

CORE MODULE 3

Aim: Installation MongoDB

Install MongoDB Atlas

STEP 1: Click this link download the MongoDB Atlas.

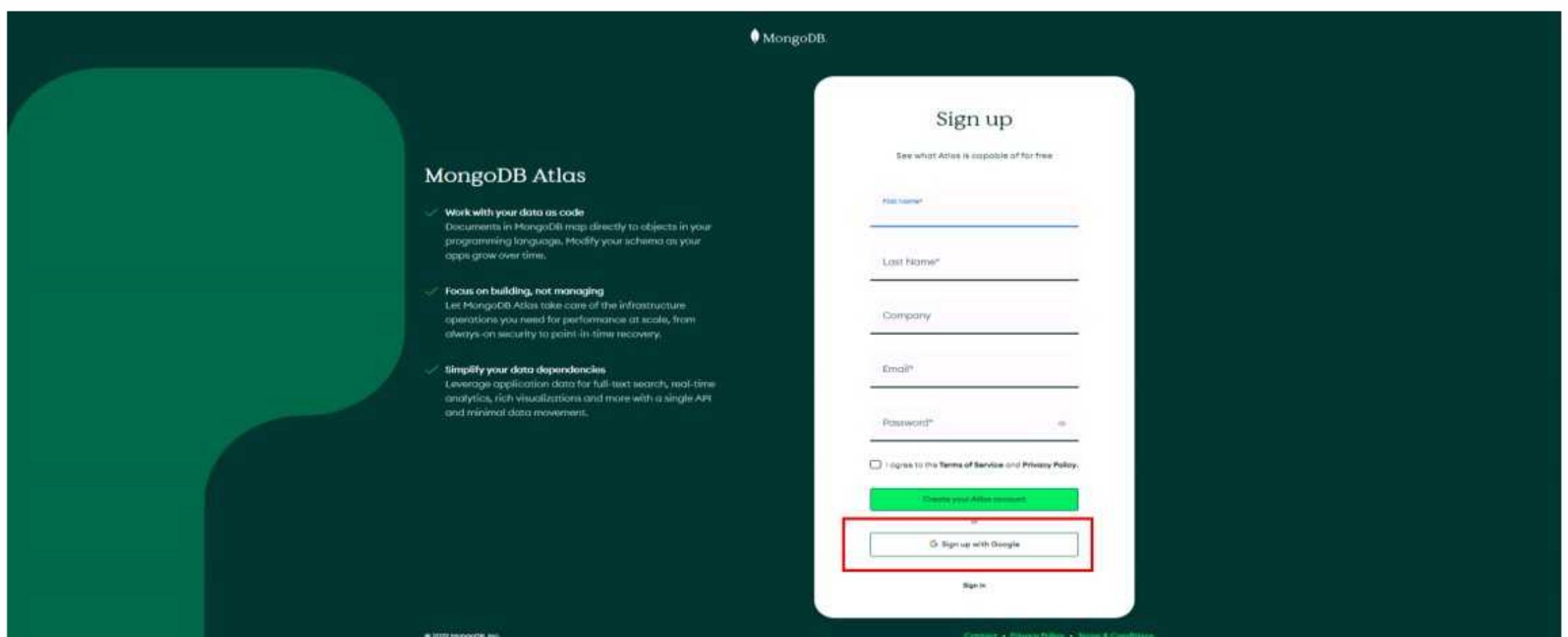
<http://www.mongodb.com/Atlas>

STEP 2: Click on Try Free



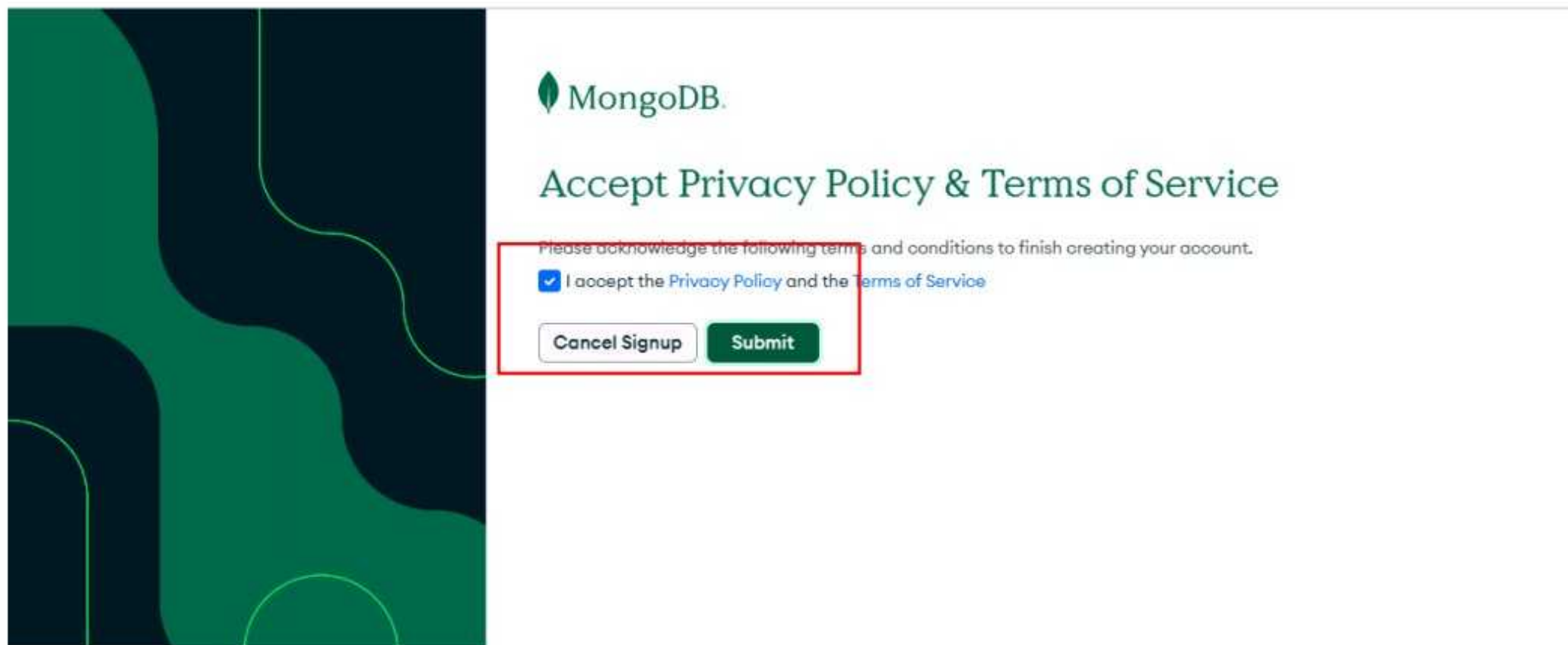
The screenshot shows the MongoDB Atlas landing page. On the left, the text reads "MongoDB Atlas. The multi-cloud developer data platform." followed by a sub-headline "An integrated suite of cloud database and data services to accelerate and simplify how you build with data." Below this is a green "Try Free" button, which is highlighted with a red rectangle, and a "Contact sales" link with a right-pointing arrow. On the right, there is a large green graphic with two white boxes labeled "Cluster" and "Serverless". Each box contains a dashboard with metrics like Read, Write, Connections, Network In/Out, and Disk Usage. At the bottom of the graphic is a "Connect To Your Database" button with a right-pointing arrow.

STEP 3: Click on sign up with google



The screenshot shows the MongoDB Atlas sign-up page. On the left, there is a dark green background with the "MongoDB Atlas" logo and three bullet points: "Work with your data as code", "Focus on building, not managing", and "Simplify your data dependencies". On the right, there is a white "Sign up" form. The form includes fields for "First Name", "Last Name", "Company", "Email", and "Password". Below these fields is a checkbox for "I agree to the Terms of Service and Privacy Policy." and a green "Create your Atlas account" button. Below the green button is a red rectangle highlighting a "Sign up with Google" button. At the bottom of the form is a "Sign in" link. The footer of the page includes "© 2022 MongoDB, Inc." and links for "Contact", "Privacy Policy", and "Terms & Conditions".

STEP 4: select your google account then click the checkbox then click on submit.



The image shows the MongoDB account creation confirmation screen. On the left is a decorative green and dark blue abstract background. The main content area has a white background. At the top is the MongoDB logo. Below it is the heading "Accept Privacy Policy & Terms of Service". A line of text reads "Please acknowledge the following terms and conditions to finish creating your account." Below this is a checkbox with a blue checkmark and the text "I accept the Privacy Policy and the Terms of Service". At the bottom are two buttons: "Cancel Signup" and "Submit". A red rectangular box highlights the checkbox and the "Submit" button.

MongoDB.

Accept Privacy Policy & Terms of Service

Please acknowledge the following terms and conditions to finish creating your account.

☒ I accept the [Privacy Policy](#) and the [Terms of Service](#)

[Cancel Signup](#) [Submit](#)

