Day 21 : 28 Nov 2024 CB FSD - Planning and UI Design

Angular Service :

If we write any business logic inside a component. That logic consider as local to that component. Means we need to write some logic in every components. If we need some logic it can be simple or complex for more than one component then we can use service class.

Template component service

Html page ts file

Tdf login page tdf component page

Service ts

Mdf login page mdf component page file

Creating service using angular cli we need to use the command as

Ng generate service logic

Or

Ng g s logic

We create all service class insider service folder.

ng g s service/login

@Injectable is decorator provided by angular to make special type of service class.

IOC : Inversion of Control : IOC is a type of programming design pattern or best practise. According to IOC in place of creating any resources or object explicitly allow to create and maintain by container(engine or run time environment). Base upon our requirement you need to pull it and use it. The life of those resource taken care by container. IOC is a concept.

DI : Dependency Injection : implementation of IOC is taken care by DI. Using DI we can pull the resource or objects from container.

Constructor base DI

Setter base DI

Angular support only constructor base DI not setter DI.

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.