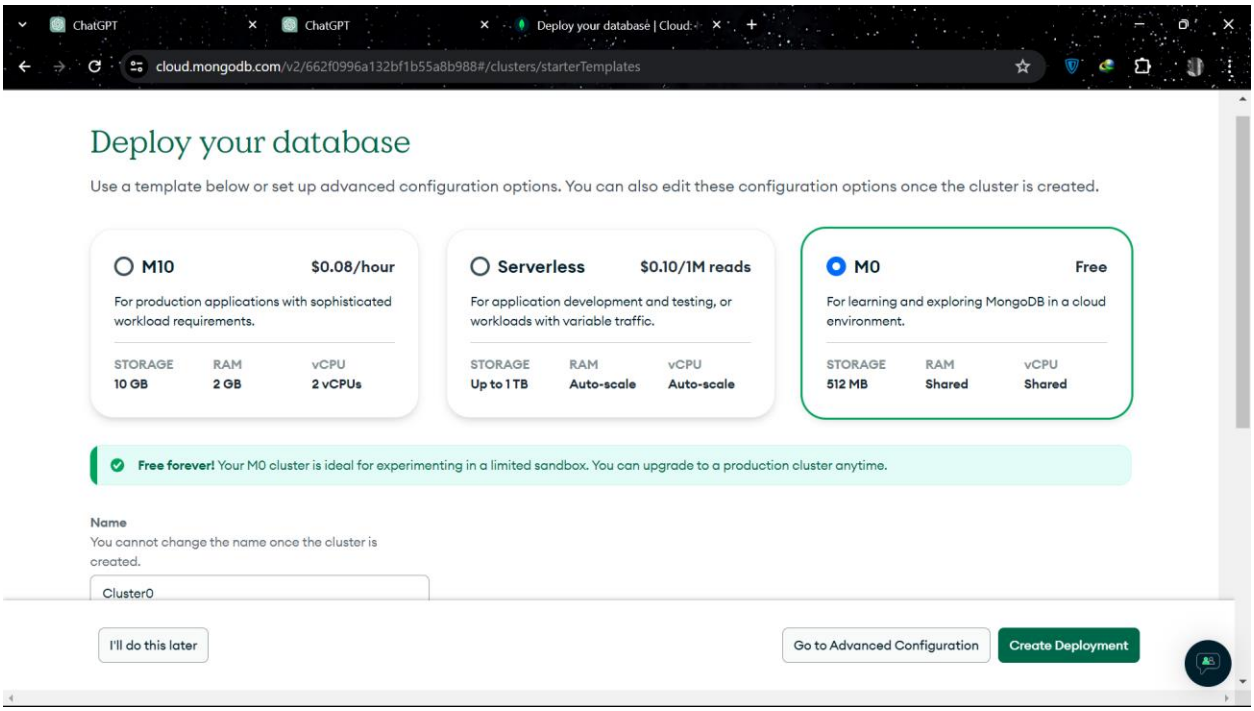

ChatGPT
ChatGPT
Atlas Onboarding | Cloud: Mon
cloud.mongodb.com/v2/662f0996a132bf1b55a8b988#/setup/personalization
Atlas
Welcome to Atlas. Let's build something great.
Help us tailor your experience by taking a minute to answer the questions below.
GETTING TO KNOW YOU
What is your primary goal?
Learn MongoDB
How long have you been developing software with MongoDB?
1-6 months experience
GETTING TO KNOW YOUR PROJECT
What programming language are you primarily building on MongoDB with?
JavaScript / Node.js
What type(s) of data will your project use?
You can choose as many as you want
Other



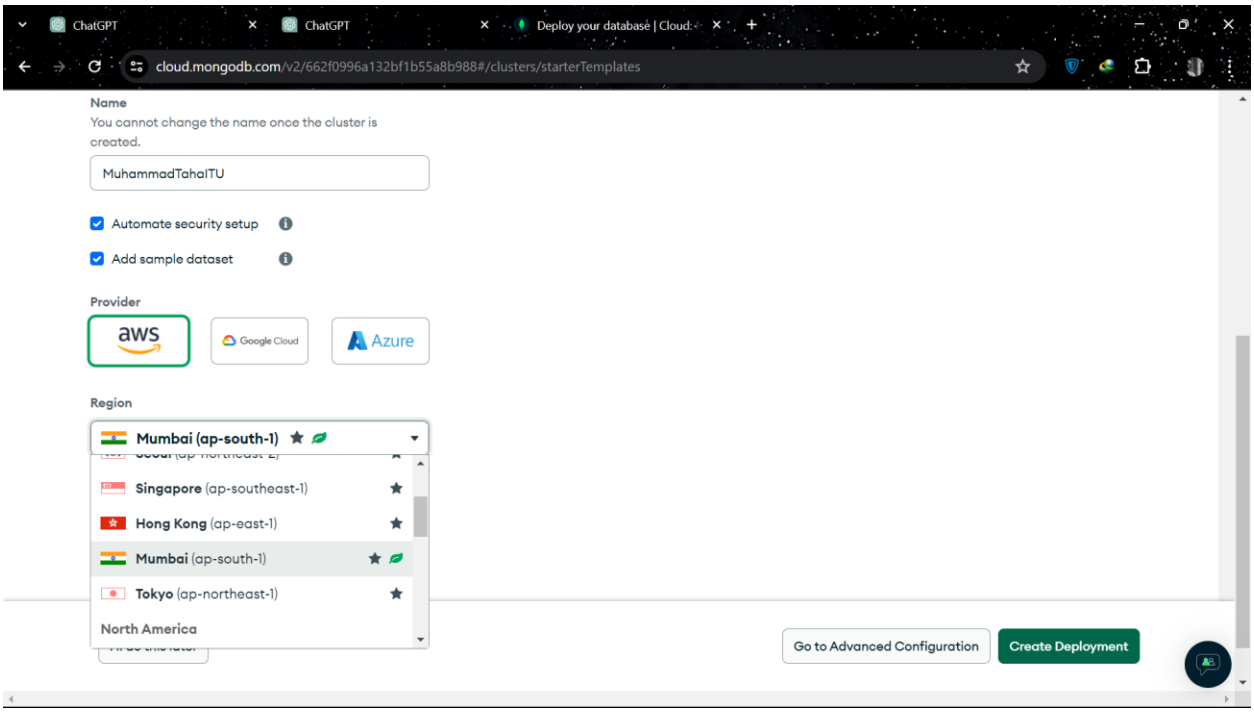
Here is the real game:

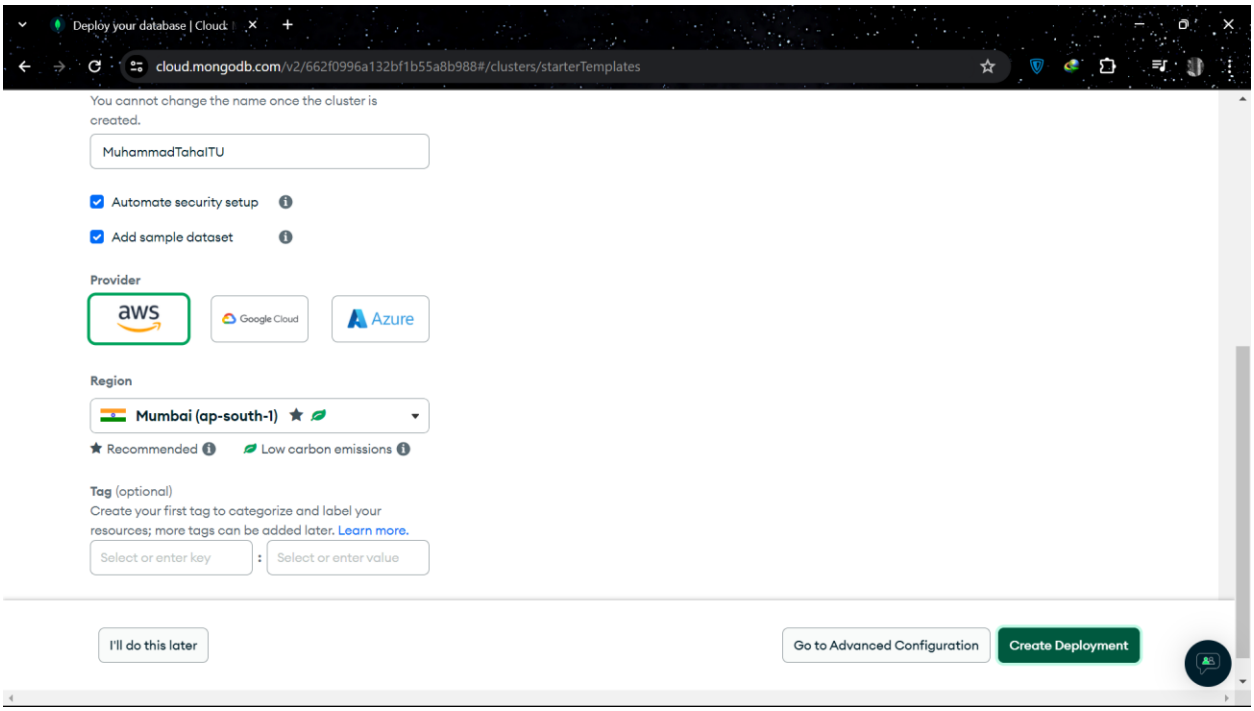


A free server:

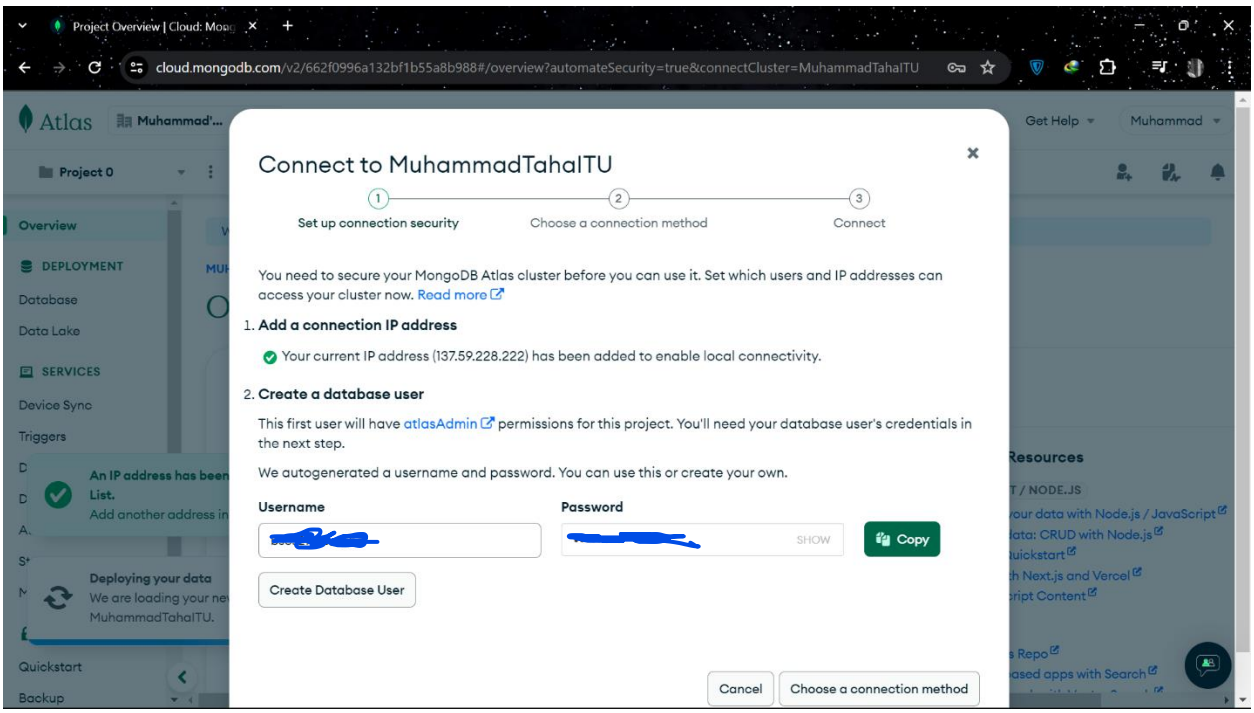


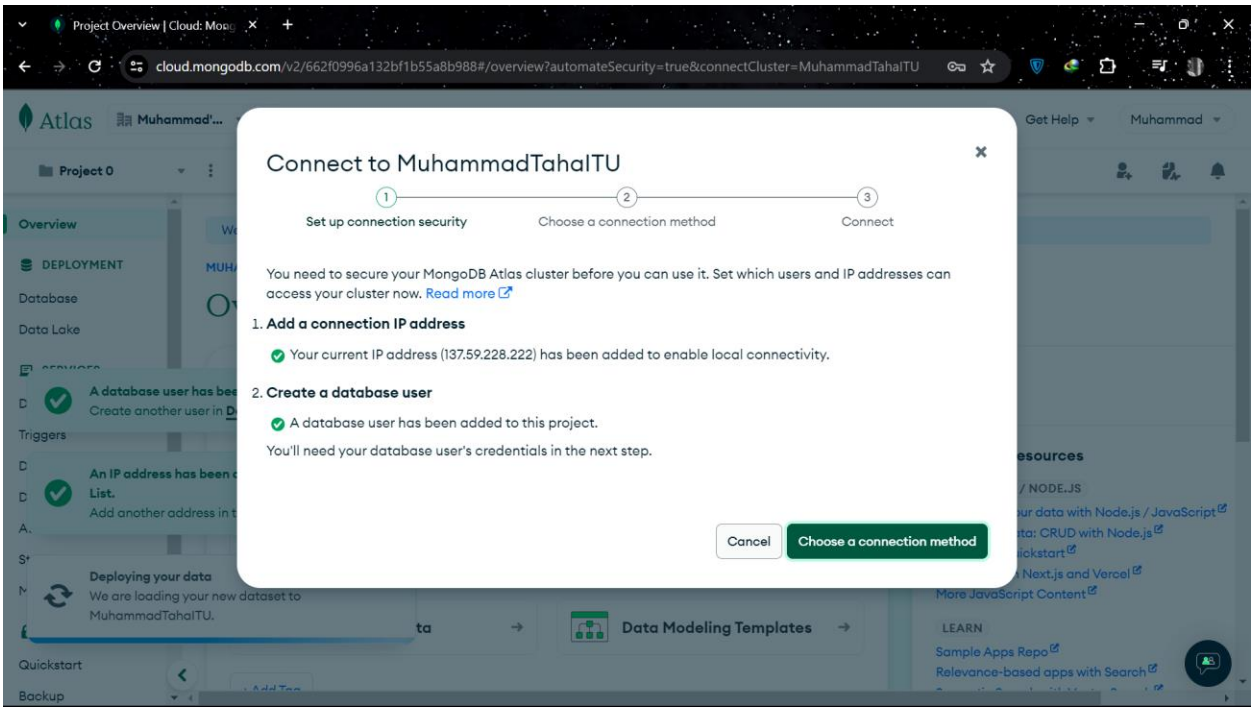
You can go for any recommended, I would say chose geographically closer one but yes traffic does matter too. And they recommend you according to according to availability so don't worry just a closer one with a recommending popup and a leaf for environment safety .



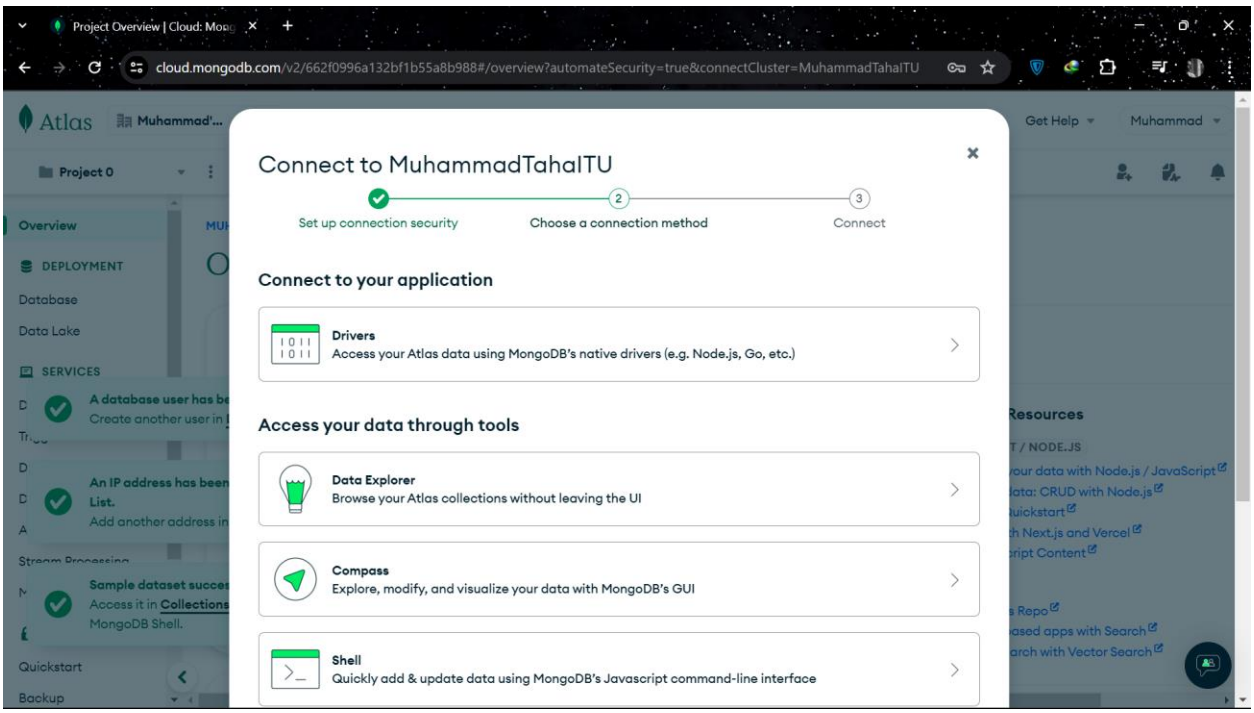


Create Database user remember your user name and password.



