1. about the database I use:

I choose to use MongoDB Atlas

a. It is a cloud-based database. MongoDB Atlas is a fully-managed cloud database that handles all the complexity of deploying, managing, and healing your deployments on the cloud service provider of your choice (AWS , Azure, and GCP). MongoDB Atlas is the best way to deploy, run, and scale MongoDB in the cloud.

b. The project data does not have complex relations. It is easier to use the MongoDB because it is like the operation of json file

c. I create the cloud database for free

1. How to create the database:
2. Sign in page:

https://account.mongodb.com/account/login?nds=true&\_ga=2.148904374.1076191997.1673157179-341948187.1667526511

1. Click create to create a cluster. If you are invited to join an organization, you can leave that organization and so you can create your own.

Select MongoDB Atlass because it contains more services, and click on next

Graphical user interface, text, application

Description automatically generatedThen create organization as the owner, and you can add users later.

Create a new project

Create a database (owner has to do it)

Build a database: chose “shared” because it is free.

Graphical user interface, text, application, chat or text message

Description automatically generated

Create a shared cluster

Graphical user interface, text, application, email

Description automatically generated

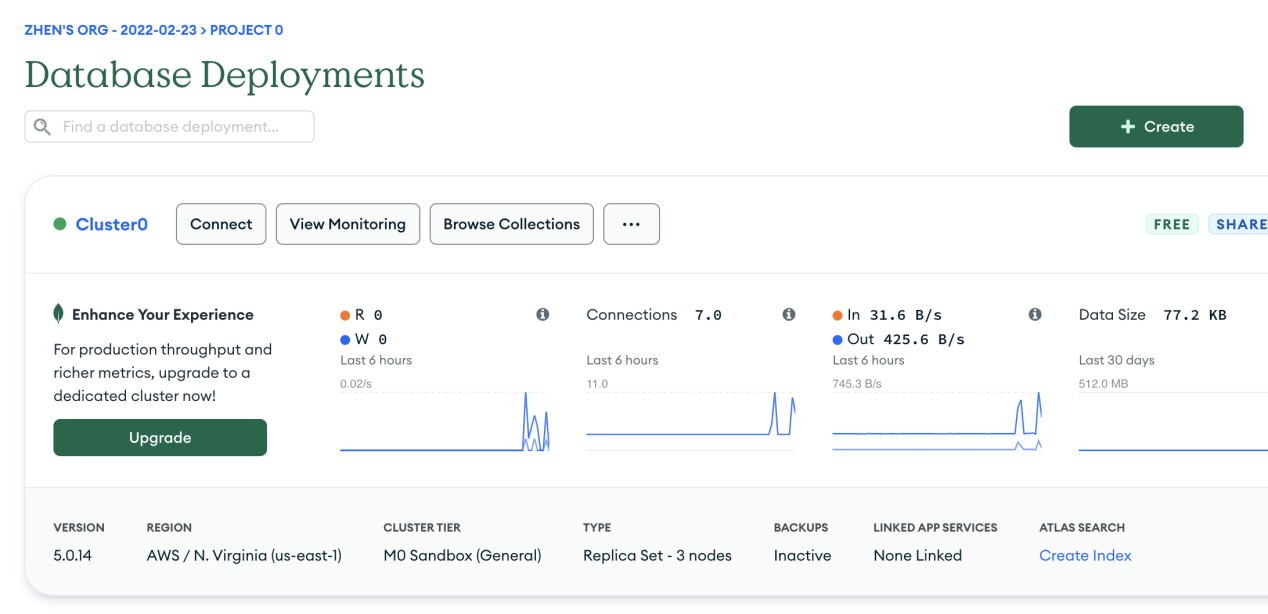
Graphical user interface, text, application

