CRUD Operation using Express with Mongo DB with mongoose module.

Creating the admin and user portal.

CRUD Operation folder

Backed folder

create the package.json file using the command as npm init

It will ask you package name give some name and enter it.

npm install express cors mongoose

router controller model

app.js (main file)--🡪

We have to create three folder router, control and model

model : this folder contains all model class. According to mongoose module model class is responsible to load the mongoose module, using this module create schema( which help to provide the structure of the collection). Using schema we have to create the model and we have to export the model.

controller : controller take the help of model file or class and do the operation on collection base upon the request receive from a router file.

router : router file receive the request from main file ie app.js. then check sub path and http protocol specific method. So base upon the method and sub path it will re-direct to specific controller function or methods.

app.js or server.js or main.js

This file load all required modules ie express, cors, mongoose etc.

Then create the reference of express js, all middleware of cors.

Connect the database.

Verify the main path of the application and re-direct the request to specific router file.

Run the application on specific port number.

Authentication and Authorization

In simple world authentication is the process of verifying who a user a

Authorization is the process of verifying they have to access the resources.

Admin user can add and view the product

User login can only view product.

By default http is stateless protocol.

Session id generated by server when client send the request to the server.

And that generated id pass through cookies file to client.

Cookie file is not secure or in browser we can make cookies disable.

JWT : Json Web Token.

---🡪Req---------🡪

Client Server (Express, Java, Python, Asp.net)

🡨--------Res +JWT token ------

Frontend

Now we have to install jsonwebtoken module

We have to install bcrypt module

npm install jsonwebtoken bcryptjs

create the angular project using ng new angular-application

create two component

ng g c signin

ng g c signup

ng g s login

ng g class login (login model class)

Docker

Deploying the application in AWS

First create new folder

Then create index.html page

Then create Dockerfile

FROM nginx:alpine

COPY index.html /usr/share/nginx/html/

Command to create the image

docker build -t my-project-page . -f Dockerfile

nginx by default running on port number 80

docker run –d –p 9999:80 my-project-page

create the angular project

and develop the application and build it using command as

**ng build**

copy and paste build file in another folder and then create the Dockerfile and build it and run

the image.

ng build -t my-project-angular . -f Dockerfile

now we have to run the project

installing git in EC2 instance

sudo yum install git –y

sudo yum install docker

sudo docker build -t my-docker-image . -f Dockerfile

sudo docker run -d -p 80:80 my-docker-image