Introduction Node JS

JavaScript Run time: Run JS code without embedding that in Web Browser.
Using Google Chrome's V8 engine
Download from here: https://nodejs.org/en/download
once it is installed check version
open cmd --> run command
node -v (node version)
npm -v (node package manager version)

How to install Express?
      npm i express (this command will install express locally)
      locally means in current folder.
      how to do global instllation:
            npm install -g mysql
How to create Project in NodejS?
-- create folder with project name
I want to add configuration file:
      move to the folder (cd folder-name)
      npm init -y (this will create package.json file)

once the project folder is having package.json we can start installing dependencies
npm i express (install locally)
npm i nodemon --save-dev (this will install for development environment only)

After executing above commands you can see node_modules folder and package-lock.json file.
node_modules folder we can ignore while uploading on github
whenever its required you can generate by just executing npm install command.
Just keep 1 thing in your mind run this command at that place where you have package.json and lock file located.

To configure nodemon with start command.
edit package.json file as shown below.

 {

```json
"name": "sample-api",
"version": "1.0.0",
"description": "",
"main": "index.js",
"scripts": {
"start": "nodemon server.js",
"test": "echo \"Error: no test specified\" && exit 1"
},
"keywords": [],
"author": "",
"license": "ISC",
"dependencies": {
"express": "^5.1.0"
},
"devDependencies": {
"nodemon": "^3.1.10"
}
}
```

Create Server.js file

```js
const express = require('express');

const app= express(); //server created

//localhost:5000/
app.get('/',(req,res)=>{
res.status(200).send('<h1>This is My landing Page</h1>')
})
//localhost:5000/about
app.get('/about',(req,res)=>{
res.status(200).send('<h1>This is My About Us Page</h1>')
})
//localhost:5000/contact
app.get('/contact',(req,res)=>{
res.status(200).send('<h1>Contact Us</h1>')
})
app.get('/hello',(req,res)=>{
res.status(200).send('<h1>Hello From SONAM')
})
```

```
app.listen(5000,()=>console.log('Server started'))
```

Once this is done you can run it from terminal.

```
D:\LetsUpgrade\node-js-express\Sample-API>npm start

> sample-api@1.0.0 start
> nodemon server.js

[nodemon] 3.1.10
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node server.js`
Server started
```
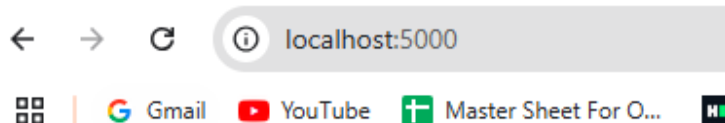
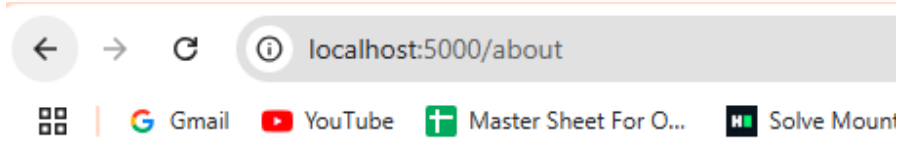now whenever you change your code and save it your server will restart automatically.

```
[nodemon] restarting due to changes...
[nodemon] starting `node server.js`
Server started
[nodemon] restarting due to changes...
[nodemon] restarting due to changes...
[nodemon] starting `node server.js`
Server started
[nodemon] restarting due to changes...
[nodemon] starting `node server.js`
[nodemon] restarting due to changes...
[nodemon] starting `node server.js`
Server started
```