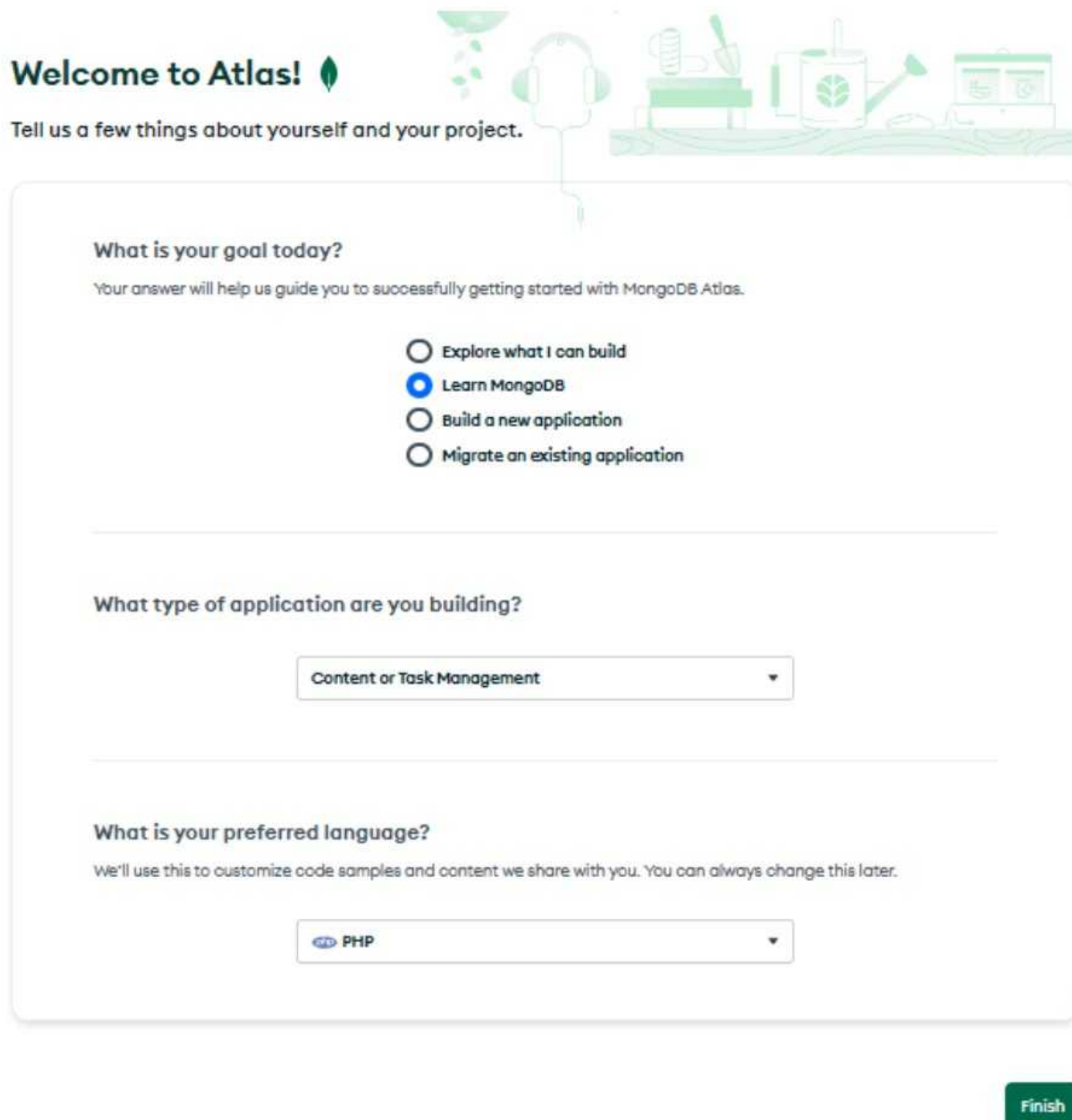
STEP 5: Account Created.




STEP 6: Select

- What is goal today (**Learn MongoDB**)
- What type of application are you building (**content or task management**)
- What is your preferred language (**PHP**)

Then click on Finish.



The image shows the 'Welcome to Atlas!' screen from MongoDB. At the top, there's a green header with the text 'Welcome to Atlas!' and a small leaf icon. Below it, a subtitle says 'Tell us a few things about yourself and your project.' To the right of the text is a green illustration of a desk with a laptop, a mug, and some plants. The main content area is a light gray box with rounded corners. It contains three sections: 1. 'What is your goal today?' with a subtext 'Your answer will help us guide you to successfully getting started with MongoDB Atlas.' and four radio button options: 'Explore what I can build', 'Learn MongoDB' (which is selected with a blue dot), 'Build a new application', and 'Migrate an existing application'. 2. 'What type of application are you building?' with a dropdown menu showing 'Content or Task Management'. 3. 'What is your preferred language?' with a subtext 'We'll use this to customize code samples and content we share with you. You can always change this later.' and a dropdown menu showing 'PHP' with the PHP logo. At the bottom right of the form is a green 'Finish' button.

Welcome to Atlas! 

Tell us a few things about yourself and your project.


What is your goal today?
Your answer will help us guide you to successfully getting started with MongoDB Atlas.

☐ Explore what I can build
☒ Learn MongoDB
☐ Build a new application
☐ Migrate an existing application

What type of application are you building?

