Creating a RESTful API using express.js and creating a database and index in MongoDB.

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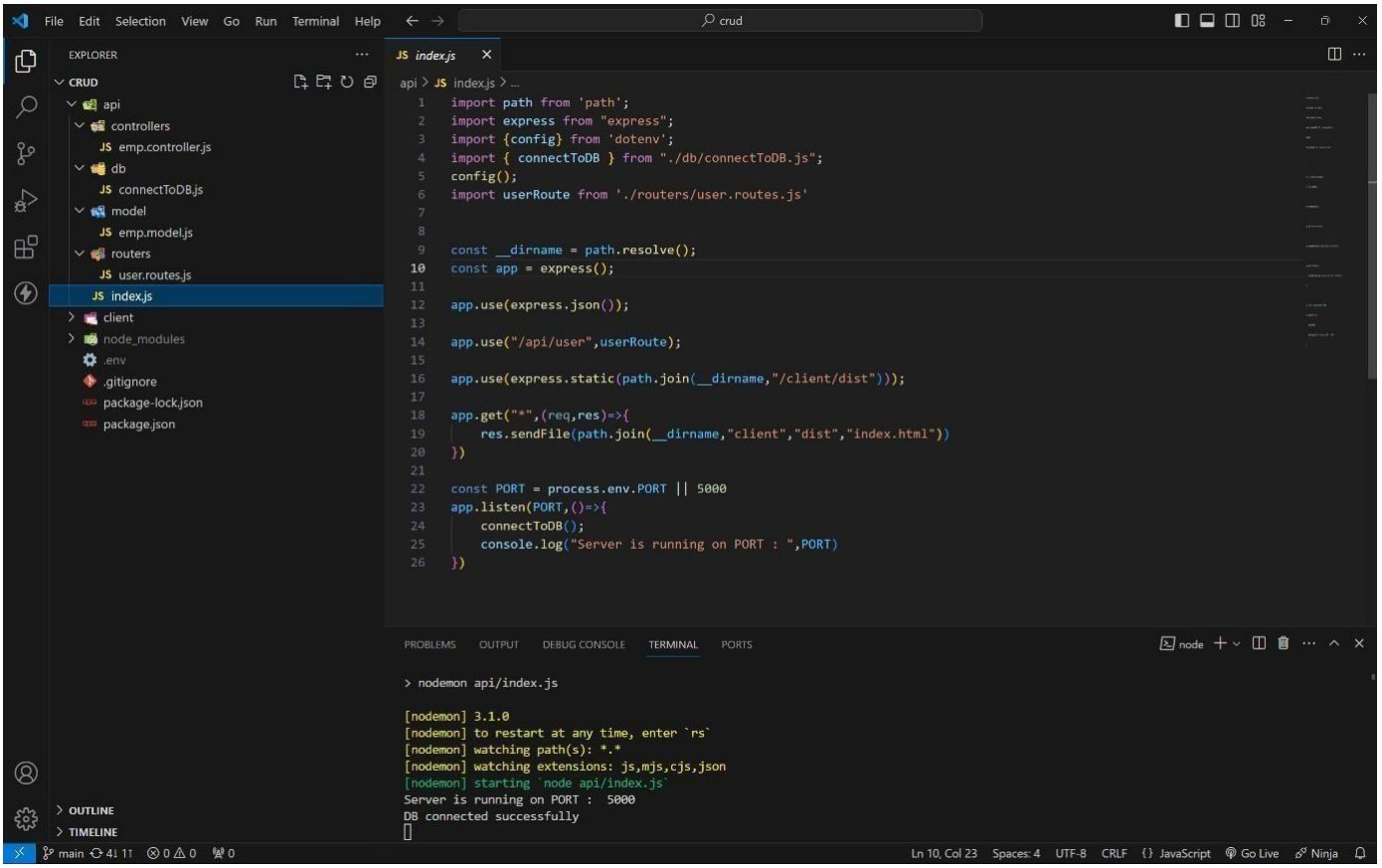
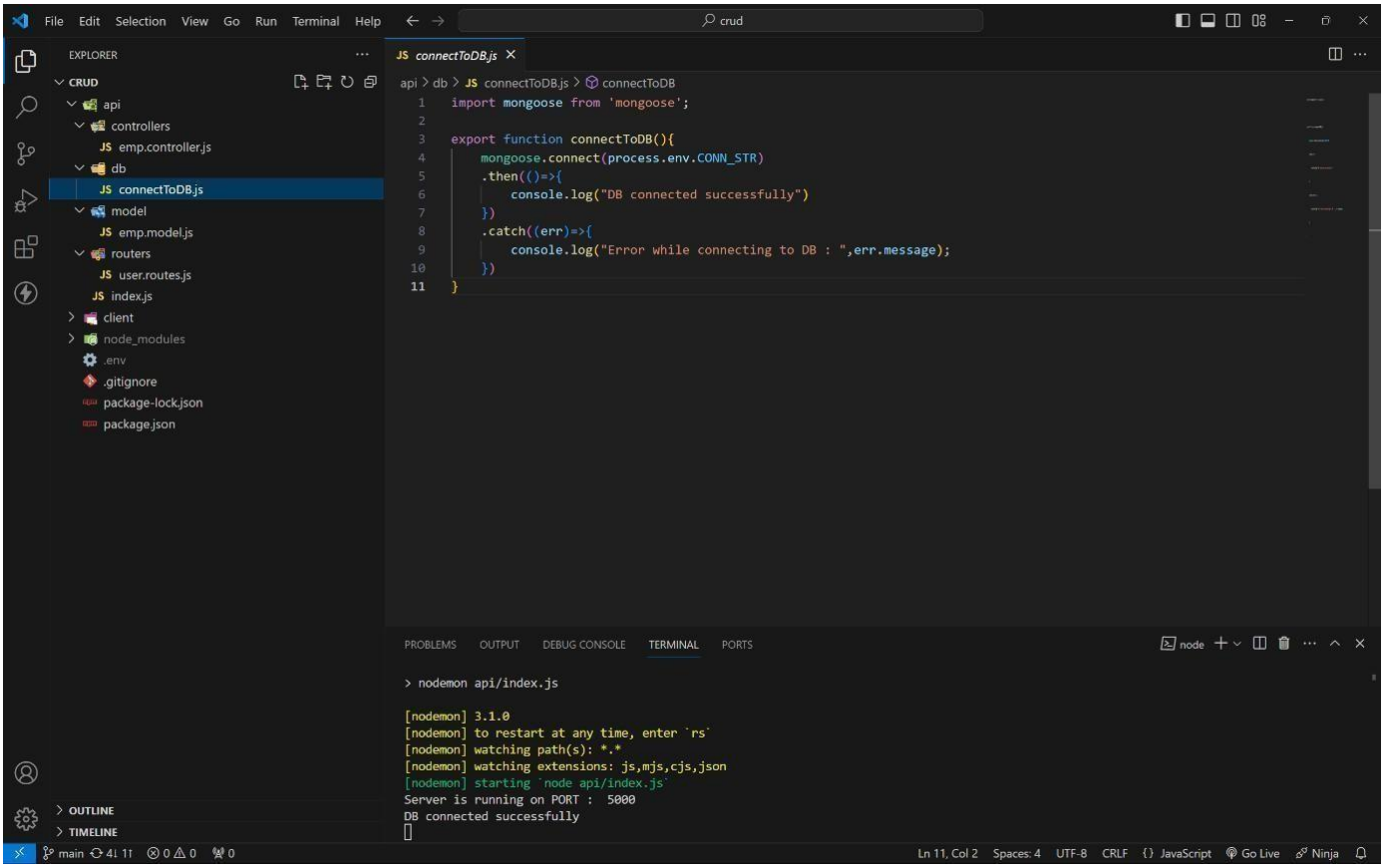
College Name : Chebrolu Engineering College

source code :

