The same configuration environment for flawless 😊 project development

This is the procedure how to configure our project environment. All team members have to be follow this procedure. React, Node (express), mongoodb are works on dependence based, we will add the dependence at any time hence the absence or variation of the location of these dependence will distract the development lifecycle of our project.

Step 1: download the node js from the node js website and install it

To Check your installation open cmd terminal then write node -v if it display the node version you done grate work

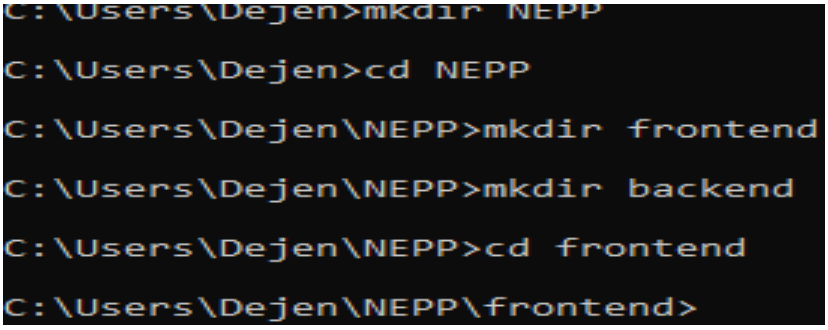
Step 2: Set Up Project Structure

Open the cmd terminal then write mkdir NEPP

Enter into NEPP directory by Cd NEPP

With in NEPP directory create new folder mkdir frontend and mkdir backend

```
NEPP |
     ├── frontend
     └── backend
```



Step 3: Set Up the Frontend (React)

Then enter into frontend folder by cd frontend write this

npx create-react-app . don't miss the dot please b/c the dot indicate install in the current directory , wait up to finished the installation after that install this

npm install axios

that is all about the frontend react set up

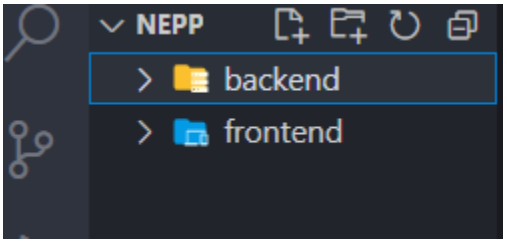
step 4: Set Up the Backend (Node.js with Express)

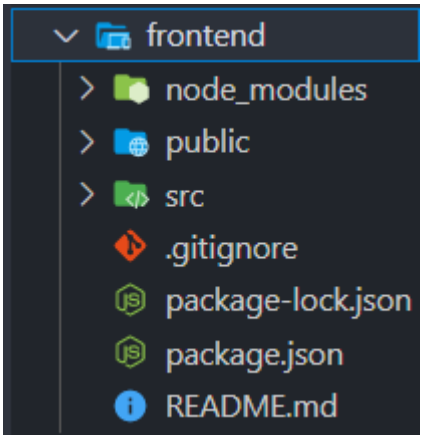
Please exit from frontend and enter in to backend like in this way

cd .. this leads into NEPP then write this cd backend well done you enter into backend folder.

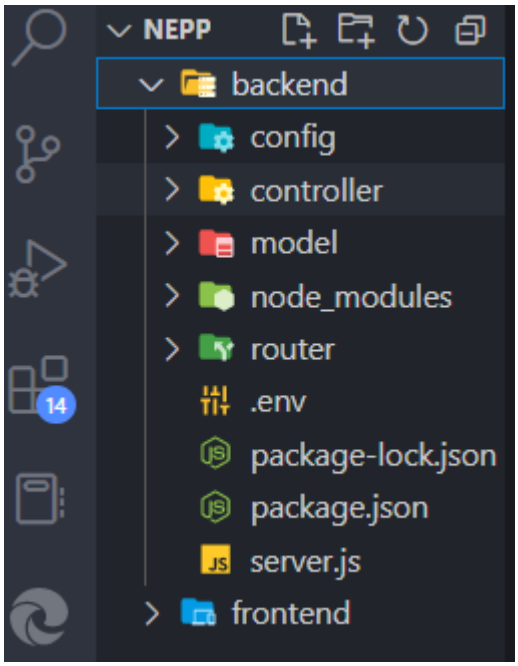
1,write this npm init –y this initialize a Node.js

2, npm install express mongoose dotenv cors this **Install Necessary Dependencies**: great work you finished then please exit from the backend folder by cd .. Now you are in NEPP directory or folder in order to open this in vs code please write cd . From NEPP directory.