Description automatically generated

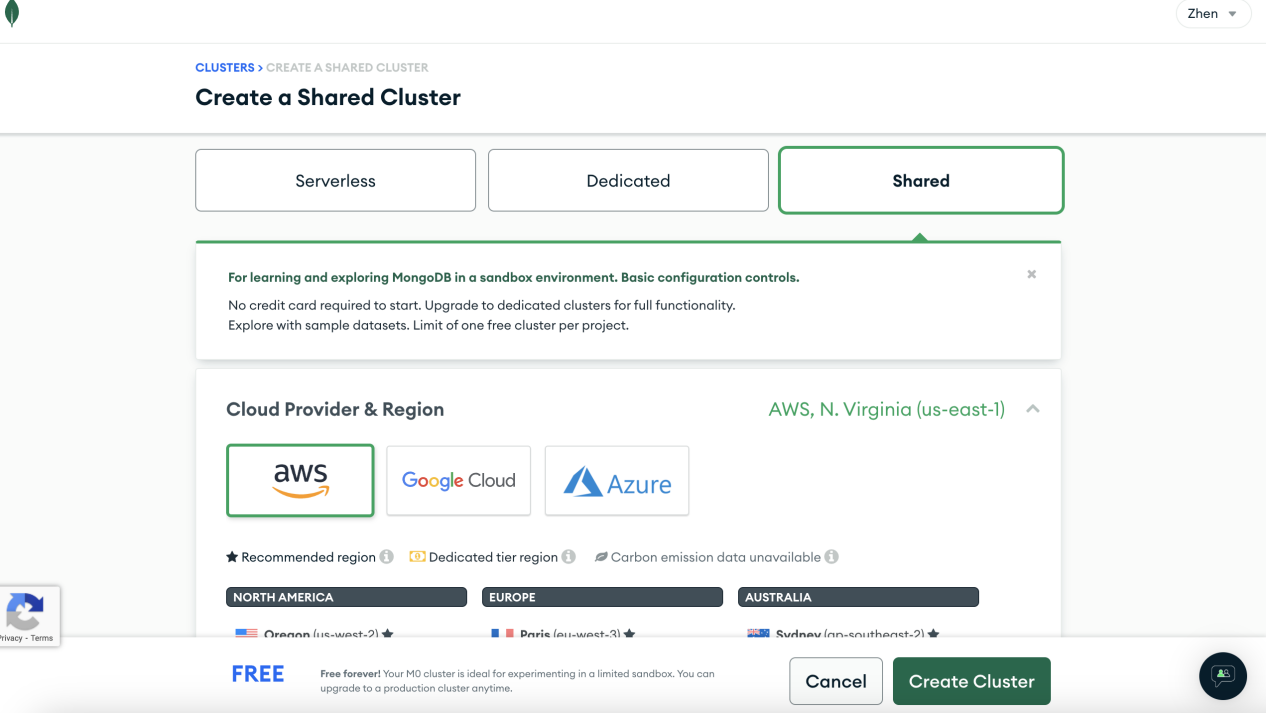
Graphical user interface, text, application

Description automatically generated

Useed a temp IP to move on to create a database.