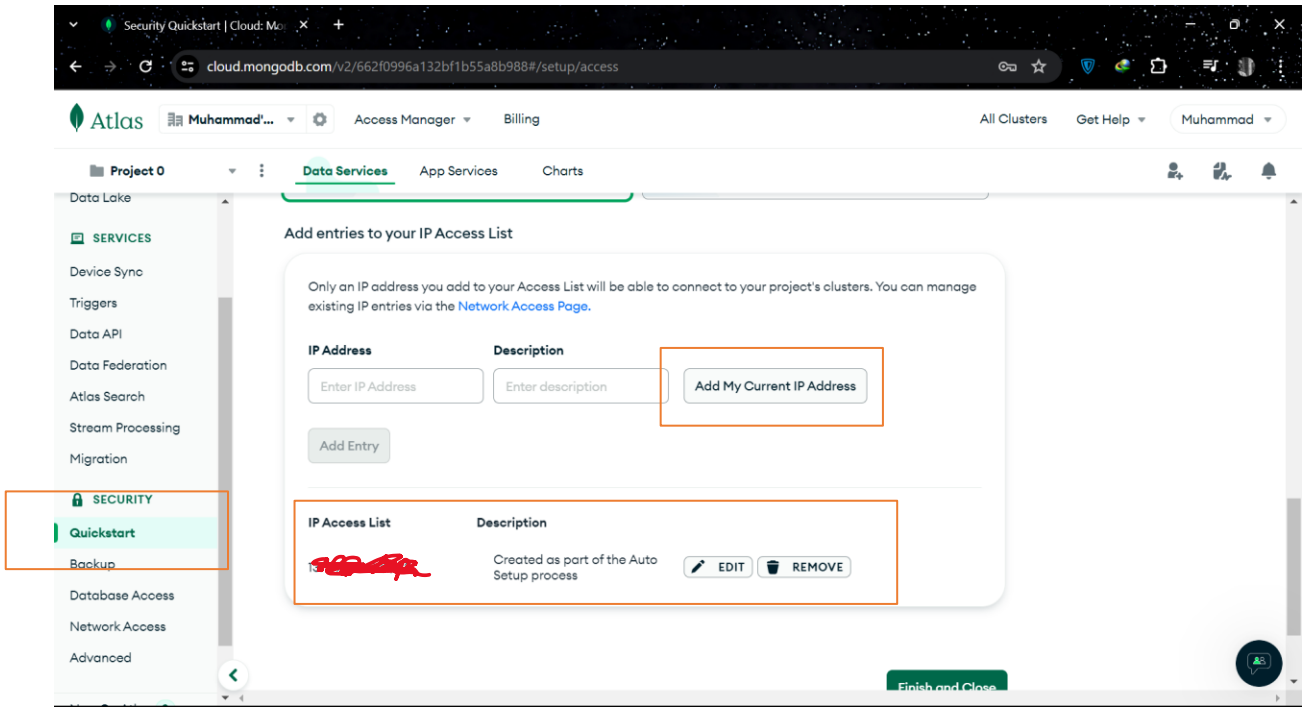


Close it

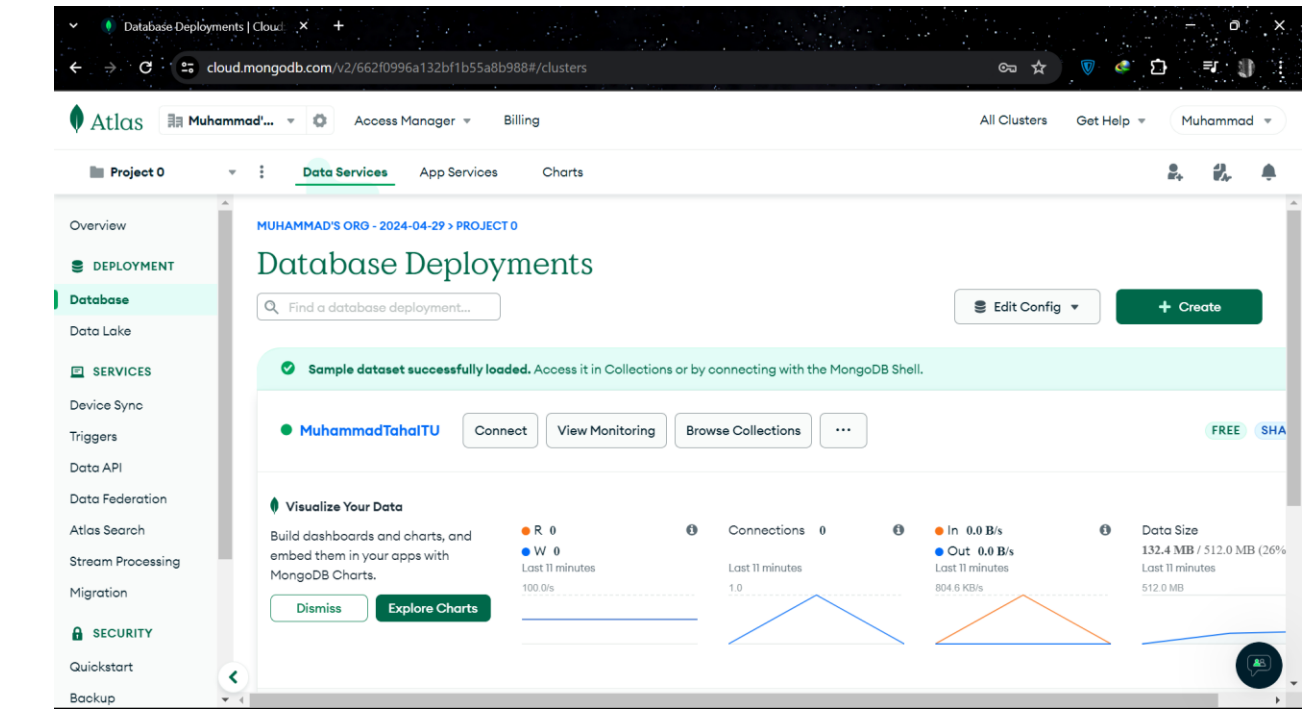


Now this is important:

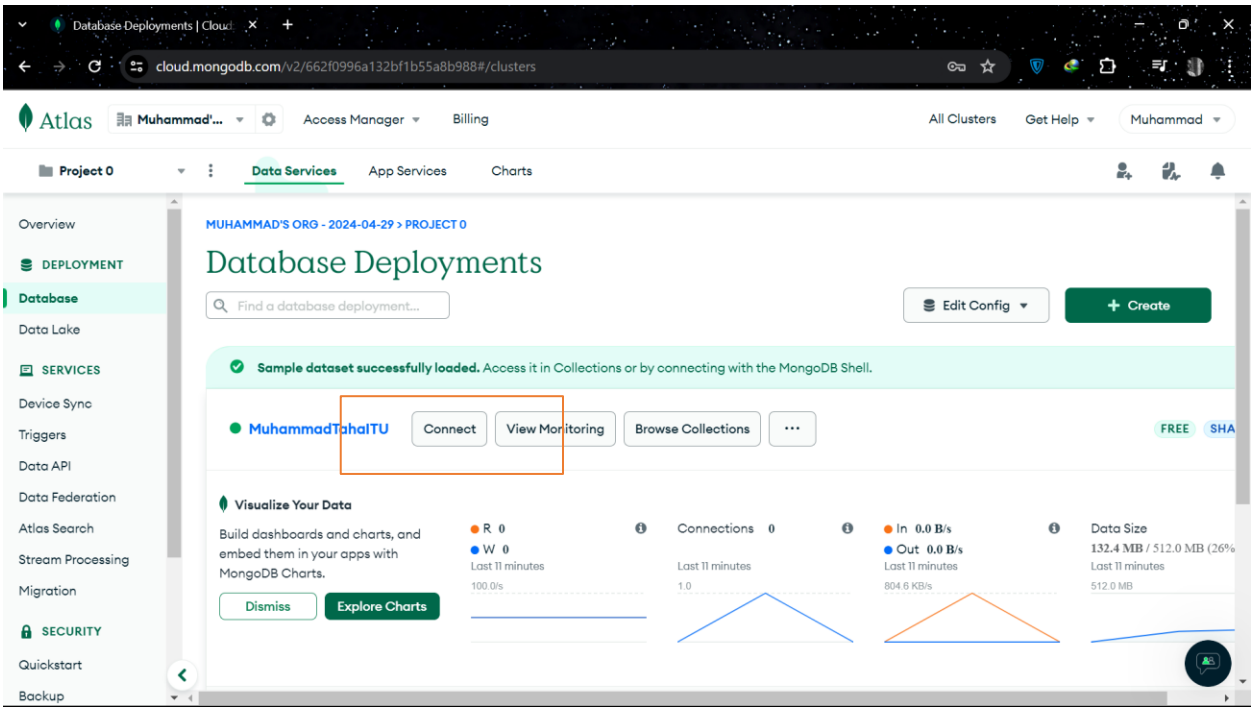
In QuickStart you will find the IP addresses that are working with this