Content or Task Management ▼

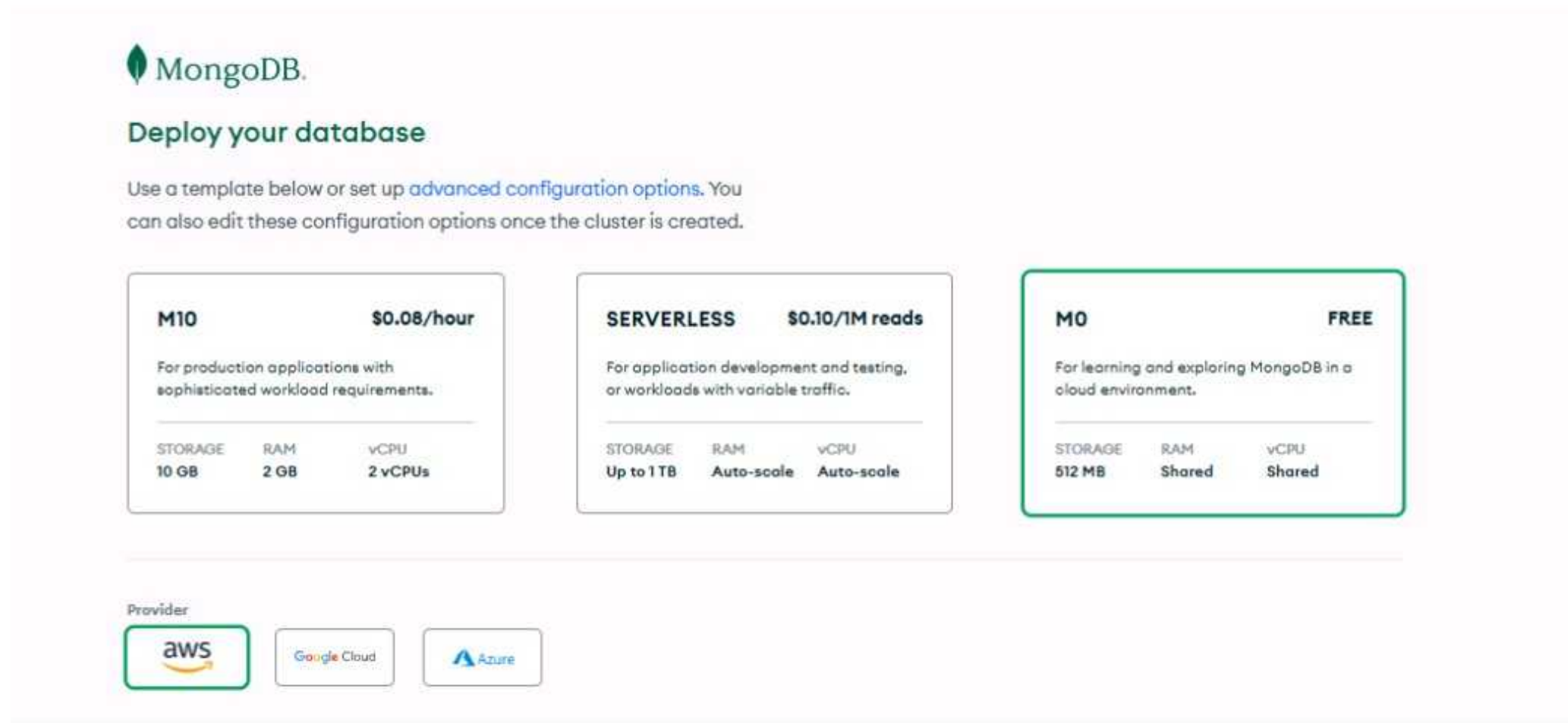
What is your preferred language?
We'll use this to customize code samples and content we share with you. You can always change this later.

 PHP ▼

Finish

STEP 7: Select from Deploy your database

- M0 free
- AWS(Amazon Web Services) from Provider



The screenshot shows the MongoDB 'Deploy your database' interface. It features three deployment options: M10 (\$0.08/hour), SERVERLESS (\$0.10/1M reads), and M0 (FREE). The M0 option is highlighted with a green border. Below the options, there are buttons for selecting a cloud provider: AWS, Google Cloud, and Azure. The AWS button is also highlighted with a green border.

MongoDB.

Deploy your database

Use a template below or set up [advanced configuration options](#). You can also edit these configuration options once the cluster is created.

Option	Price
M10 For production applications with sophisticated workload requirements.	\$0.08/hour
SERVERLESS For application development and testing, or workloads with variable traffic.	\$0.10/1M reads
M0 For learning and exploring MongoDB in a cloud environment.	FREE

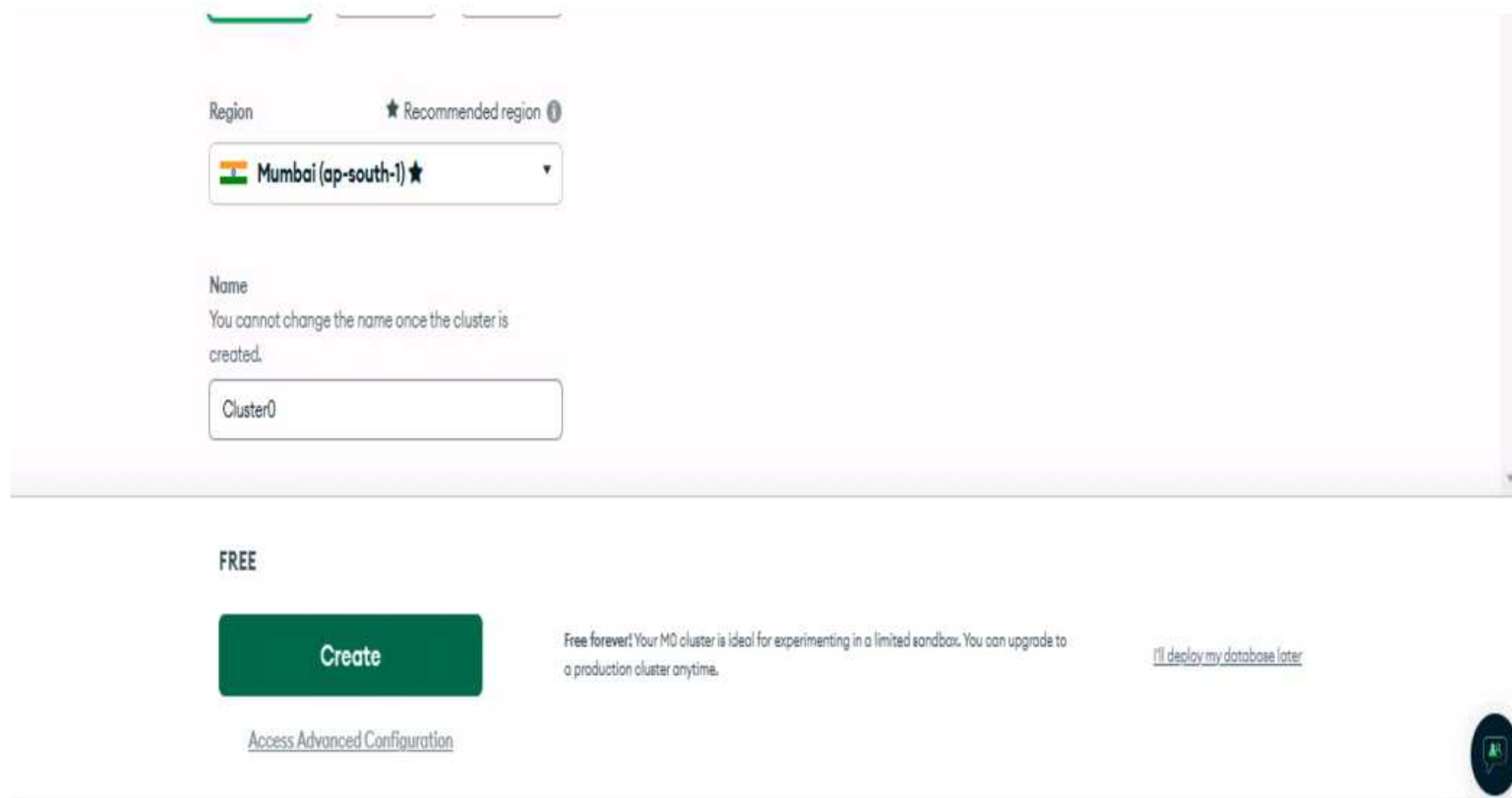
Option	Storage	RAM	vCPU
M10	10 GB	2 GB	2 vCPUs
SERVERLESS	Up to 1 TB	Auto-scale	Auto-scale
M0	512 MB	Shared	Shared