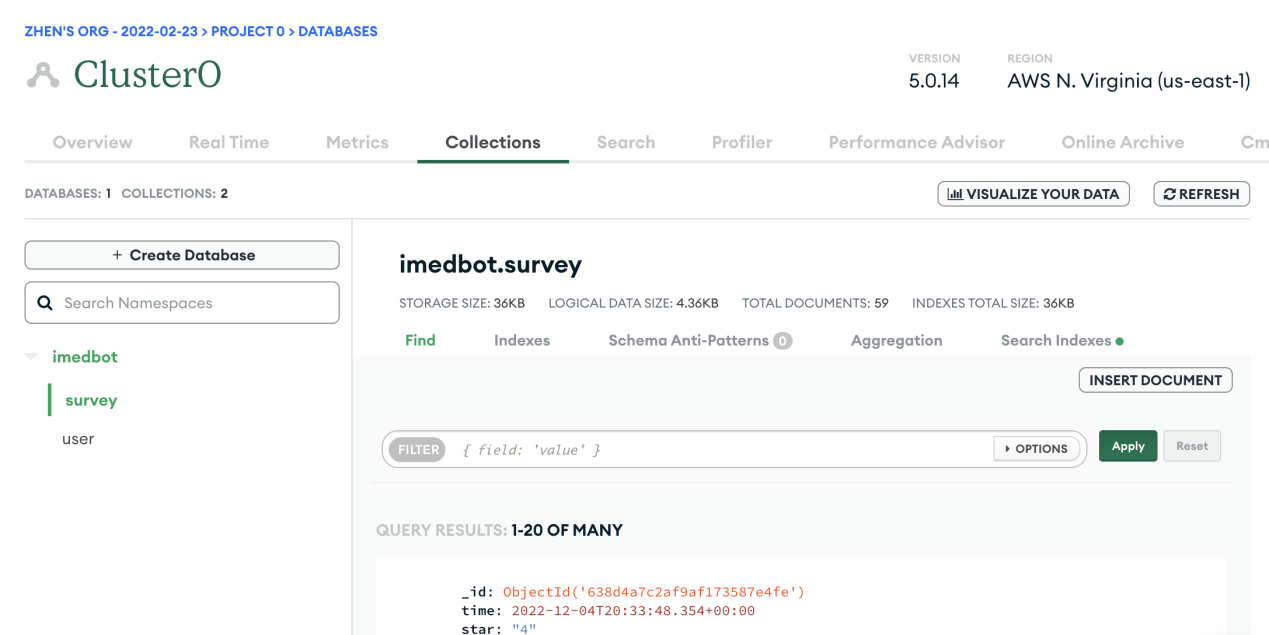
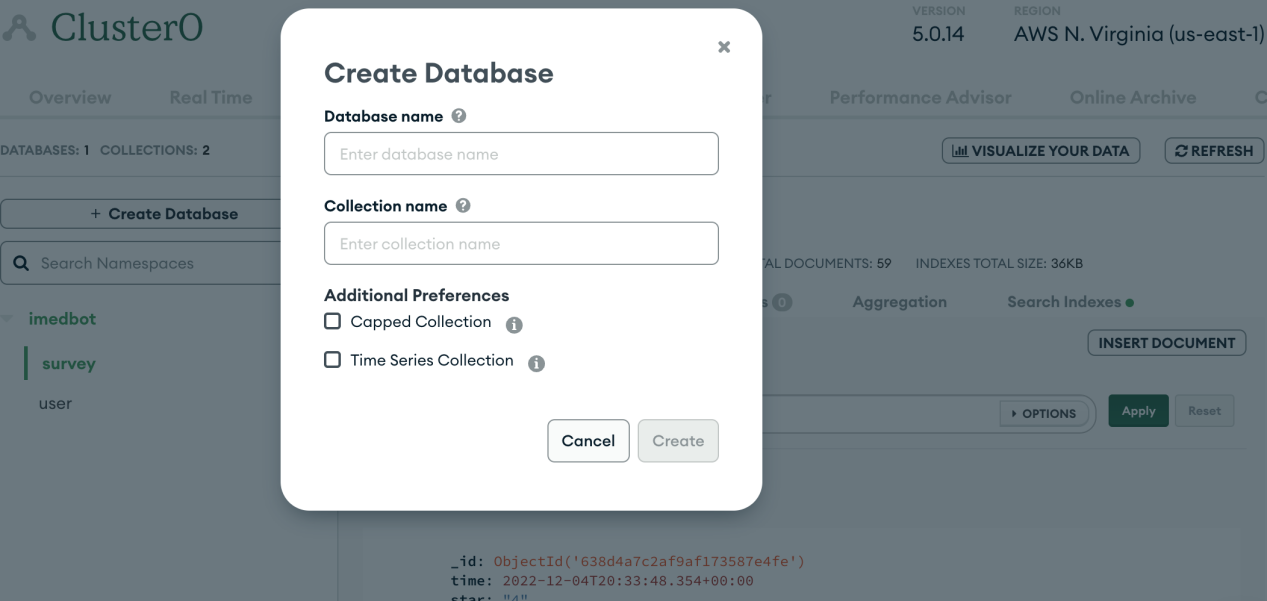


c. Choose the settings. Only shared is free. I just use the default settings and click create cluster.

