

# MONGO DB

Dikesempatan kali ini saya akan menjelaskan bagaimana kita mensetup ke data bases mongo dengan menggunakan React , saya berharap dapat menyimak dengan baik.

## REQUIRMENT:

1.Akun MongoDB

2.Project React

3.Node Js

4.Npm

### 1. Persiapkan File React nya

Kalian Bisa git clone dari repostority saya dan pastekan diterminal kalian dengan commad :

Git clone [git@github.com:NimonHiya/bookinghotel.git](https://github.com:NimonHiya/bookinghotel.git)

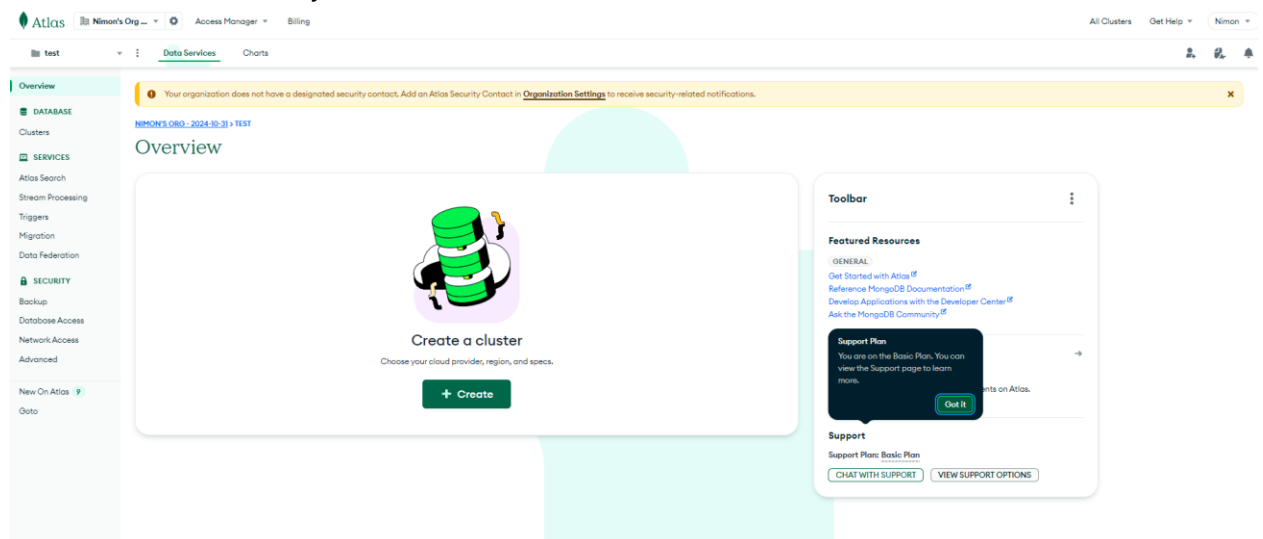
### 2. Daftar MongoDB

Selanjutnya kalian bisa daftar MongoDB nya melalui link :

[Create Account | MongoDB](#)

### 3. Setup Cluster(Database)

Click Create button nya



Selanjutnya saat sudah dibuka isi name nya sesuai nama project kalian Name nya bisa “Test” atau nama Project kalian “bookinghotel” dan isi seperti pada Digambar

## Deploy your cluster

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

☐ **M10** **\$0.09/hour**  
  
Dedicated cluster for development environments and low-traffic applications.  

| STORAGE | RAM  | vCPU    |
|---------|------|---------|
| 10 GB   | 2 GB | 2 vCPUs |

☐ **Serverless**  
  
For application development and testing, or workloads with variable traffic.  

| STORAGE    | RAM        | vCPU       |
|------------|------------|------------|
| Up to 1 TB | Auto-scale | Auto-scale |

☒ **M0** **Free**  
  
For learning and exploring MongoDB in a cloud environment.  

| STORAGE | RAM    | vCPU   |
|---------|--------|--------|
| 512 MB  | Shared | Shared |

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

### Name

You cannot change the name once the cluster is created.