Provider

[aws](#) [Google Cloud](#) [Azure](#)


STEP 8: Select Region- Mumbai(ap-south-1)

& Name-cluster0. Then click on create



The screenshot shows the 'Create' cluster screen. It includes a 'Region' dropdown menu with 'Mumbai (ap-south-1)' selected, marked as a recommended region. Below this is a 'Name' field with 'Cluster0' entered. A large green 'Create' button is prominent. At the bottom, there is a 'FREE' label, a link to 'Access Advanced Configuration', and a note about the free forever trial.

Region ★ Recommended region ⓘ

 **Mumbai (ap-south-1) ★**

Name

You cannot change the name once the cluster is created.

Cluster0

FREE

[Access Advanced Configuration](#)

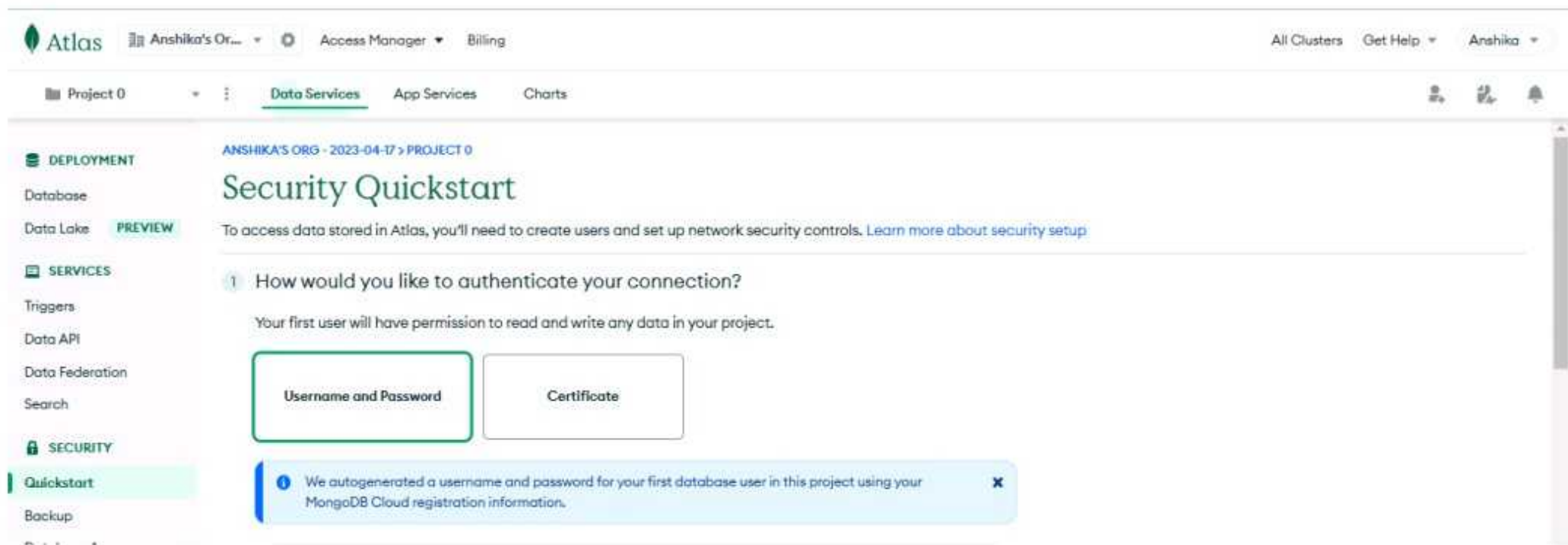
Create

Free forever! Your M0 cluster is ideal for experimenting in a limited sandbox. You can upgrade to a production cluster anytime.