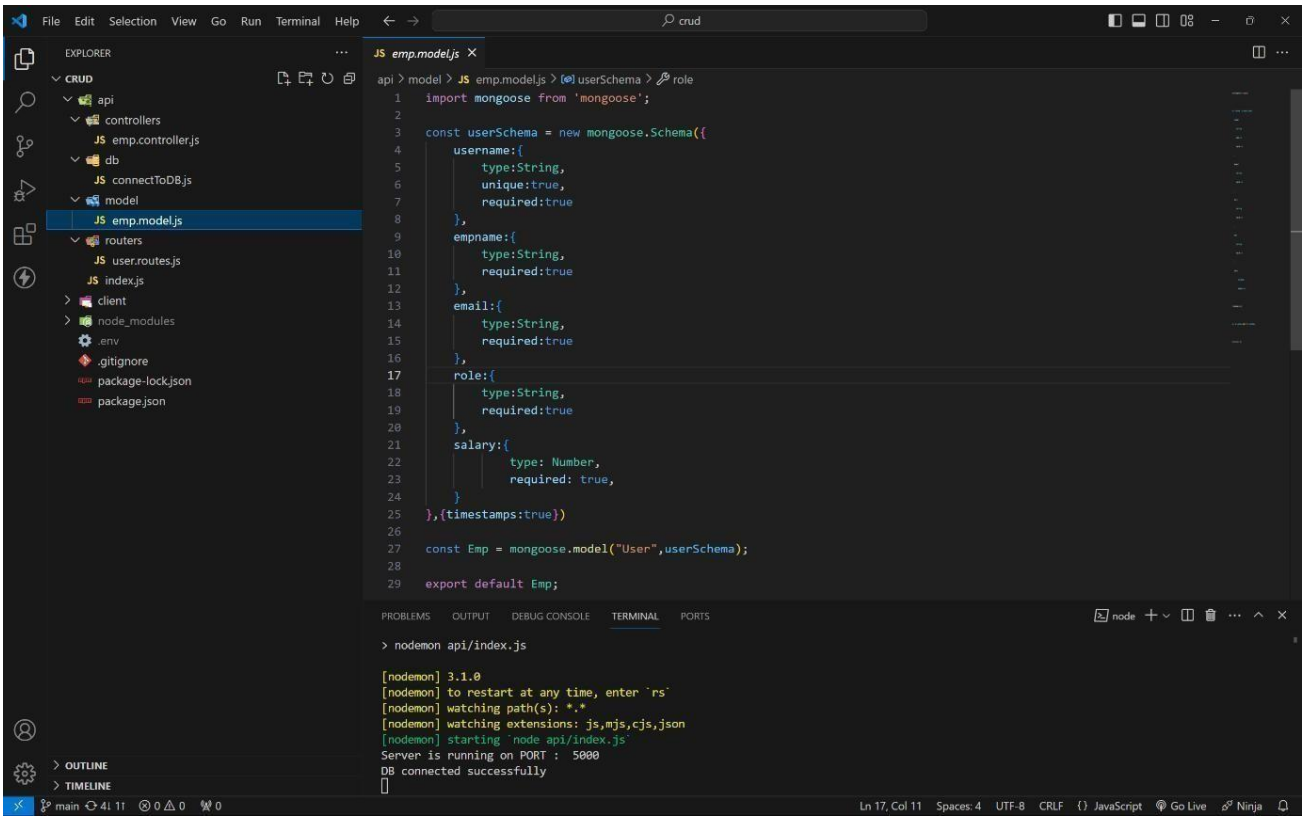
index.js file :



MONGODB CONNECTION :


File Edit Selection View Go Run Terminal Help
crud
EXPLORER
CRUD
api
controllers
emp.controller.js
db
connectToDB.js
model
emp.model.js
routers
user.routes.js
index.js
client
node_modules
.env
.gitignore
package-lock.json
package.json
connectToDB.js
api > db > connectToDB.js > connectToDB
import mongoose from 'mongoose';
export function connectToDB(){
mongoose.connect(process.env.CONN_STR)
.then(()=>{
console.log("DB connected successfully")
})
.catch((err)=>{
console.log("Error while connecting to DB : ",err.message);
})
}
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
node
> nodemon api/index.js
[nodemon] 3.1.0
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node api/index.js`
Server is running on PORT : 5000
DB connected successfully
OUTLINE
TIMELINE
main
Ln 11, Col 2
Spaces: 4
UTF-8
CRLF
JavaScript
Go Live
Ninja