☒ Automate security setup ⓘ

☒ Preload sample dataset ⓘ

### Provider



### Region

**Singapore (ap-southeast-1)** ★ ▼

★ Recommended ⓘ Low carbon emissions ⓘ

### Tag (optional)

Create your first tag to categorize and label your resources; more tags can be added later. [Learn more.](#)

:

dan jika sudah click button create Deployment

[Go to Advanced Configuration](#)

[Create Deployment](#)

Selanjutnya kalian mendapatkan username dan password dan kalian bisa simpan dulu ke notepad atau ganti sesuai dengan yang kalian mau

## Connect to Test



You need to secure your MongoDB Atlas cluster before you can use it. Set which users and IP addresses can access your cluster now. [Read more](#)

### 1. Add a connection IP address

✓ Your current IP address (140.213.9.139) has been added to enable local connectivity. Only an IP address you add to your Access List will be able to connect to your project's clusters. Add more later in [Network Access](#).

### 2. Create a database user

This first user will have [atlasAdmin](#) permissions for this project.

We autogenerated a username and password. You can use this or create your own.

ⓘ You'll need your database user's credentials in the next step. Copy the database user password.

Username

nimonhiya

Password

2YV0IgQR0EFDbDIb

HIDE

Copy

Create Database User

Close

Choose a connection method

Selanjutnya jika sudah click Create Database User dan selanjut nya chose a connection method lalu muncul halaman seperti ini kita biarkan saja dulu kita close terlebih dulu

### Connect to Test

1

Set up connection security


2

Choose a connection method

3


Connect

Connect to your application


 Drivers  
Access your Atlas data using MongoDB's native drivers (e.g. Node.js, Go, etc.)

>


Access your data through tools

 Compass  
Explore, modify, and visualize your data with MongoDB's GUI


>

 Shell  
Quickly add & update data using MongoDB's Javascript command-line interface

>

 MongoDB for VS Code  
Work with your data in MongoDB directly from your VS Code environment

>

 Atlas SQL  
Easily connect SQL tools to Atlas for data analysis and visualization

>

Go Back

Close

Selanjutnya buka quickstart lalu masukan IP address 0.0.0.0/0 dan click add entry dan jadi seperti pada gambar dan selesai

Data Federation

SECURITY

Quickstart

Backup

Database Access

Network Access

Advanced

New On Atlas 9

Goto

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** ADVANCED

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.

**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                               |   |
|------------------|---|---|
| 0.0.0.0/0        |   | <a href="#">EDIT</a> <a href="#">REMOVE</a> |
| 140.213.9.139/32 | Created as part of the Auto Setup process | <a href="#">EDIT</a> <a href="#">REMOVE</a> |

Finish and Close

#### 4. Setup Prisma ORM (Object-Relation-Mapping)

Selanjutnya kita membuka folder react kita dan membuka terminal nya dan masukan command ini pada terminal untuk menginstall Prisma ORM

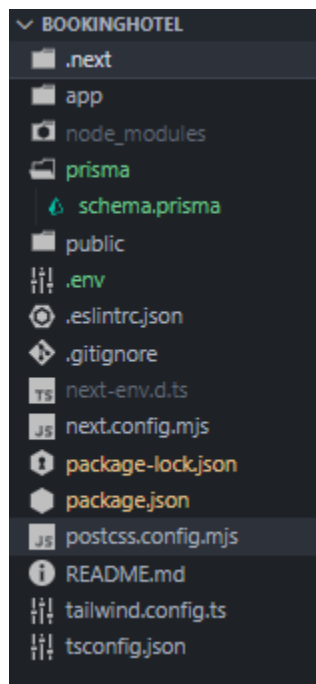
npm install -D prisma

```
PS C:\Users\juanf\Documents\bookinghotel> npm install -D prisma
```

Setelah berhasil terinstall kita menjalankan command  
**npx prisma init**

```
PS C:\Users\juanf\Documents\bookinghotel> npx prisma init
```

Setelah berhasil dari situ muncul lah file konfigurasi



## 5. Setup schema.prisma dan .env

Selanjutnya kita membuka file schema.prisma ubah provider nya menjadi "mongodb"

```
Generate
generator client {
  provider = "prisma-client-js"
}

// You'll need to add your database provider here, for example:
datasource db {
  provider = "mongodb"
  url      = env("DATABASE_URL")
}
```

Selanjut nya kita akan membahas dibawah nya dengan code seperti ini

### 1. MODEL USER

```
1  model Account {
2    id          String   @id @default(auto()) @map("_id") @db.ObjectId
3    userId      String   @db.ObjectId
4    type        String
5    provider     String
6    providerAccountId String
7    refresh_token String? @db.String
8    access_token  String? @db.String
9    expires_at   Int?
10   token_type    String?
11   scope         String?
12   id_token      String? @db.String
13   session_state String? @db.String
14
15   user User @relation(fields: [userId], references: [id], onDelete: Cascade)
16
17   @@unique([provider, providerAccountId])
18 }
```