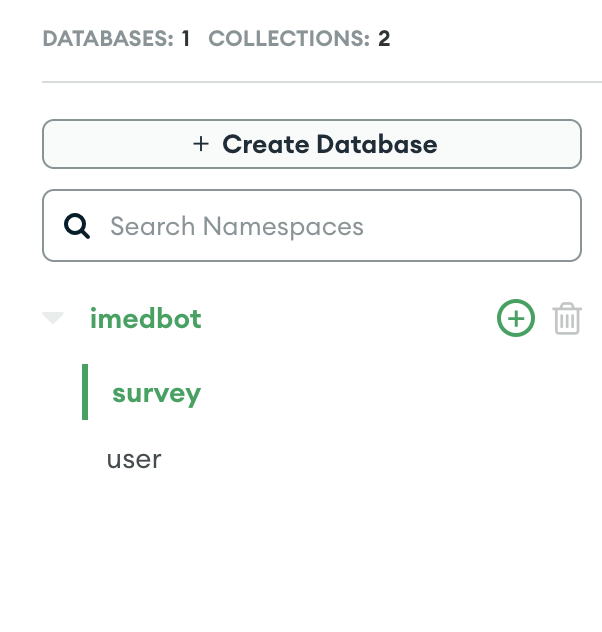


d. After creating the cluster, go into it and click collections

Create database and collections like this by click ‘create database’

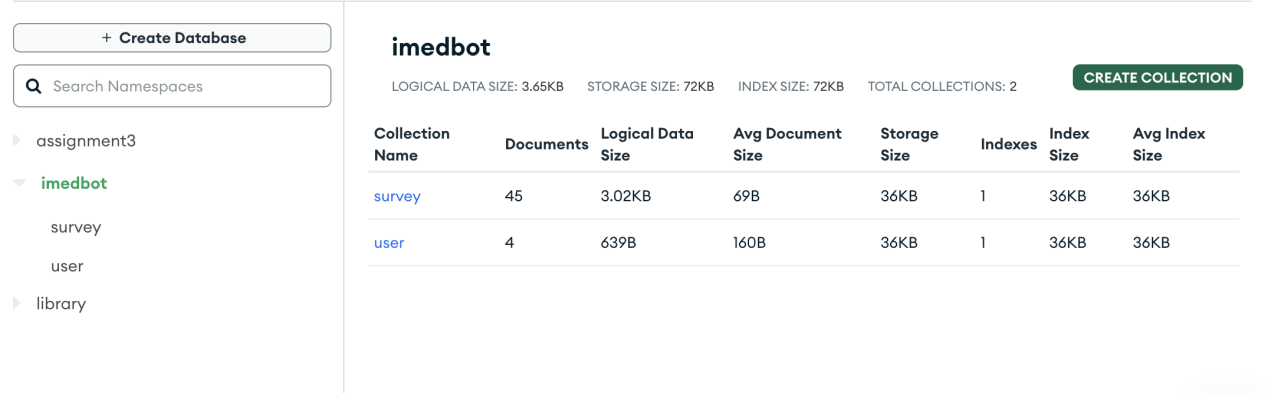


d. Create more collections by clicking ‘+’.



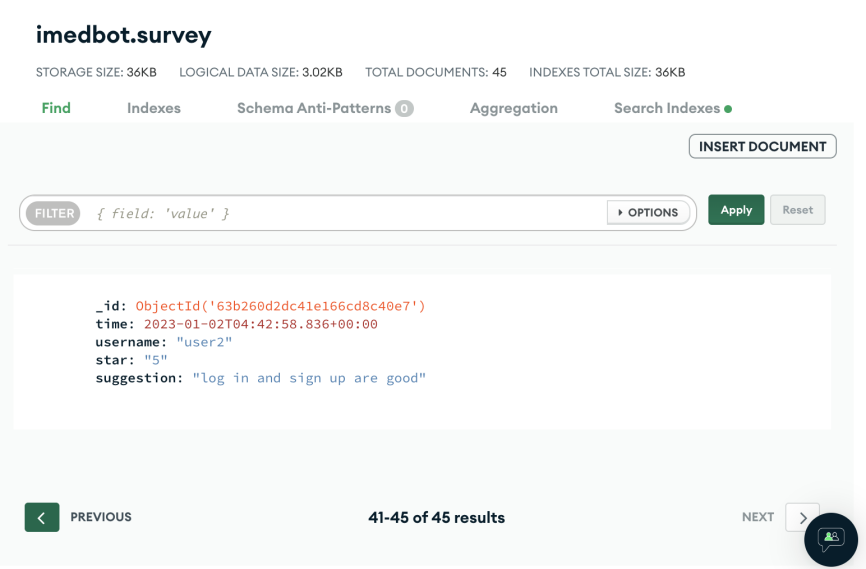
1. The structure of database:

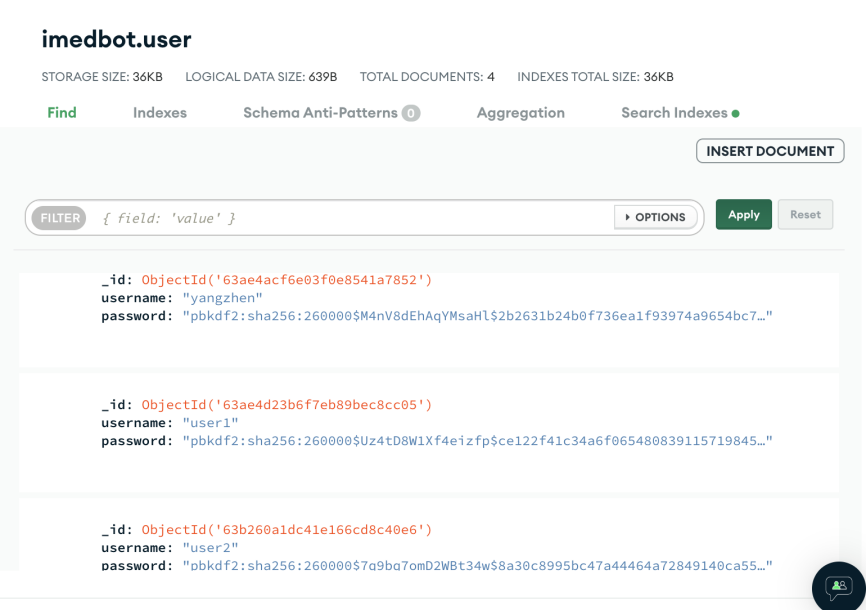
a.I create the database called imedbot. Multiple collections can be created in MongoDB database. “A collection is a grouping of MongoDB documents. Documents within a collection can have different fields. A collection is the equivalent of a table in a relational database system.”



b. I create two collections. One is used for storing users’ survey and the other is used for storing users’ username and password.

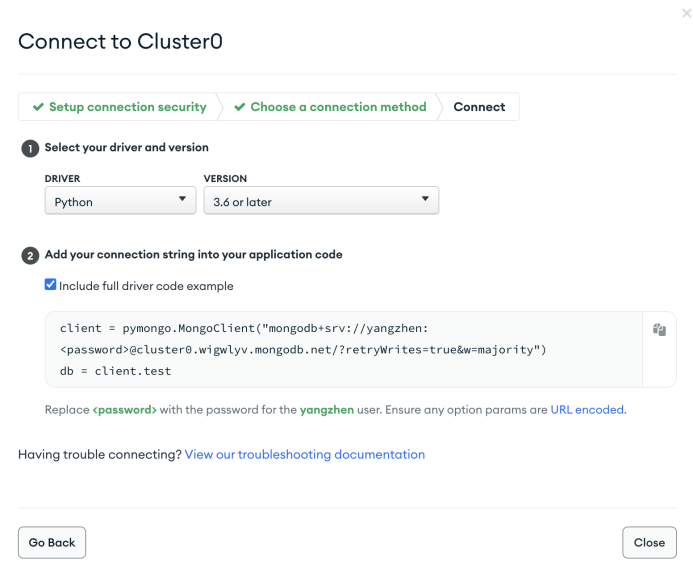
For security reasons, I store the password by using encryption and cannot see the plaintext of password.



