Day 22 : 2 Dec 2024 CB FSD - Planning and UI Design

Angular Pre defined Service

Angular provided pre defined service ie HttpClient API which help to call backend technologies service develop using any language.

Using Backend technologies we create RestFull Web service or api or end point. Those end point provided us data in the form of json. JSON is a common format which help to share the data between more than one application when they develop using different language like java, python, php, angular or react.

We create different type of end point

Get end point :

Retrieve one object details

Retrieve many object details.

Retrieve one or many object details using query param means while calling we are passing some value.

Select query

Post end point :

Create the object or store the object in database or file.

While calling these point we need to pass the information of particular object like login, product, customer, orders, account etc.

Insert query

Delete end point :

Delete the particular object using pk property like delete query

Update end point :

Update particular object particular property using pk. Like update query.

To call these end point in angular we use HttpClient API. This class DI we do inside service class. HttpClient API is a part of HttpClientModule. While doing DI for HttpClient we need to import HttpClientModule in app.module.ts . HttpClient get, post, put and delete method return type is Observable.

Observable is use to handle asynchronous event of data of any types. Observable is a part of rxjs.

In JavaScript or TypeScript or Angular we do two type of communication

1. Synchronous communication : the code or calling end point execute sequentially. It execute statement by statement or line by line.
2. Asynchronous communication : the code or calling end point execute independently.

To load the data from Observable we need to use subscribe. Which takes 3 parameter as a callback.

1st : next : which help to load the data one by one.

2nd error : while loading if we get any error this code get call.

3rd complete : after loaded data successfully third parameter get called.

ng new product-restapi

routing -🡪No

styling 🡪css

cd product-restapi

ng g c product -🡪 product component

ng g s product 🡪product service

ng g interface product -🡪 map the json data.

Angular pipe : Angular pipe is use to format the data while display on browser with help of template.

Angular provided lot of pre defined pipe

Like uppercase, lowercase, currency, date, asyn etc.

Syntax

{{variableName|pipename}}

Angular Routing : using angular routing we can navigate from one component to another component with or without conditions. These routing rules we need to write in routing file.

ng new angular-routing

routing -🡪 yes

styling 🡪 css

cd angular-routing

ng g c aboutus

ng g c contactus

ng g c login

ng g c dashboard

first we need to write the rules in routing files

const routes:Routes=[

{path:”about”,component:AboutUsComponent}

]

Angular provided pre defined tag is <router-outlet></router-outlet>. This tag behave like place holder. Which help to load the component contents or html page contents base upon path provided in routing file.

Angular routing provided pre defined api is Router which help to route with condition. So in component we need to do the DI for Router API which provide navigate function which help to navigate or move another component when conditions true or false

If we want to share the data between one component to another component and both are independent component. We can use

1. sessionStorage API

if we store any data in session object it present till session available. Once you close the application or session destroy the data preset in session object also get destroy.