## 2. MODEL ACCOUNT

```
1  model Reservation {
2    id          String    @id @default(auto()) @map("_id") @db.ObjectId
3    startDate   DateTime
4    endDate     DateTime
5    listingId   String    @db.ObjectId
6    userId      String    @db.ObjectId
7    createdAt   DateTime  @default(now())
8    updatedAt   DateTime  @updatedAt
9
10   listing     Listing   @relation(fields: [listingId], references: [id], onDelete: Cascade)
11   user        User      @relation(fields: [userId], references: [id], onDelete: Cascade)
12 }
```

## 3. MODEL LISTING

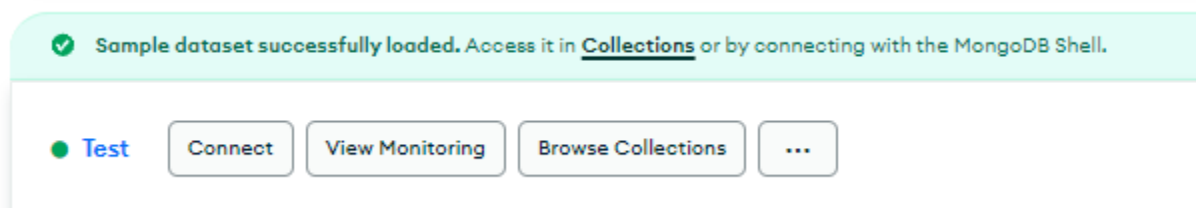
```
1  model Listing {
2    id          String    @id @default(auto()) @map("_id") @db.ObjectId
3    title       String
4    description  String?
5    imageSrc    String?
6    createdAt   DateTime  @default(now())
7    category    String?
8    roomCount   Int?
9    bathroomCount Int?
10   guestCount  Int?
11   locationValue String?
12   userId      String    @db.ObjectId
13   price       Int?
14
15   user         User      @relation(fields: [userId], references: [id], onDelete: Cascade)
16   reservations Reservation[]
17 }
```



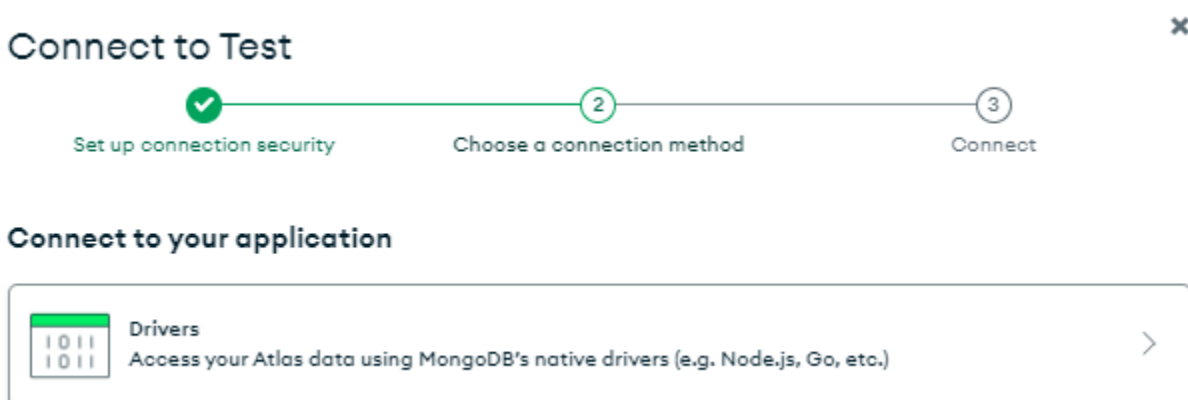
#### 4. MODEL Reservation

```
1  model Reservation {  
2    id      String  @id @default(auto()) @map("_id") @db.ObjectId  
3    startDate DateTime  
4    endDate  DateTime  
5    listingId String  @db.ObjectId  
6    userId   String  @db.ObjectId  
7    createdAt DateTime @default(now())  
8    updatedAt DateTime @updatedAt  
9  
10   listing Listing @relation(fields: [listingId], references: [id], onDelete: Cascade)  
11   user    User   @relation(fields: [userId], references: [id], onDelete: Cascade)  
12 }
```

Selanjut nya kita buka file .env kita akan menkonfigurasi .env tersebut selanjut nya kita buka Kembali mongodb nya