MODEL :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.gitignore
package-lock.json
package.json
emp.model.js
api > model > emp.model.js > userSchema > role
import mongoose from 'mongoose';
const userSchema = new mongoose.Schema({
username:{
type:String,
unique:true,
required:true
},
empname:{
type:String,
required:true
},
email:{
type:String,
required:true
},
role:{
type:String,
required:true
},
salary:{
type: Number,
required: true,
}
},{timestamps:true})
const Emp = mongoose.model("User",userSchema);
export default Emp;
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
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[nodemon] 3.1.0
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Server is running on PORT : 5000
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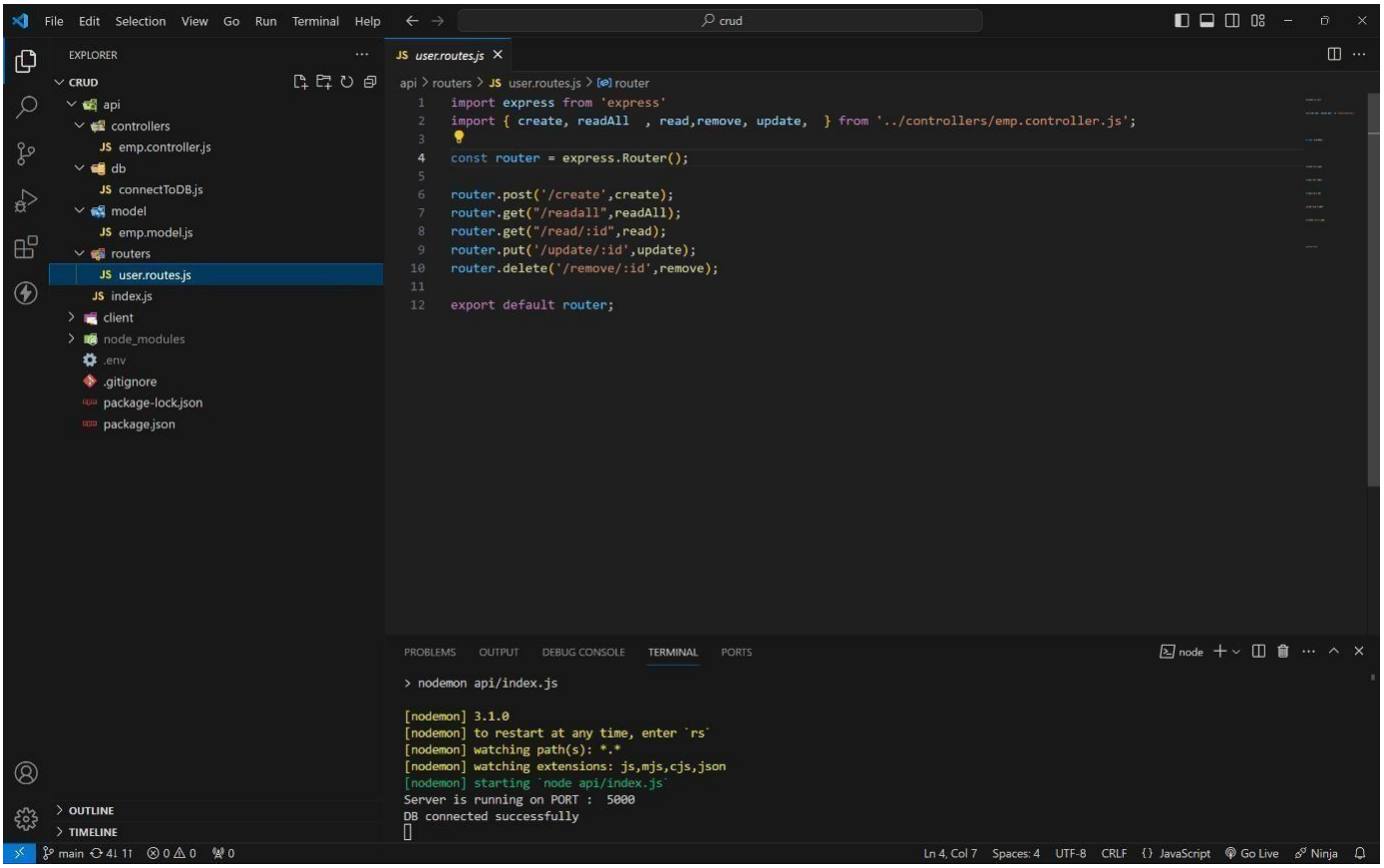
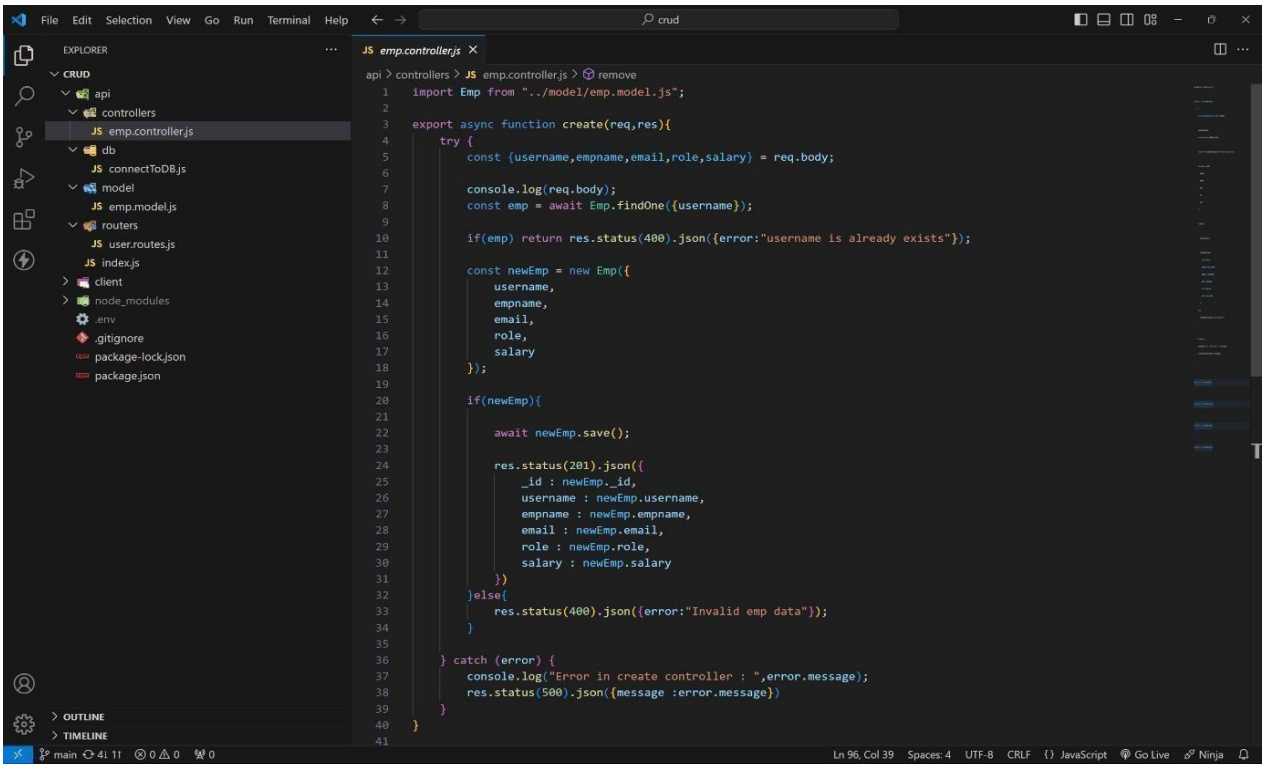
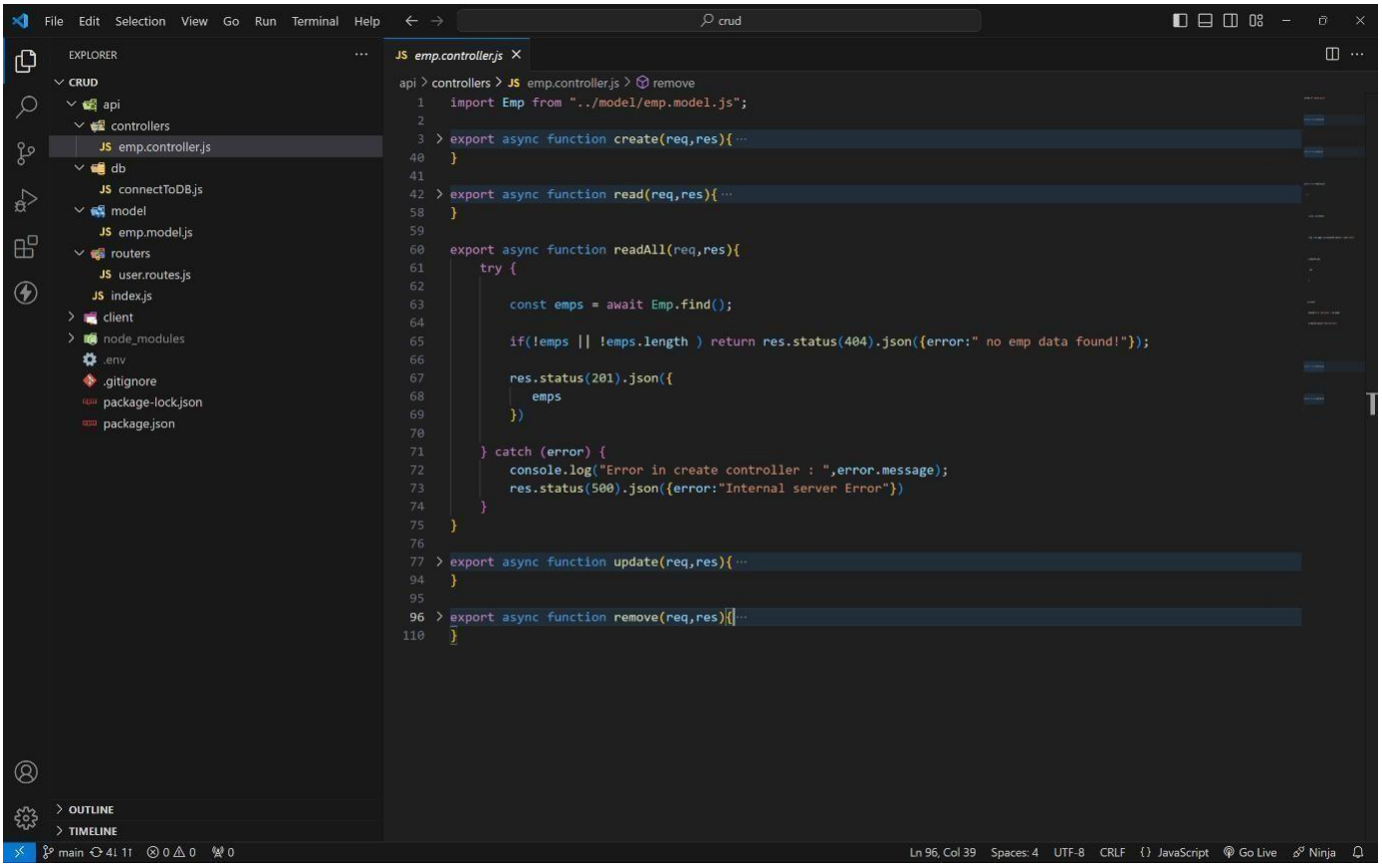
ROUTES:



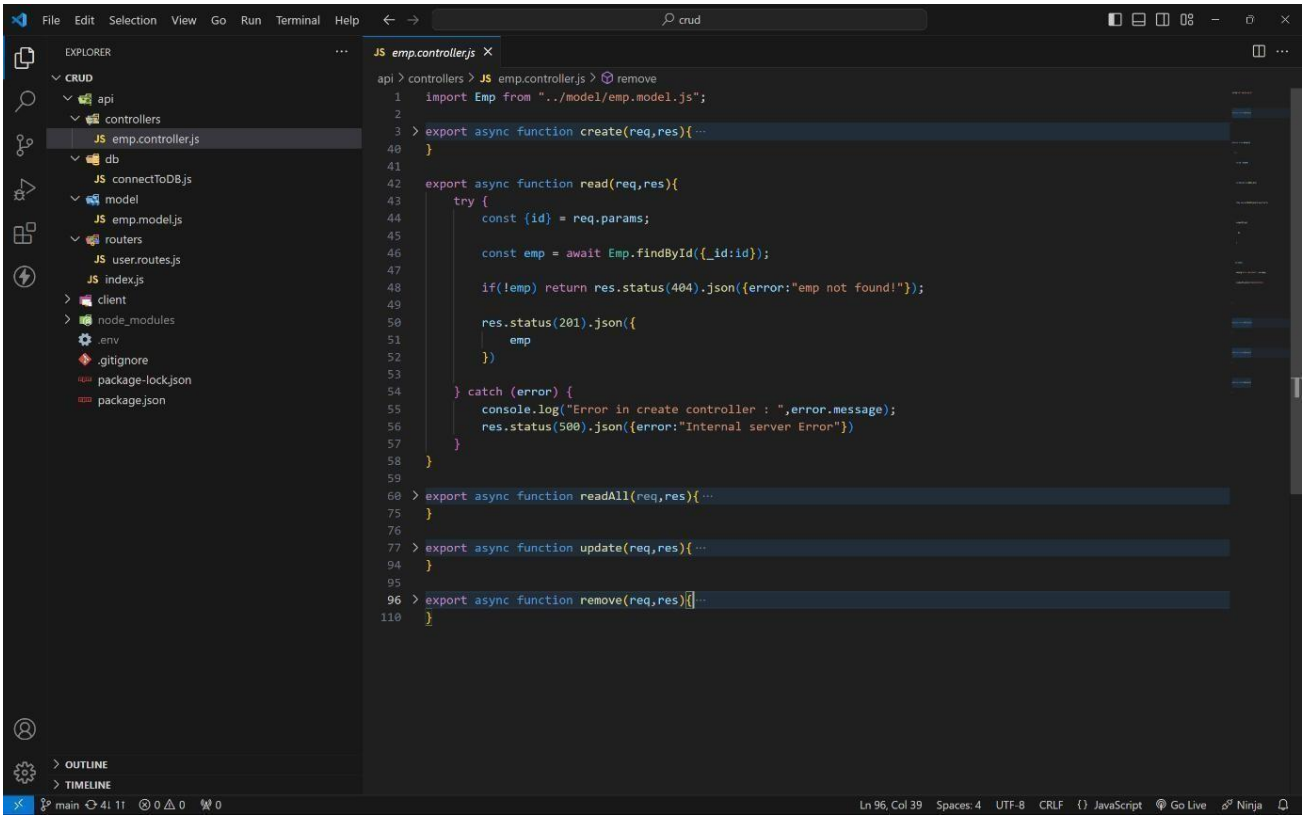
CONTROLLERS : CREATE :



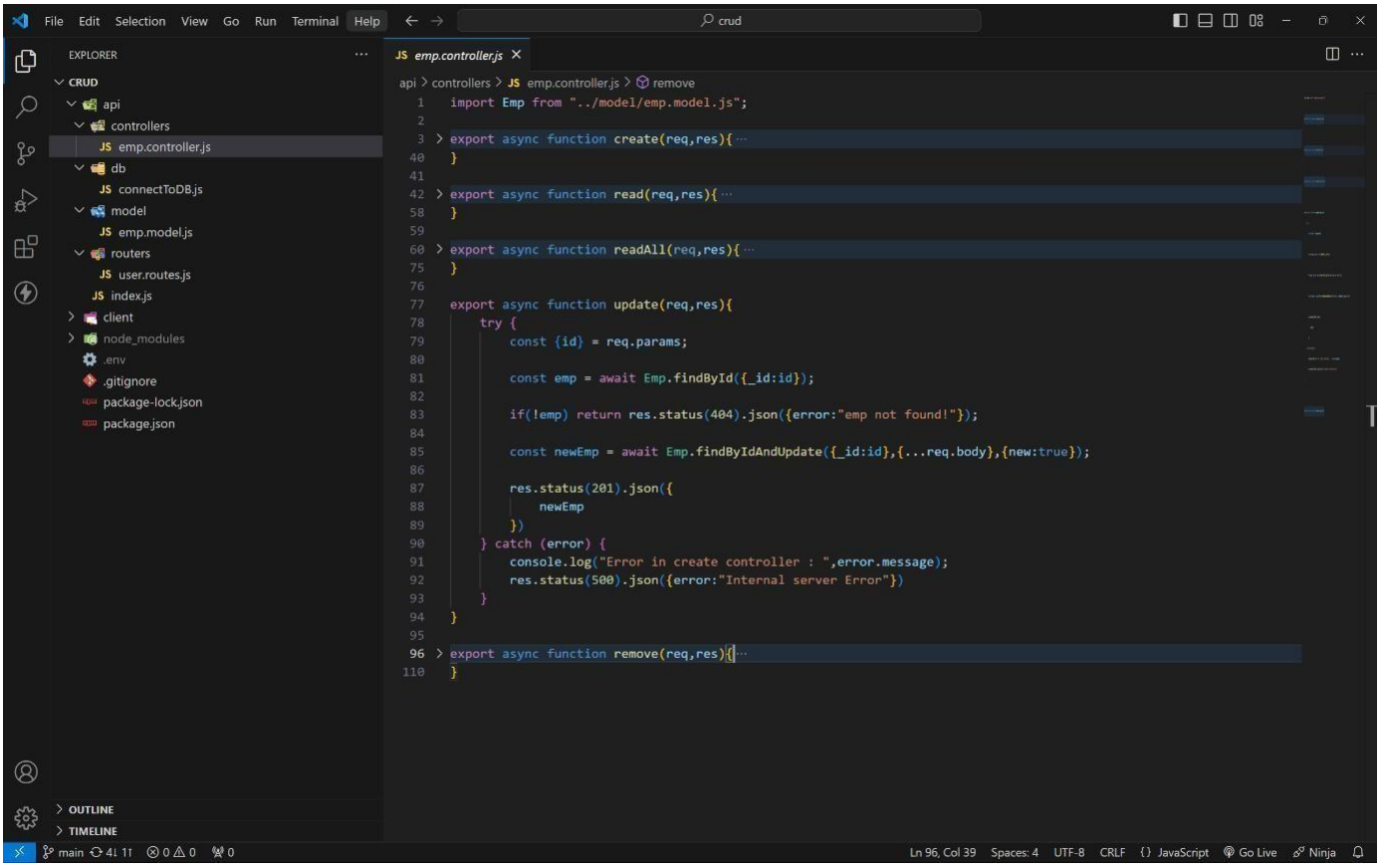
READALL:



READONE :



UPDATE :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package.json
OUTLINE
TIMELINE
emp.controller.js
api > controllers > emp.controller.js > remove
import Emp from "../model/emp.model.js";
export async function create(req,res){
}
export async function read(req,res){
}
export async function readAll(req,res){
}
export async function update(req,res){
try {
const {id} = req.params;
const emp = await Emp.findById({_id:id});
if(!emp) return res.status(404).json({error:"emp not found!"});
const newEmp = await Emp.findByIdAndUpdate({_id:id},{...req.body},{new:true});
res.status(201).json({
newEmp
})
} catch (error) {
console.log("Error in create controller : ",error.message);
res.status(500).json({error:"Internal server Error"})
}
}
export async function remove(req,res){
}
main
Ln 96, Col 39
Spaces: 4
UTF-8
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HOW TO RUN ON LOCALLY :

1 . Create a folder as any name.

2 . Open that folder in any code editor (vs code).

3 . Open terminal (ctrl + ~) on code editor.

4 . Type this code to get code locally. git clone https://github.com/4727yesuraju/crud.git

5 . Now move to crud folder (cd crud in terminal)

6 . Ignore client folder.

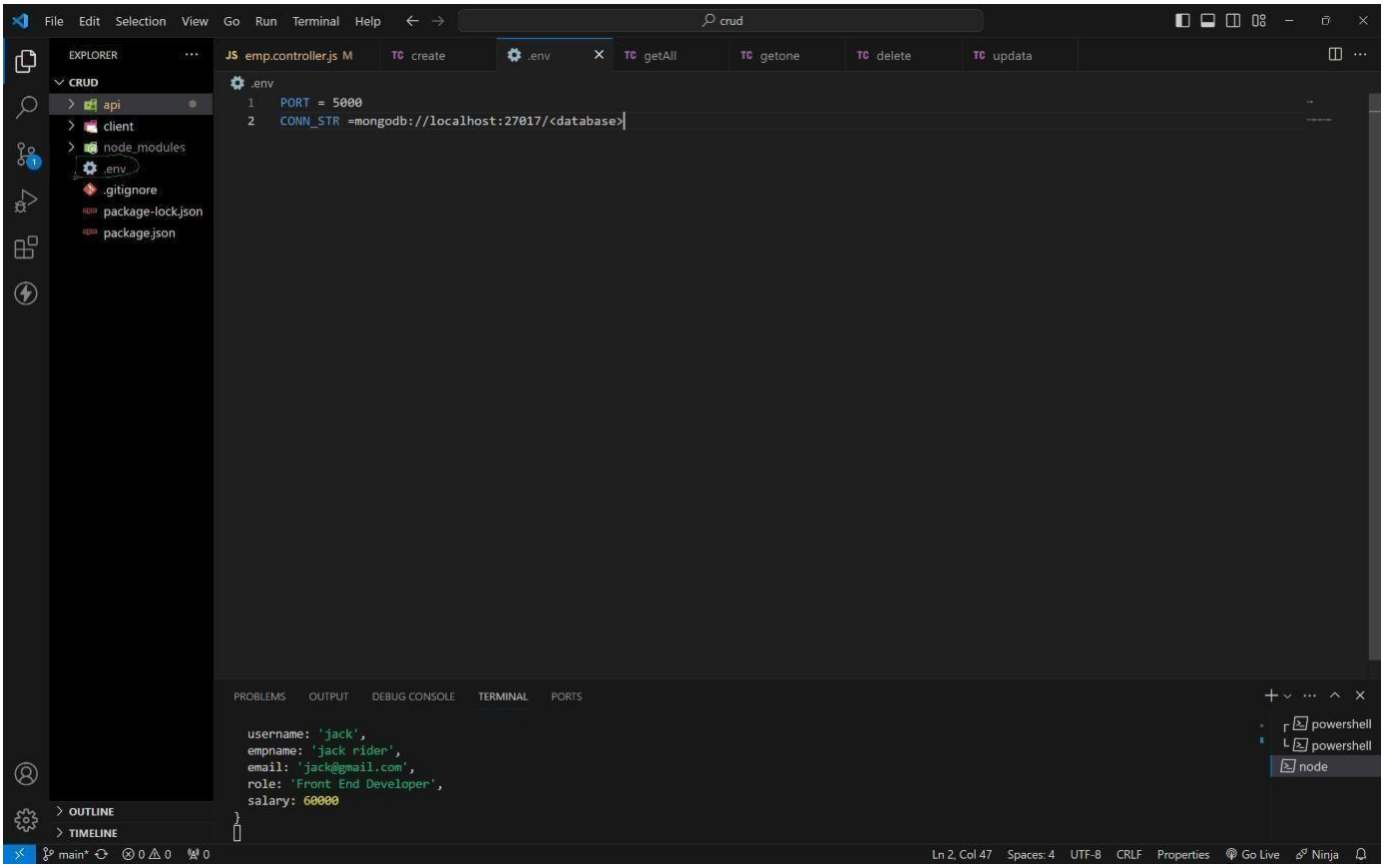
7 . Here crud is root folder.

8 . In root folder create a .env file and create a PORT and

CONN_STR variables and assign value.

ex : PORT = 3000 (commonly any number between 3000 - 8080).

CONN_STR = your mongodb_connection_string



--- trouble in above process ? :

simply paste this code in .env file .

PORT = 5000

CONN_STR=mongodb+srv://4727yesuraju:rough@cluster0.wbclvtg.mongodb.net

/?retryWrites=true&w=majority&appName=Cluster0

9 . After in terminal (in crud folder as root folder) type this command to server.

npm i (installing all dependencies)

npm run dev (to run server)

10 . if you get below message in terminal then your server will running Successfully

```
PS C:\Users\4727y\OneDrive\Desktop\internshala\crud> npm run dev

> crud@1.0.0 dev
> nodemon api/index.js

[nodemon] 3.1.0
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node api/index.js`
Server is running on PORT :  5000
DB connected successfully
```

route and its functionality :

For this use any API using tools like Postman or Thunder Client.

i use THUNDER CLIENT.

CREATE ROUTE :

1 . This route is used to create a new employee in database with a below fields.

username, empname, email, role, salary

2 . in thunder client click on new request and select this options method as post

url as http://localhost:5000/api/user/create

pass this json data as a body as your required value.

{

"username": "jack",

"empname": "jack rider",

"email": "jack@gmail.com",

"role": "Front End Developer",

"salary": 60000

}

3 . finally press send to insert data in mongodb data base and get a inserted data as a response.

4 . If user is already in db it will return User is already exist as response.

for more details visit below output images...