Atlas. If you were developing on one Laptop and now you are on some other device you do need to login the Atlas and put your new device's IP here



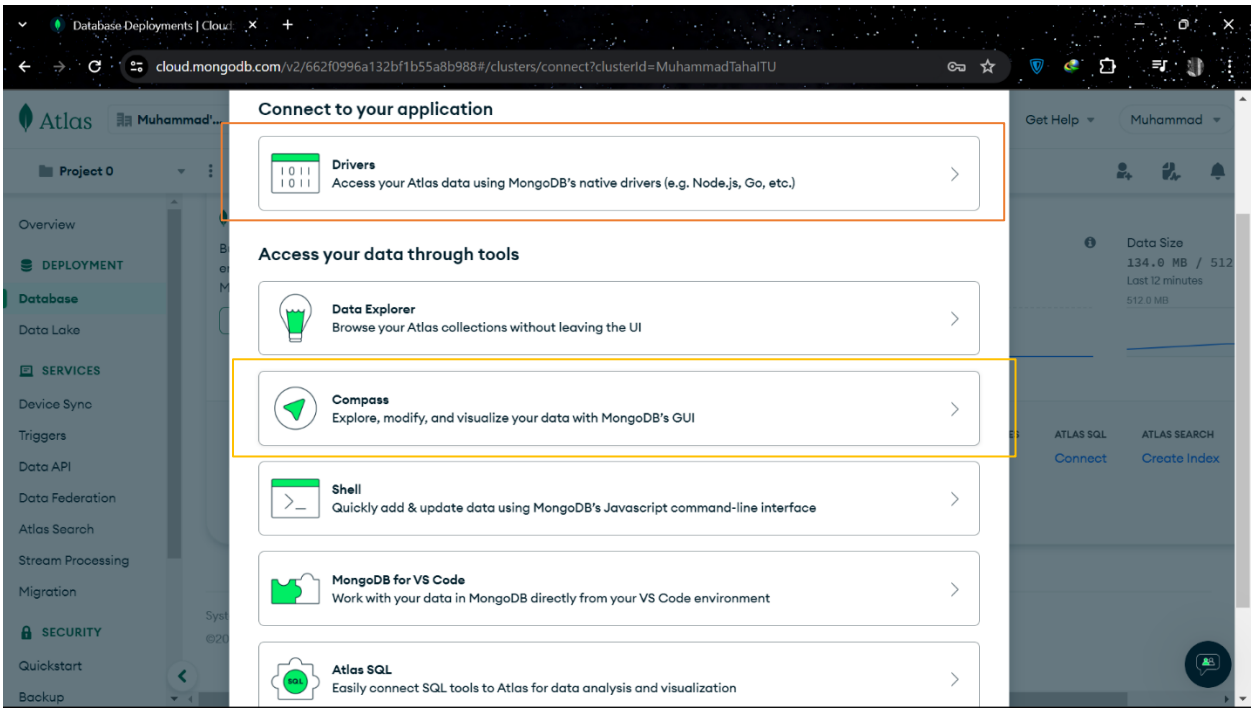
Here is where all your DBs will be visible