[I'll deploy my database later](#)

STEP 9: Select from security Quick start


- Click on **Username & Password**



STEP 10: Create username & password

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.

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


Username	Authentication Type	
adit2023-24	Password	<input type="button" value="EDIT"/> <input type="button" value="REMOVE"/>

STEP 11: Click on My Local Environment

- Then Click on **Add My Current IP Address**
- Then click on **Finish & Close**


✓ 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

i We added your current IP address. You can connect to your cluster locally from this device.

Add entries to your IP Access List

Only an IP address you add to your Access List will be able to connect to your project's clusters. You can manage existing IP entries via the [Network Access Page](#).

IP Address

Description

Enter IP Address

Enter description

Add My Current IP Address

Add Entry

IP Access List

Description

117.251.98.170/32

My IP Address

 EDIT

 REMOVE

Finish and Close

STEP 12: Click on Go to Database

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.

1 We added your current IP address. You can connect to your cluster locally.

Add entries to your IP Access List

Only an IP address you add to your Access List will be able to connect to your existing IP entries via the [Network Access Page](#).


IP Address	Description
<input type="text" value="Enter IP Address"/>	<input type="text" value="Enter description"/>
<input type="button" value="Add My Current IP Address"/>	
<input type="button" value="Add Entry"/>	

IP Access List	Description	
117.251.98.170/32	My IP Address	<input type="button" value="EDIT"/> <input type="button" value="REMOVE"/>

Congratulations on setting up access rules!
You will now be able to connect to your deployments. You can continue to add and update access rules in [Database Access](#) and [Network Access](#).

☒ Hide Quickstart guide in the navigation. You can visit [Project Settings](#) to access it in the future.

STEP 13: Click on SetUp



Introducing Backup Compliance Policy!

Further secure your business critical data with immutable backup protection that prevents snapshots and other cluster configurations from being modified or deleted.

[Close](#)

Connect to Cluster0

STEP 14: Click on Connect

The screenshot shows the MongoDB Atlas 'Database Deployments' page for 'Cluster0'. The left sidebar contains navigation links for DEPLOYMENT, SERVICES, and SECURITY. The main content area features a 'Load sample datasets to Cluster0.' banner, a 'Connect' button, and a table of deployment metrics. The 'Connect' button is highlighted with a green border.

VERSION	REGION	CLUSTER TIER	TYPE	BACKUPS	LINKED APP SERVICES	ATLAS SEARCH
6.0.5	AWS / Mumbai (ap-south-1)	M0 Sandbox (General)	Replica Set - 3 nodes	Inactive	None Linked	Create Index

STEP 15: Click on Shell

The screenshot shows the 'Connect to Cluster0' dialog box. It features a progress bar with three steps: 'Set up connection security' (completed), 'Choose a connection method' (current step), and 'Connect'. Below the progress bar, there are four options for connecting to the application: 'Drivers', 'Compass', 'Shell', and 'VS Code'. The 'Shell' option is highlighted with a red border.

Connect to your application

- Drivers**: Access your Atlas data using MongoDB's native drivers (e.g. Node.js, Go, etc.)
- Compass**: Explore, modify, and visualize your data with MongoDB's GUI
- Shell**: Quickly add & update data using MongoDB's Javascript command-line interface
- VS Code**: Work with your data in MongoDB directly from your VS Code environment

Go Back Close

STEP 16: Click on I have the MongoDB shell installed

Then copied the path given here

Connect to Cluster0

Set up connection security Choose a connection method **3** Connect

I do not have the MongoDB Shell installed I have the MongoDB Shell installed

1 Select your mongo shell version

mongosh

(To check your shell version, run `mongosh --version` or `mongo --version`)

2 Run your connection string in your command line

Use this connection string in your application:

```
mongosh "mongodb+srv://cluster0.dqaeiqi.mongodb.net/myFirstDatabase" --apiVersion 1 --username adit2023-24
```

Replace **myFirstDatabase** with the name of the database that connections will use by default. You will be prompted for the password for the Database User, **adit2023-24**. When entering your password, make sure all special characters are [URL encoded](#).

RESOURCES

- [Add Data in the Shell](#)
- [Access your Database Users](#)
- [Troubleshoot Connections](#)

STEP 17: go to command prompt

Win+R then type cmd then click ok.

After that pasted the copied path here

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.19044.2728]
(c) Microsoft Corporation. All rights reserved.

C:\Users\ghmun>mongosh "mongodb+srv://cluster0.dqaeiqi.mongodb.net/myFirstDatabase" --apiVersion 1 --username adit2023-24
```

STEP 18: Enter the password then hit enter

Now successfully connect to atlas.

```
cmd mongosh mongodb+srv://<credentials>@cluster0.dqaeiqi.mongodb.net/myFirstDatabase
Microsoft Windows [Version 10.0.19044.2728]
(c) Microsoft Corporation. All rights reserved.

C:\Users\ghmun>mongosh "mongodb+srv://cluster0.dqaeiqi.mongodb.net/myFirstDatabase" --apiVersion 1 --username adit2023-24
Enter password: *****
Current Mongosh Log ID: 643d283dda2acf22a8c7e096
Connecting to:      mongodb+srv://<credentials>@cluster0.dqaeiqi.mongodb.net/myFirstDatabase?appName=mongosh+1.8.0
Using MongoDB:      6.0.5 (API Version 1)
Using Mongosh:      1.8.0

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

Atlas atlas-55ggi7-shard-0 [primary] myFirstDatabase>
```

STEP 19: create a database and create collection and insert the document in the collection.