READONE :

1 . This route is used to read specific user info by passing that user id as a param.

method as get

url as

http://localhost:5000/api/user/read/65ed7b3d76e1dcc9a51654ca

2 . After sending you will get that specific user details as response.

READALL :

1 . Read all route is used to get all the user data existing in the mongodb

data base .

method as get

url as http://localhost:5000/api/user/readall

2 . After sending you will get that all user details as response.

UPDATE :

1 . This route is used to update specific user by passing that user id as a param. method as put

url as http://localhost:5000/api/user/update/65ed7b3d76e1dcc9a51654ca

2 . After sending you will get updated user details as response.

DELETE :

1 . This route is used to delete specific user by passing that user id as a param. method as delete

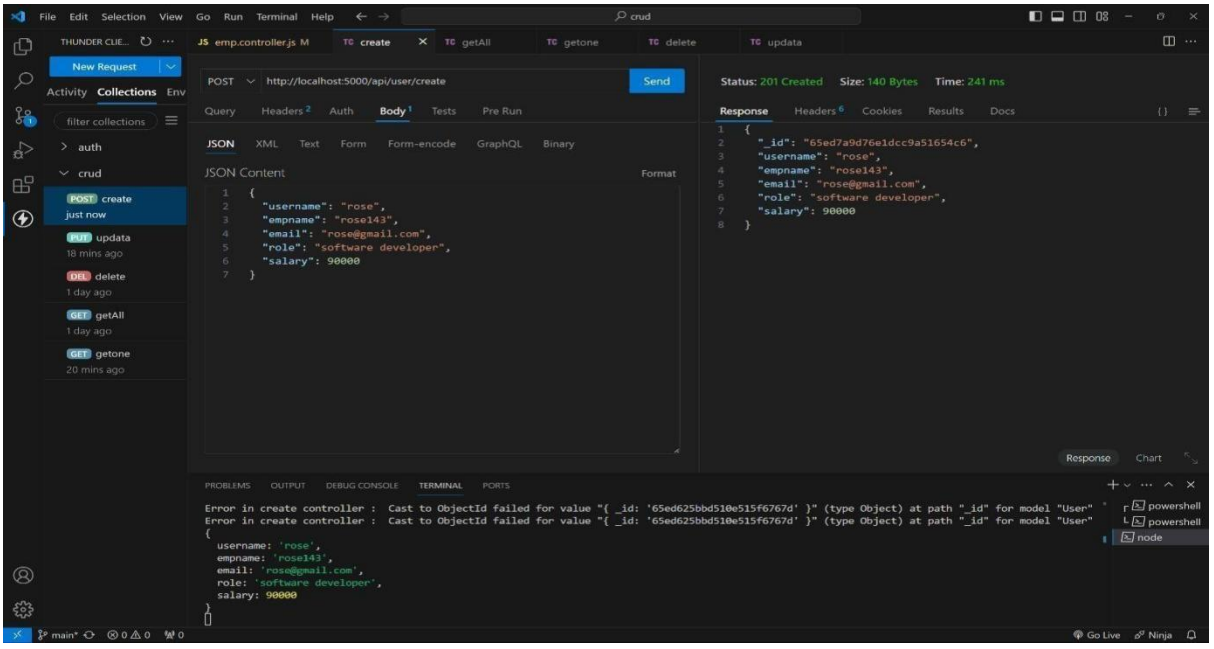
url as

http://localhost:5000/api/user/delete/65ed7b3d76e1dcc9a51654ca

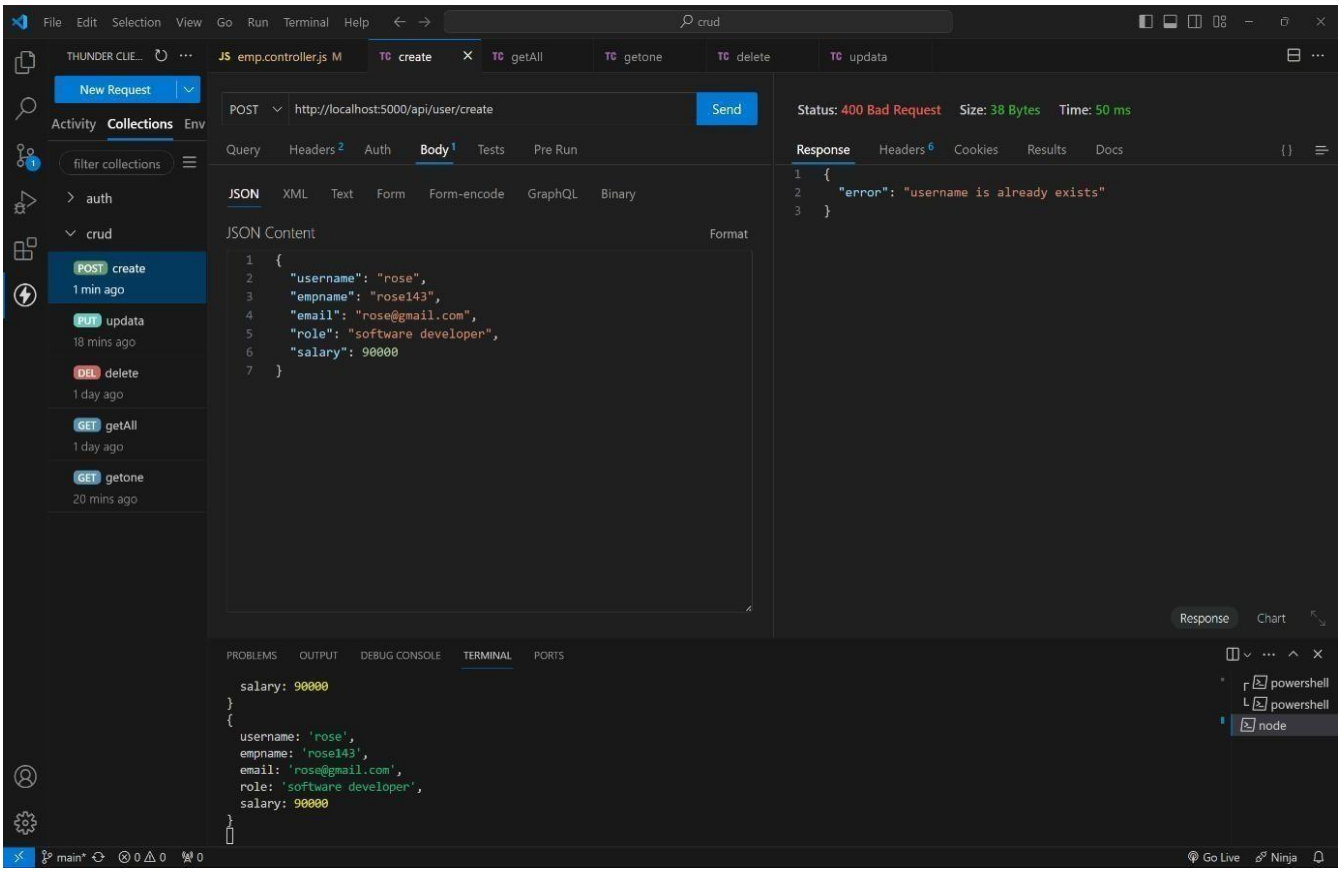
2 . After sending you will deleted successfully as response.