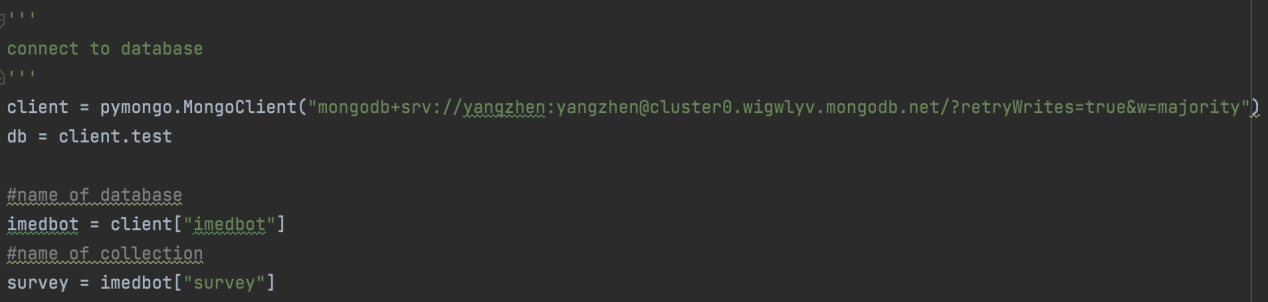


1. connecting to python project

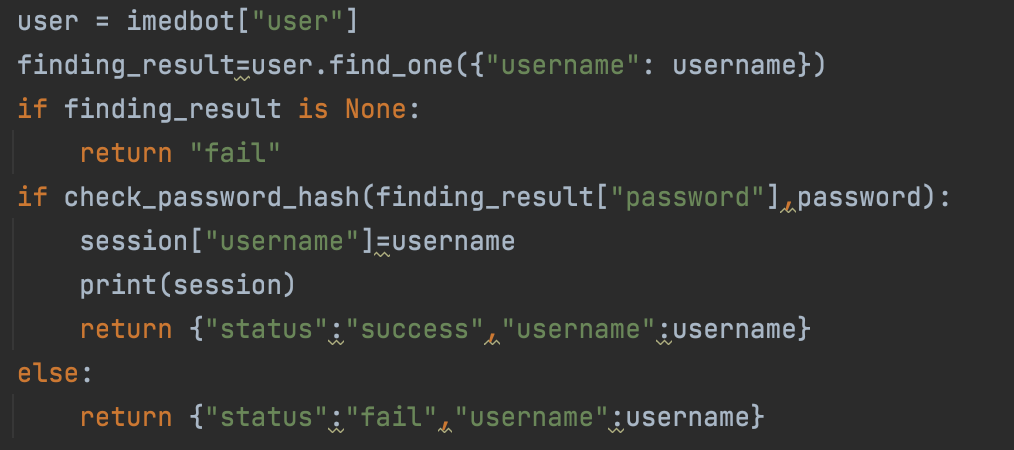
The guide from MongoDB website:



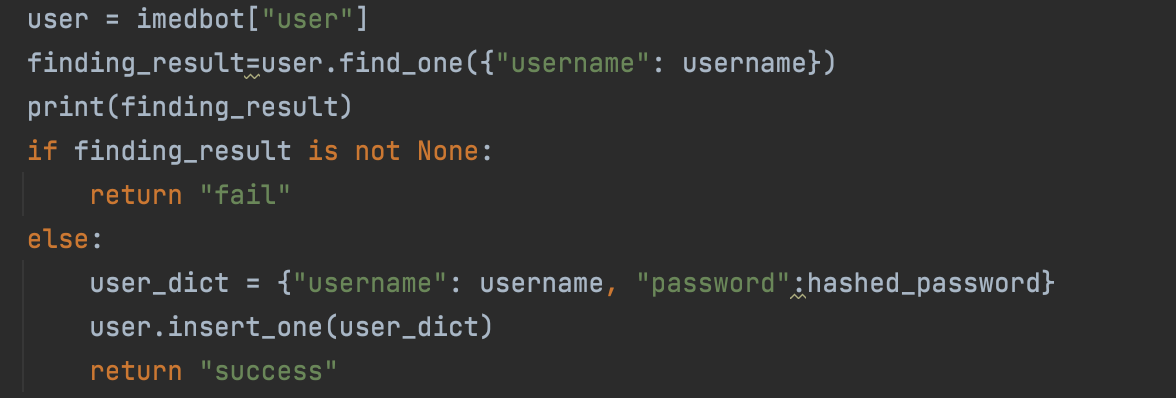
In pycharm:



Finding:



Inserting:



My user name and password JiangLab (organization) of MongoDB

Graphical user interface

Description automatically generated

Password: 12345aBc

5.database migration

To install the database tools, follow the website:

https://www.mongodb.com/docs/database-tools/installation/installation/

Graphical user interface, text, application, email

Description automatically generated

Official guide from website:

You can download and upload the data using command line.

Graphical user interface, text, application, email

Description automatically generated

Here the password is the one that is used for database access not that for website account.

The password used for connecting database is: 12345aBc