```
cmd Select mongosh mongodb+srv://<credentials>@cluster0.dqaeiqi.mongodb.net/myFirstDatabase
Microsoft Windows [Version 10.0.19044.2728]
(c) Microsoft Corporation. All rights reserved.

C:\Users\ghmun>mongosh "mongodb+srv://cluster0.dqaeiqi.mongodb.net/myFirstDatabase" --apiVersion 1 --username adit2023-24
Enter password: *****
Current Mongosh Log ID: 643d283dda2acf22a8c7e096
Connecting to:      mongodb+srv://<credentials>@cluster0.dqaeiqi.mongodb.net/myFirstDatabase?appName=mongosh+1.8.0
Using MongoDB:      6.0.5 (API Version 1)
Using Mongosh:      1.8.0

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

Atlas atlas-55ggi7-shard-0 [primary] myFirstDatabase> use Adit
switched to db Adit
Atlas atlas-55ggi7-shard-0 [primary] Adit> db.data.insert({Course:"ADIT", Duration:"2 Year"})
DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or bulkwrite.
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("643d28ab613b5bcb0bb48c35") }
}
Atlas atlas-55ggi7-shard-0 [primary] Adit> db.data.find().pretty()
[
  {
    _id: ObjectId("643d28ab613b5bcb0bb48c35"),
    Course: 'ADIT',
    Duration: '2 Year'
  }
]
Atlas atlas-55ggi7-shard-0 [primary] Adit>
```

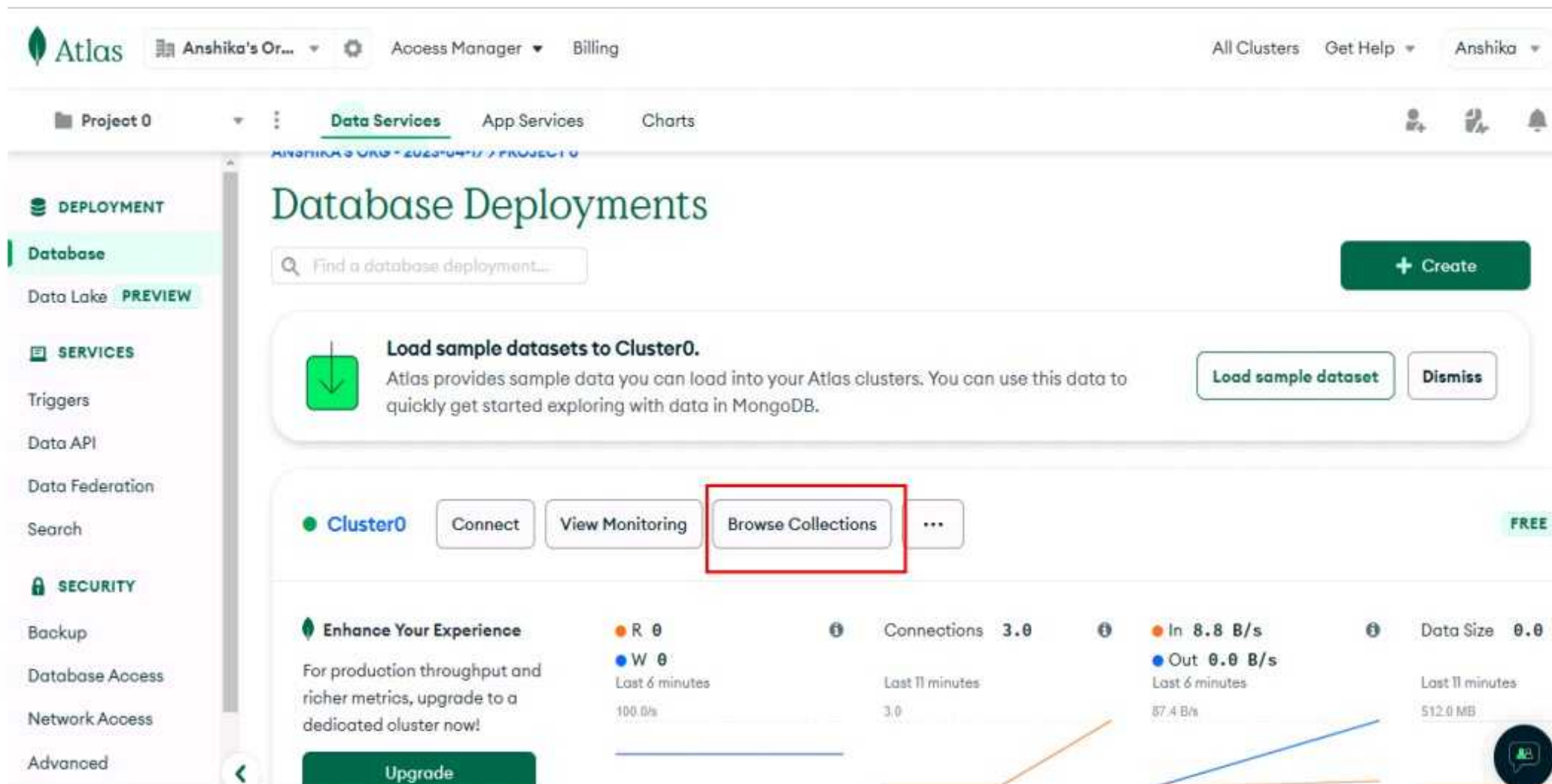
Create database

Create collection & insert the data

Show the data insert the collection

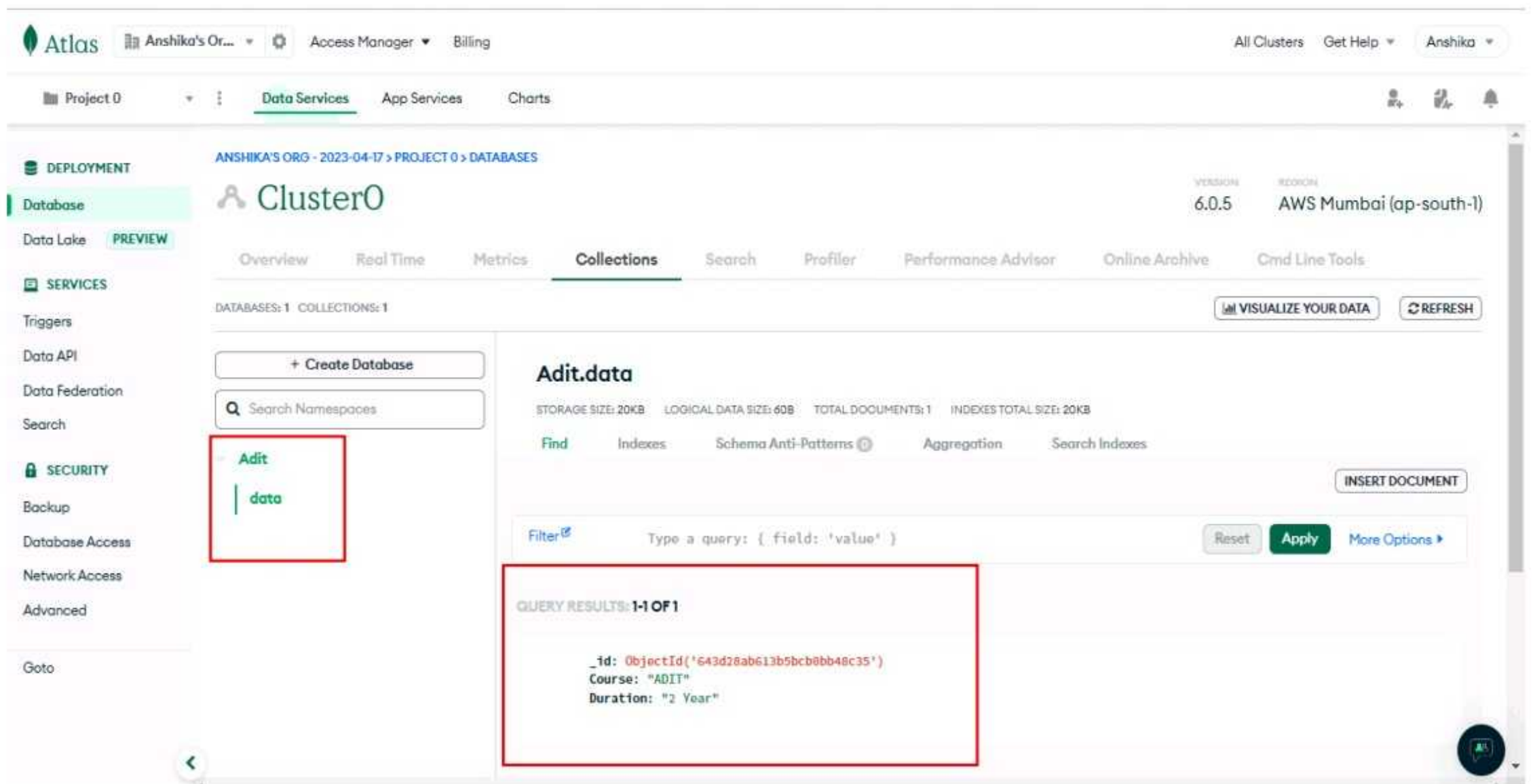
STEP 20: now show the insert data on mongoDB atlas

- Click on **Browse Collection**



The screenshot shows the MongoDB Atlas 'Database Deployments' page. The left sidebar contains navigation links for DEPLOYMENT, Database, Data Lake, SERVICES, Triggers, Data API, Data Federation, Search, SECURITY, Backup, Database Access, Network Access, and Advanced. The main content area has a search bar and a '+ Create' button. A green box highlights the 'Browse Collections' button under the 'Cluster0' section. Below this, there are performance metrics for Cluster0, including Read (R) and Write (W) rates, Connections, In/Out data rates, and Data Size.

STEP 21: Now able to show our insert data .



The screenshot shows the MongoDB Atlas 'Cluster0 Collections' page. The left sidebar is the same as in Step 20. The main content area shows the 'Adit.data' collection. A red box highlights the 'Adit' namespace in the left sidebar. Another red box highlights the 'Adit.data' collection in the main content area. The collection details show a storage size of 20KB, logical data size of 60B, and total documents of 1. The 'Find' tab is selected, showing a query filter and the query results. The query results show a single document with the following fields: '_id: ObjectId('643d28ab613b5bcb0bb48c35')', 'Course: "ADIT"', and 'Duration: "2 Year"'.