Click connect saat muncul seperti ini



Click Drivers nya

### 3. Add your connection string into your application code

Use this connection string in your application

☐ View full code sample

```
mongodb+srv://nimonhiya:<db_password>@test.gtopq.mongodb.net/?
retryWrites=true&w=majority&appName=Test
```

Copy use this connection

mongodb+srv://nimonhiya:<db\_password>@test.gtopq.mongodb.net/

copy sampai / saja tidak semua nya selanjut nya kita buka .env dan kita edit disitu buat seperti ini

```
1 # Environment variables declared in this file are automatically made available to Prisma.
2 # See the documentation for more detail: https://pris.ly/d/prisma-schema#accessing-environment-variables-from-the-schema
3
4 # Prisma supports the native connection string format for PostgreSQL, MySQL, SQLite, SQL Server, MongoDB and CockroachDB.
5 # See the documentation for all the connection string options: https://pris.ly/d/connection-strings
6
7 DATABASE_URL="mongodb+srv://nimonhiya:MASUKAN_PASSWORD_KALIAN_DISNI_@bookinghotelapp.bgd7n.mongodb.net/Test"
```

Jangan lupa memasukan db password kalian

Selanjutnya buka terminal kalian dan jalan kan commad

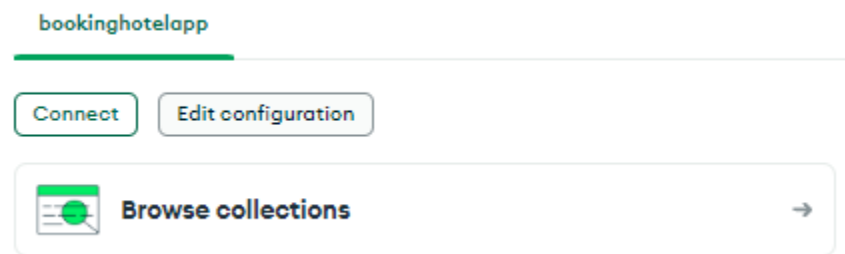
**npx prisma db push**

```
PS C:\Users\juanf\Documents\bookinghotel> npx prisma db push
```

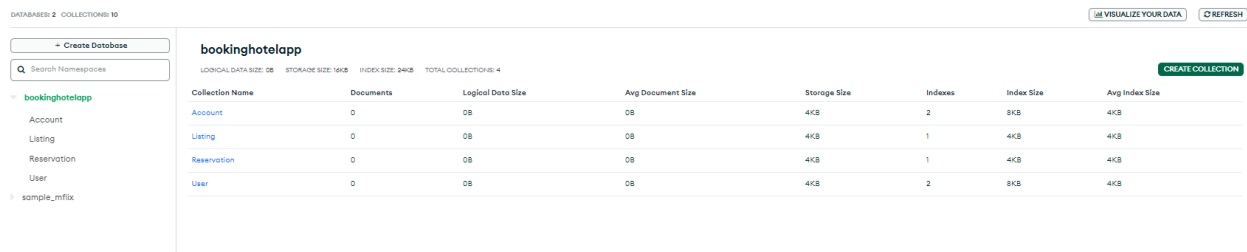
\*Connection Internet kaliat harus stabil untuk menjalankan command ini

## 5. Check database nya di Mongodb

Click Browse Collections



Lalu tampilah hasil yang kalian buat



| Collection Name | Documents | Logical Data Size | Avg Document Size | Storage Size | Indexes | Index Size | Avg Index Size |
|-----------------|-----------|-------------------|-------------------|--------------|---------|------------|----------------|
| Account         | 0         | 0B                | 0B                | 4KB          | 2       | 8KB        | 4KB            |
| Listing         | 0         | 0B                | 0B                | 4KB          | 1       | 4KB        | 4KB            |
| Reservation     | 0         | 0B                | 0B                | 4KB          | 1       | 4KB        | 4KB            |
| User            | 0         | 0B                | 0B                | 4KB          | 2       | 8KB        | 4KB            |

Selesai kalian berhasil

## KESIMPULAN

Jadi, untuk migration kita perlu 4 step inti yang pertama adalah Mempersiapkan akun MongoDB kita , lalu kita mengatur React dan Prisma ORM , selanjut nya kita melakukan Konfigurasi Database , dan yang terakhir kita Menampilkan data kita di dalam Mongo Db . Dan yang paling penting untuk Setup MongoDB kita perlu koneksi internet yang stabil agar kita lancar.Sekian Dan Terimakasih