OUTPUT :

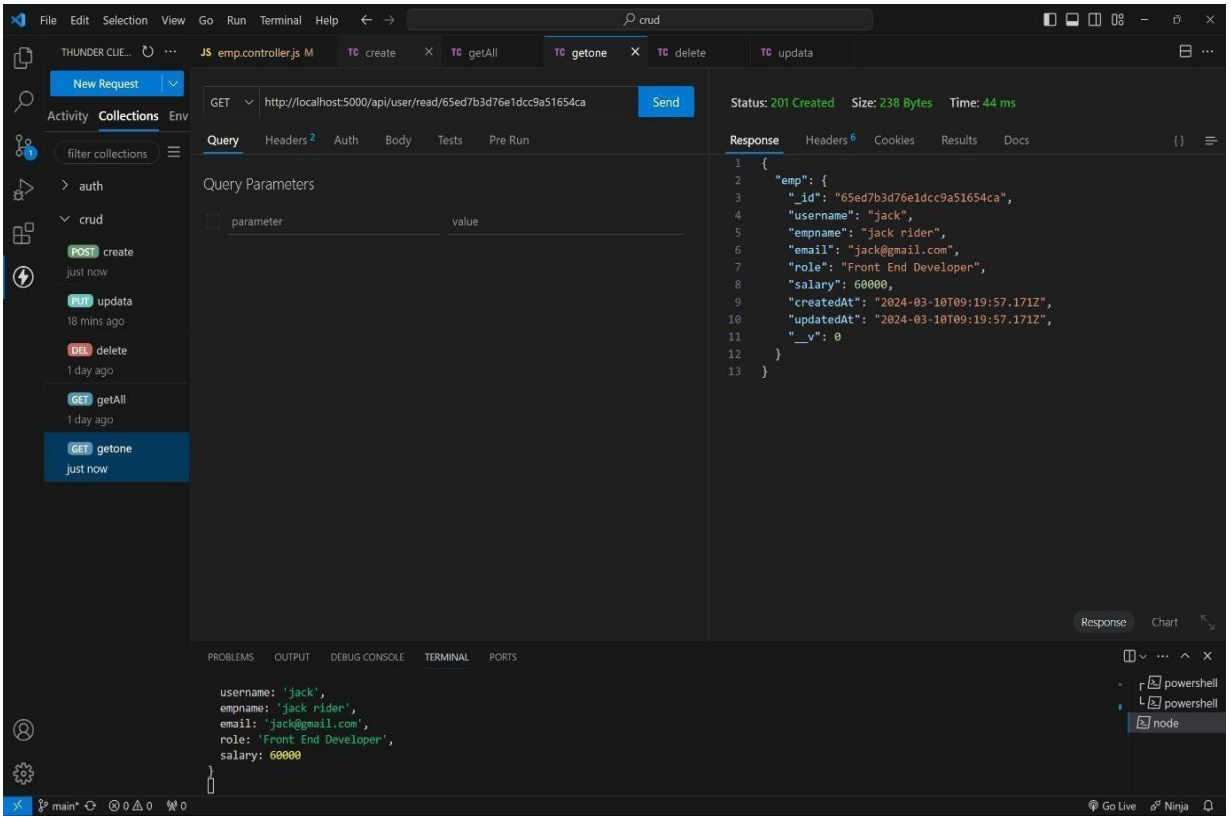
CREATE A NEW USER :



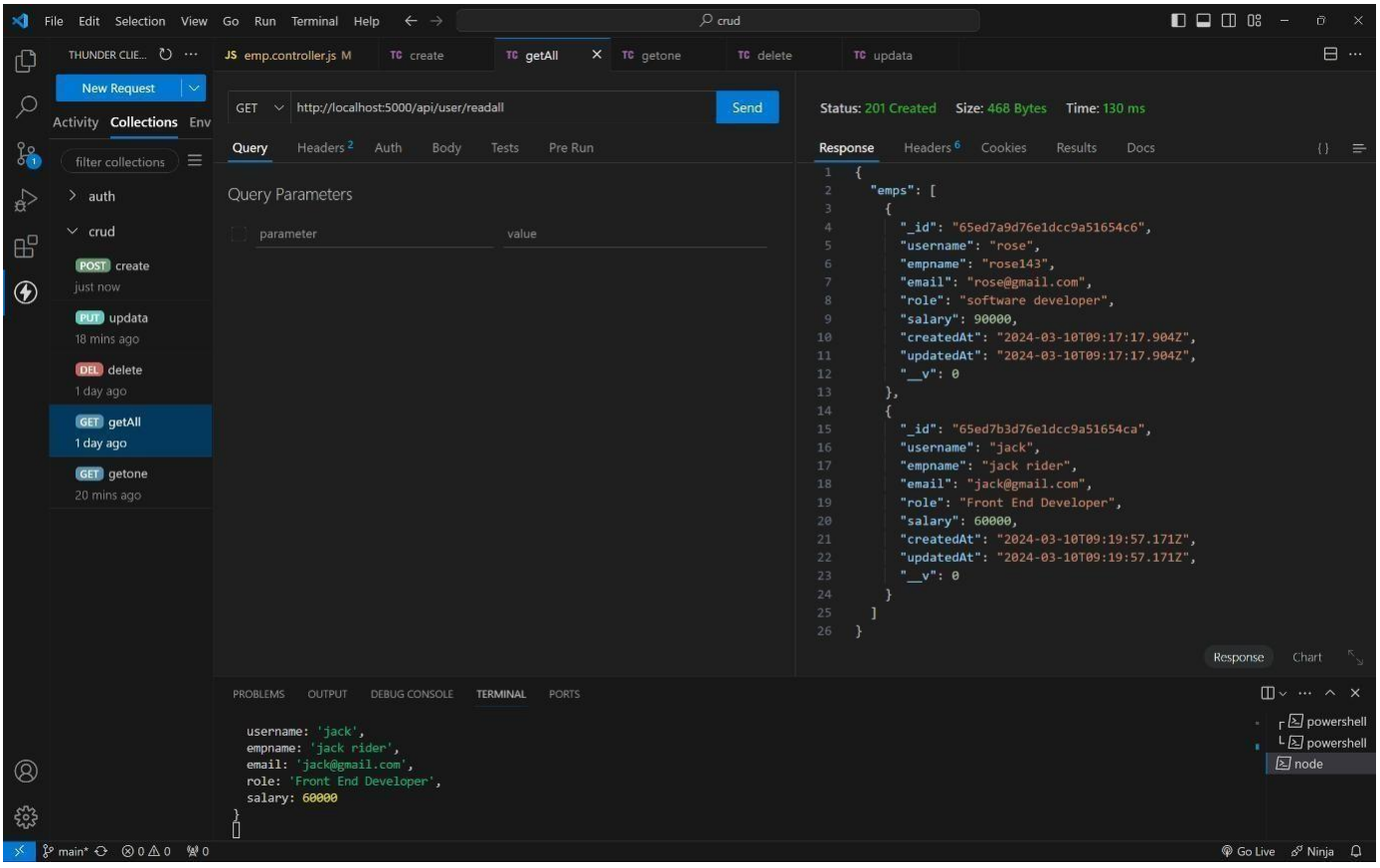
CREATING USER WITH EXISTING USERNAEM :