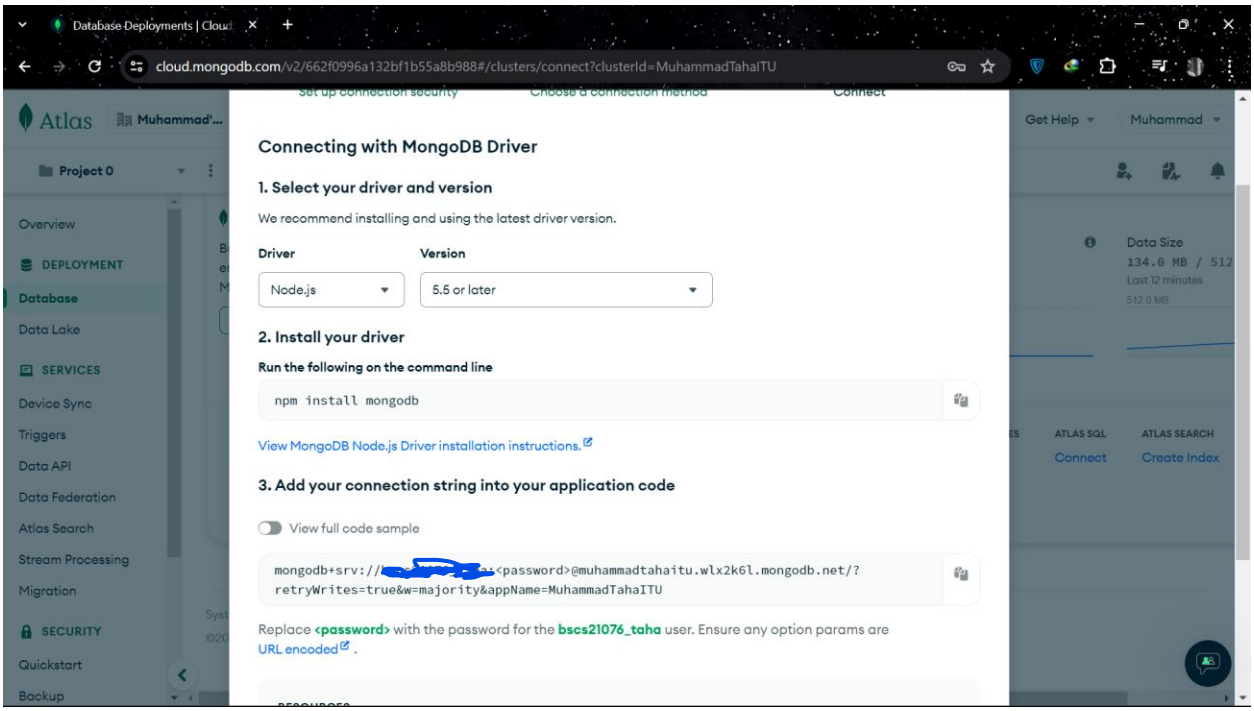


Now let's hit connect and make it work for our project in VScode.



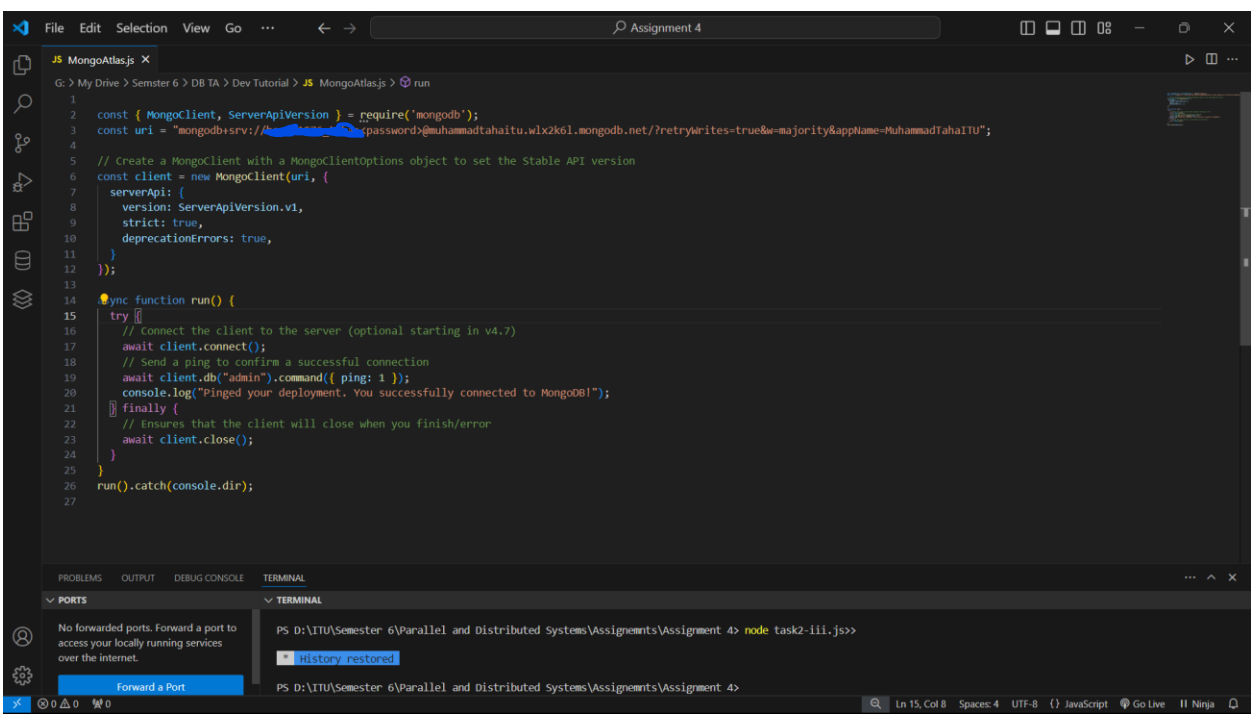
We have option to use our cloud projects through many different option like in compass, we will just be needing to copy the string that it will give on clicking atlas and after that past it in compass connection string. But for now I'm clicking the 1st option as it give me a connection string that I can use in my Node js (or any chosen language)