You can see the result in browser by accessing path

localhost:5000

88 | G Gmail ▶ YouTube Master Sheet For O... HI

This is My landing Page

About Us

Gmail   YouTube   Master Sheet For O...   Solve Mount

This is My About Us Page

If you want to load HTML page then create one folder named views and create index.html file
index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Home Page</title>
</head>
<body>
<h1>Sonam Soni</h1><hr>
<!-- p*4>lorem -->
<p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Corrupti quasi a
nesciunt numquam tempora recusandae rem. Pariatur sed obcaecati ullam sit
quasi ipsam voluptatem non id porro, quidem animi nobis.</p>
<p>Nam sunt ratione id quia quisquam dolor dolorum obcaecati, officiis
voluptate! Ipsa et odio fugit vero, praesentium magni harum quasi est.
Veritatis dolor dolorum doloribus odit molestiae reiciendis eos sapiente?</p>
<p>Quaerat explicabo aut recusandae saepe omnis nesciunt. Error,
reprehenderit? Tenetur iure velit repudiandae assumenda aut quae sit
perspiciatis reiciendis. Ducimus tempore error praesentium consequatur quod
tempora alias, sed sapiente facere!</p>
<p>Ratione quisquam consequuntur accusantium rerum, expedita non unde iste.
Ut, omnis velit laudantium quidem nemo eos praesentium ipsa distinctio
excepturi minus esse placeat iusto iste facilis? Corrupti explicabo molestias
error.</p>
</body>
</html>
```
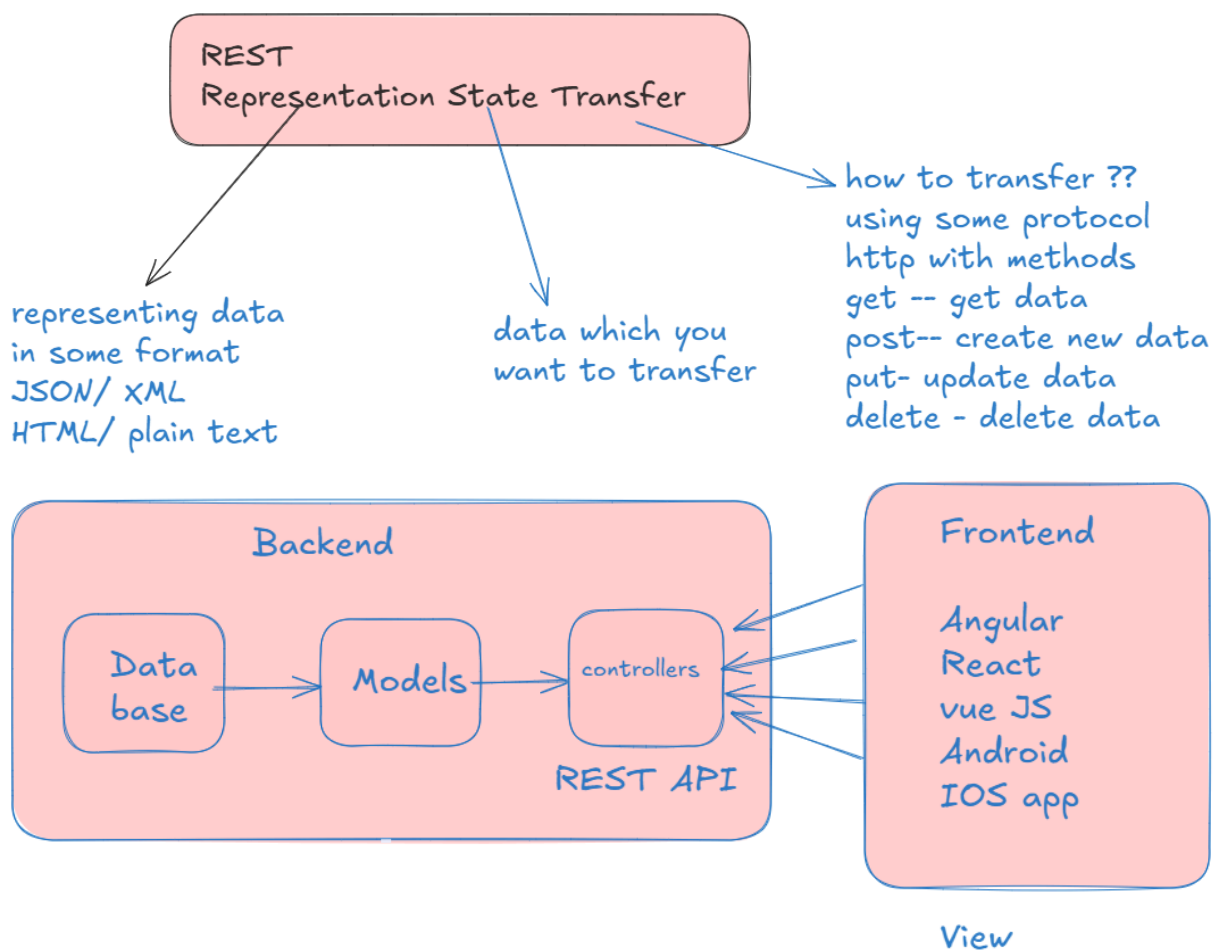
then update server.js code as below.

```
//localhost:5000/
```

```
app.get('/',(req,res)=>{
// res.status(200).send('<h1>This is My landing Page</h1>')
res.sendFile(__dirname+'/views/index.html')
})
```

check http://localhost:5000/ to see html page

Let's Create Plain API which just handles get/post/put/delete request.
Same process let's create project again
https://github.com/sonam-niit/NodeExpress-Bootcamp (git hub link for reference code