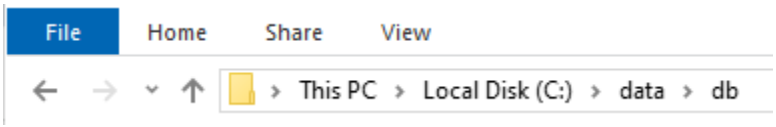


In backend folder create this folder model, config, router, controller, .env(this is not folder simple file) and server.js file



One last thing remaining what is that installing and add our database mongoodb

Step 5: before download anything go to your local disk C and create folder name data, in the data folder again create db folder. // by default, Mongo DB uses the `C:\data\db` directory to store data on Windows.



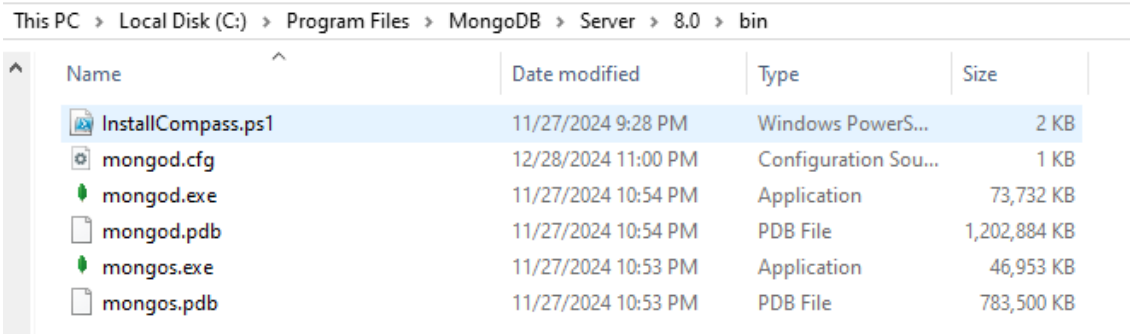
Now download the mongodb

Search Mongodb.com then select product next select the download button in Try Community Edition right bottom side.

Choose the Version and download: You can choose the latest stable version or a specific version if needed. The default option is typically the latest stable release.

Install this and after installation go to local disk c then program file then mongodB then server…then bin in bin directory please check that mongod.exe and mongo.exe file found some times the new version miss the mongo.exe but don't worry we will fix it 😁

Still you are on bin directory ,



copy the path (this pc/program file/.....bin) then in search bar search edit the system environment open it-> in advance option select environment variable -> then in system variable select path ->new then paste the path you copy before .

We are finished check it go to cmd and write mongod this will start your mongodb server and open other new cmd terminal and run mongo what is the output when you run mongo

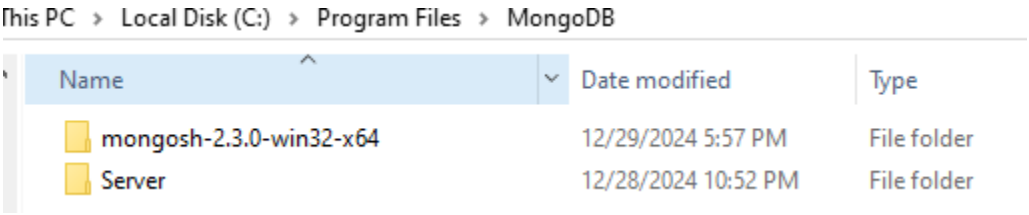
this (as I told you the your version not support mongo, but don't worry it will fix)

```
C:\Users\Dejen>mongo
'mongo' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\Dejen>
```