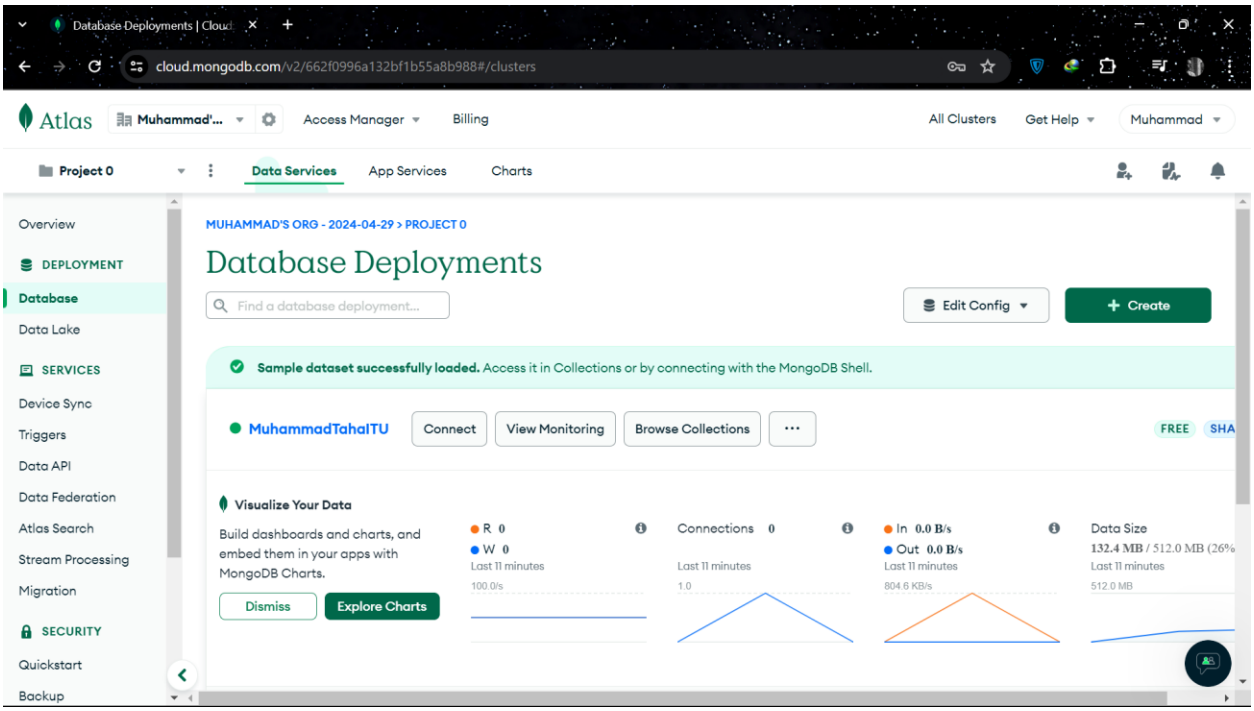


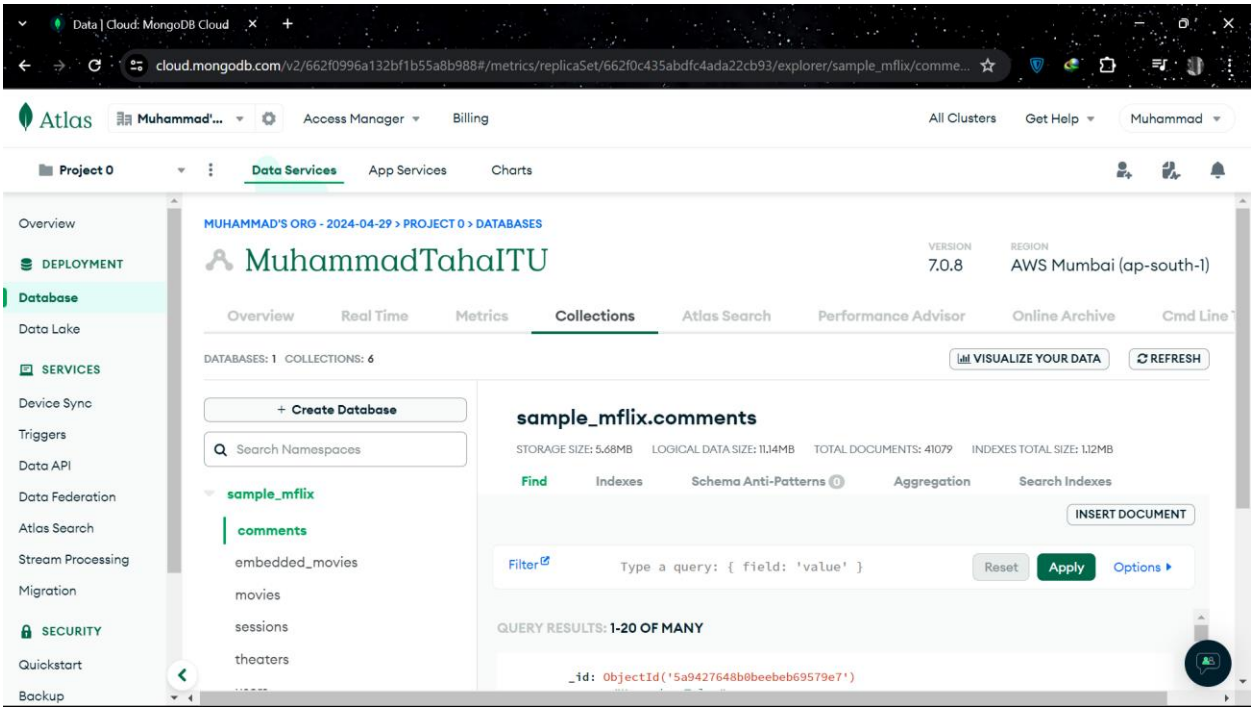
I will copy the connection string and past it in my project.