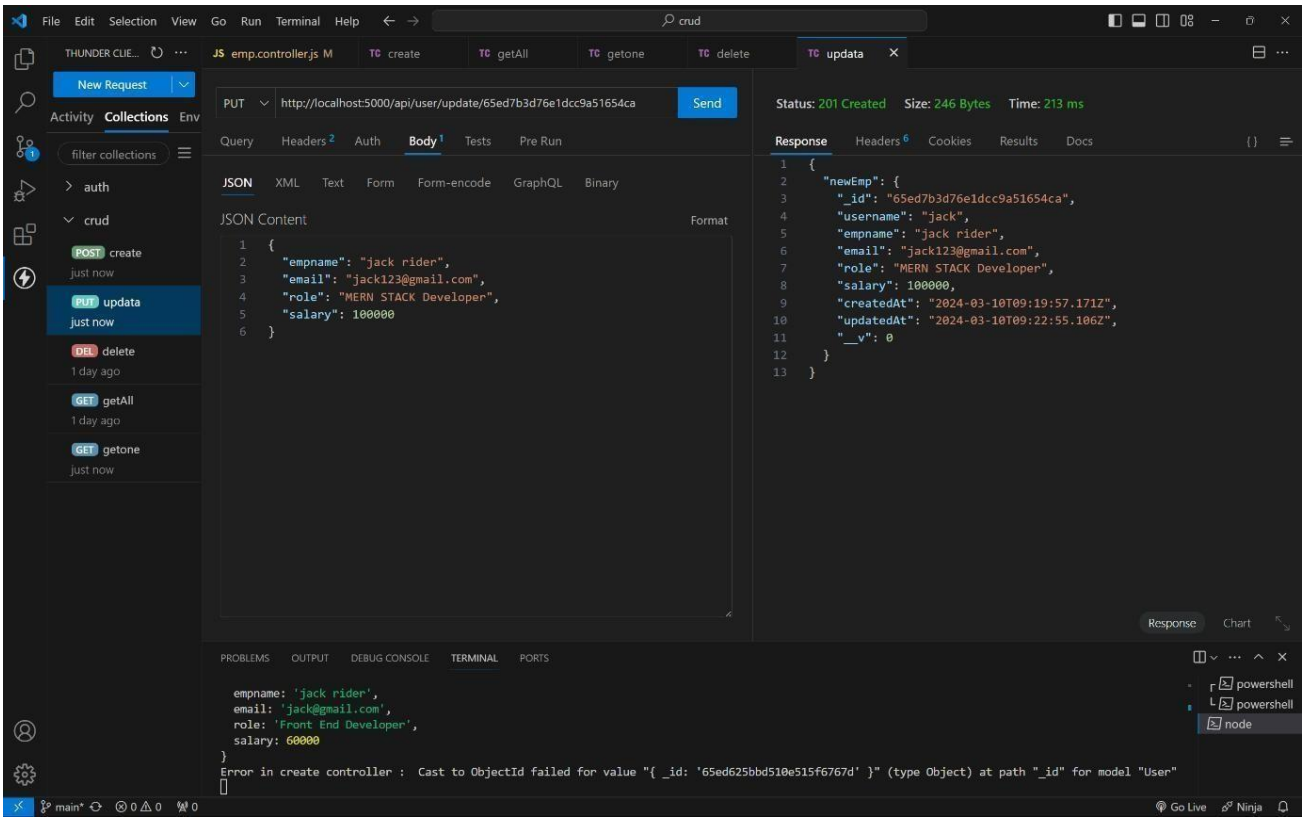
READONE :



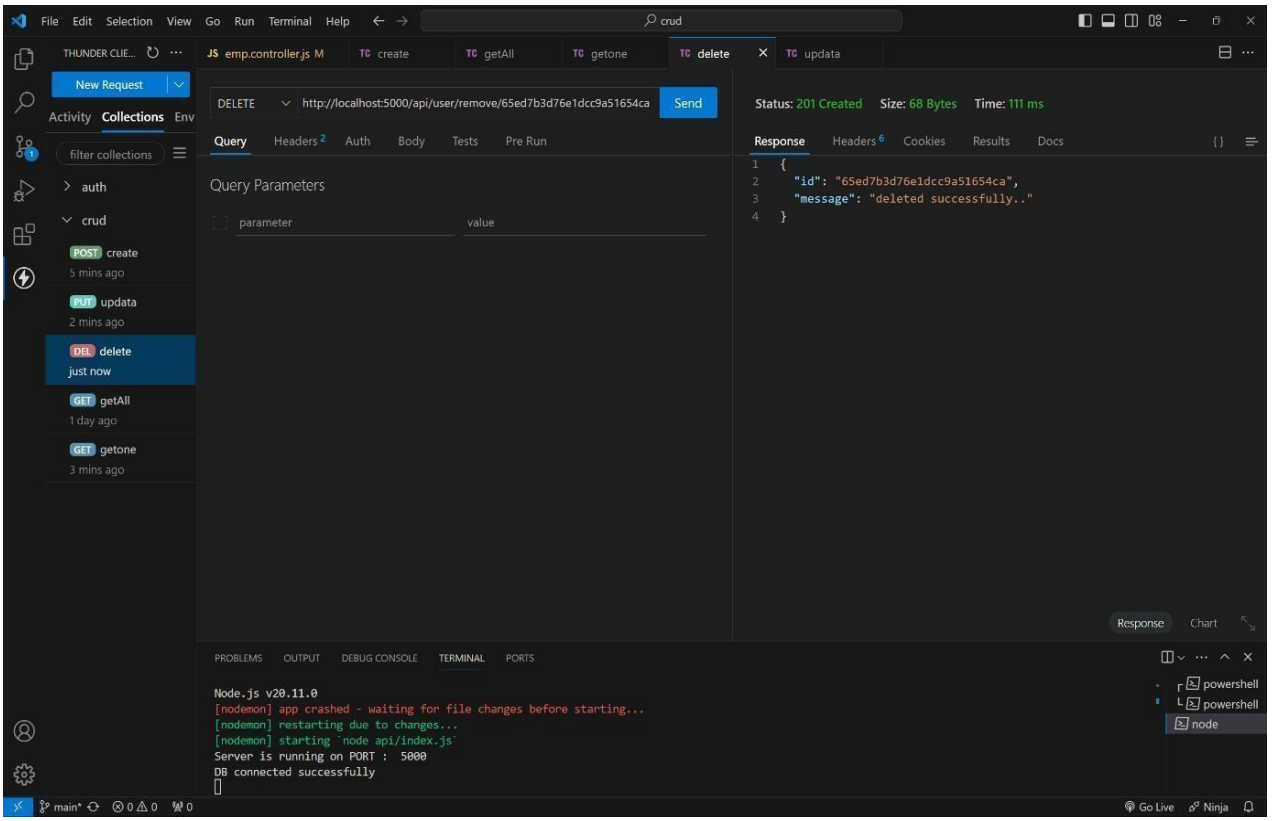
READ ALL :



UPDATE :



DELETE :


File Edit Selection View Go Run Terminal Help
crud
THUNDER CLIE...
New Request
Activity Collections Env
filter collections
auth
crud
POST create
5 mins ago
PUT updata
2 mins ago
DEL delete
just now
GET getAll
1 day ago
GET getone
3 mins ago
JS emp.controller.js M
TC create
TC getAll
TC getone
TC delete
TC updata
DELETE
http://localhost:5000/api/user/remove/65ed7b3d76e1dcc9a51654ca
Send
Status: 201 Created
Size: 68 Bytes
Time: 111 ms
Query
Headers 2
Auth
Body
Tests
Pre Run
Response
Headers 6
Cookies
Results
Docs
Query Parameters
parameter
value
{
"id": "65ed7b3d76e1dcc9a51654ca",
"message": "deleted successfully.."
}
Response
Chart
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
Node.js v20.11.0
[nodemon] app crashed - waiting for file changes before starting...
[nodemon] restarting due to changes...
[nodemon] starting `node api/index.js`
Server is running on PORT : 5000
DB connected successfully
powershell
powershell
node
main*
Go Live
Ninja