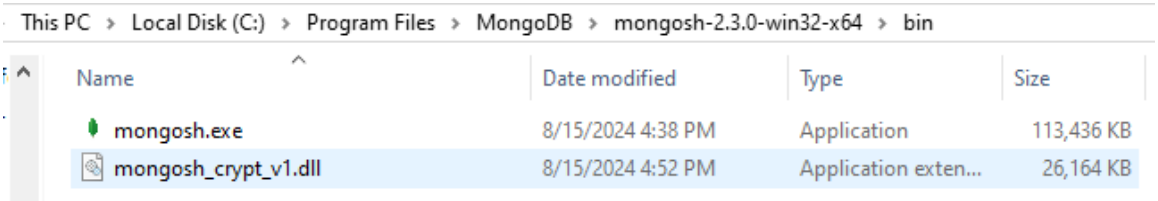
Or this one(the correct one)

```
C:\Users\Dejen>mongosh
Current Mongosh Log ID: 67a917d62eba83e9942710bb
Connecting to:          mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh
.3.0
MongoServerSelectionError: Server selection timed out after 2000 ms

C:\Users\Dejen>mongosh
Current Mongosh Log ID: 67a918c344003224ba2710bb
Connecting to:          mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh
.3.0
Using MongoDB:          8.0.4
Using Mongosh:          2.3.0
mongosh 2.3.9 is available for download: https://www.mongodb.com/try/download/shell

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

If the error display (the first one), goto the browser and search mongodb shall download it. Be attention after you download the mongodb shall, extract your download file in program file ->mongo dB folder like this.

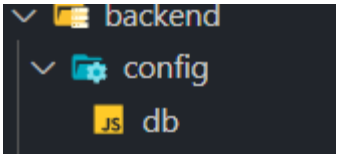


You see the mongosh-2.3.0…. found in mongodb folder. Open it (mongodb-2.3.0-win32-x64 ->bin) and copy the link(the path this pc up to bin) and add into the environment as we done before.



//code for database connection

// go to vs code editor in backend folder we have config folder and in config folder we have db file write this code or copy in db file




```
const mongoose=require('mongoose');

const connectdb= async()=>{
    try {
          await mongoose.connect(process.env.MONGODB_URL);
          console.log("the  connection is good");

    } catch (error) {
        console.log('not connected ');
    }
};
module.exports=connectdb;
```

And we have .env file in backend folder add this code into .env

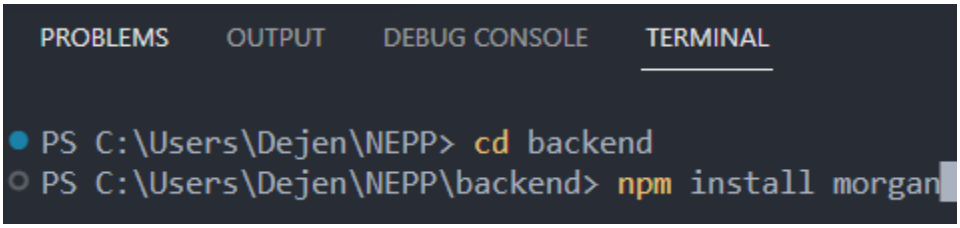
```
PORT=5000
MONGODB_URL=mongodb://localhost:27017/examDatabase
```

And we have server.js copy this code

```
const express = require('express');
const morgan = require('morgan');
require('dotenv').config();
const connectdb = require('./config/db'); // Ensure this points to your DB
connection logic

const app = express();

// Middleware
app.use(express.json()); // To parse JSON request bodies
```

```
app.use(morgan('dev'));

// Connect to database
connectdb();

// Start server
const port = process.env.PORT || 5000;
app.listen(port, () => {
  console.log(`The server running on  ${port}`);
});
```

Open terminal from vs code and direct into backend by cd backend and install the morgan like this



Now we are totally finished our installation process check it again in cmd

Open cmd run mongod by typing mongod , wait a few second and open other cmd terminal and run mongosh by typing mongosh, and in vs code editor in backend directory write this

```
PS C:\Users\Dejen\NEPP\backend> node server.js
```

The installation and database connection connected we are finished

```
PS C:\Users\Dejen\NEPP\backend> node server.js
The server running on  5000
the  connection is good
```

Part2: how it work 😍✌😊😂