Make sure you will be needing to replace <password> with your password



To see your Collections/Databases hit “Browse Collections”


Database Deployments | Cloud
cloud.mongodb.com/v2/662f0996a132bf1b55a8b988#/clusters
Atlas
Muhammad'...
Access Manager
Billing
All Clusters
Get Help
Muhammad
Project 0
Data Services
App Services
Charts
Overview
DEPLOYMENT
Database
Data Lake
SERVICES
Device Sync
Triggers
Data API
Data Federation
Atlas Search
Stream Processing
Migration
SECURITY
Quickstart
Backup
MUHAMMAD'S ORG - 2024-04-29 > PROJECT 0
Database Deployments
Find a database deployment...
Edit Config
+ Create
Sample dataset successfully loaded. Access it in Collections or by connecting with the MongoDB Shell.
MuhammadTahaITU
Connect
View Monitoring
Browse Collections
FREE
Visualize Your Data
Build dashboards and charts, and embed them in your apps with MongoDB Charts.
Dismiss
Explore Charts
R 0
W 0
Last 11 minutes
Connections 0
In 0.0 B/s
Out 0.0 B/s
Data Size
132.4 MB / 512.0 MB (26%


Data | Cloud: MongoDB Cloud
cloud.mongodb.com/v2/662f0996a132bf1b55a8b988#/metrics/replicaSet/662f0c435abdfc4ada22cb93/explorer/sample_mflix/comme...
Atlas
Muhammad'...
Access Manager
Billing
All Clusters
Get Help
Muhammad
Project 0
Data Services
App Services
Charts
MUHAMMAD'S ORG - 2024-04-29 > PROJECT 0 > DATABASES
MuhammadTahaITU
VERSION
7.0.8
REGION
AWS Mumbai (ap-south-1)
Overview
Real Time
Metrics
Collections
Atlas Search
Performance Advisor
Online Archive
DATABASES: 1 COLLECTIONS: 6
VISUALIZE YOUR DATA
REFRESH
+ Create Database
Search Namespaces
sample_mflix
comments
embedded_movies
movies
sessions
theaters
sample_mflix.comments
STORAGE SIZE: 5.68MB
LOGICAL DATA SIZE: 11.14MB
TOTAL DOCUMENTS: 41079
INDEXES TOTAL SIZE: 1.12MB
Find
Indexes
Schema Anti-Patterns
Aggregation
Search Indexes
INSERT DOCUMENT
Filter
Type a query: { field: 'value' }
Reset
Apply
Options
QUERY RESULTS: 1-20 OF MANY
_id: ObjectId('5a9427648b0beebeb69579e7')

Connected 😊

File Edit Selection View Go ... dev

EXPLORER

- DEV
  - atlas
    - atlas.js
  - atlas-v1.1
    - config.js
    - index.js
  - js-web
    - about.html
    - index.html
  - local-mongo
    - localmongo.js
  - node_modules
  - MongoAtlas.js
  - package-lock.json
  - package.json

JS MongoAtlas.js | JS localmongo.js | JS atlas.js | JS index.js | JS config.js | index.html | about.html | package.json

JS MongoAtlas.js > run

```javascript
const client = new MongoClient(uri, {
  serverApi: {
    strict: true,
    deprecationErrors: true,
  }
});

async function run() {
  try {
    // Connect the client to the server (optional starting in v4.7)
    await client.connect();
    // Send a ping to confirm a successful connection
    await client.db("admin").command({ ping: 1 });
    console.log("Pinged your deployment. You successfully connected to MongoDB!");
  } finally {
    // Ensures that the client will close when you finish/error
    await client.close();
  }
}
run().catch(console.dir);
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

PORTS

No forwarded ports. Forward a port to access your locally running services over the internet.

Forward a Port

TERMINAL

```
+ cd ...
+ ~~~~~~
    + CategoryInfo          : InvalidArgument: (:) [Set-Location], PSArg
  umentException
    + FullyQualifiedErrorId : Argument,Microsoft.PowerShell.Commands.Set
  LocationCommand

PS D:\ITU\Semester 6\Data Base TA\dev\atlas-v1.1> cd ..
PS D:\ITU\Semester 6\Data Base TA\dev> node MongoAtlas.js
Pinged your deployment. You successfully connected to MongoDB!
```

OUTLINE
TIMELINE
MYSQL

Ln 15, Col 23 Spaces: 2 UTF-8 CRLF {} JavaScript Go Live Ninja