Phase 4

Total session 9

Day 7 : 30 Jan 2024

Frontend technologies

ng new types-of-directives

cd types-of-directives

Directives : using directives in angular we are adding extra functionality or behaviour for existing DOM or html page.

Types of Directives

1. Components directives
   Component is a type of directives which help to create the user defined tags with the of @Component decorator. Component is use to control the view or part of view.

   ```
   @Component({
   selector :"my-tag",                          <my-tag></my-tag>
   templateUrl:"./mypage.html"          // static as well as dynamic using
                                        data binding
   })
   export class MyComponent {
           name:string ="Welcome"
   }
   ```

2. Structures directives : using structure directive we can add or remove dom or html contents from the web page. Using structure directive we can use if and for loop in html page

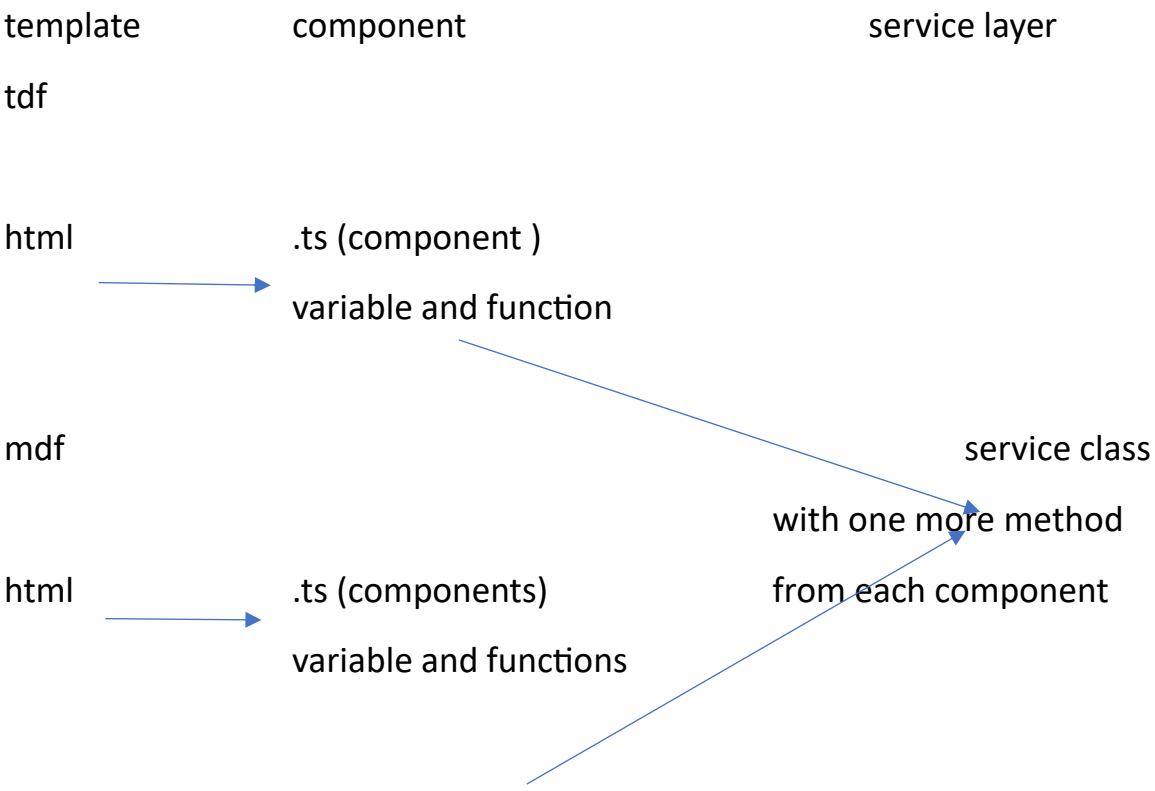
   a. Ng if
   b. Ng for

ng g c structure-directives

3. Attribute directives : using attribute directive we can apply css effect to web page.
   ngStyle
   ngClass

   ng g c attribute-directives

angular – service



service layer is use to write simple or complex common function which required for more than one components.

1. We can create normal type script class to make as service class. then in each component using new keyword we need to create the object of service.
2. Angular provided pre defined decorator @Injeable. If we create class with @Injecatlabe decorator using IOC and DI we can pull the object from container in every component. Now we need to provide the details about service class in app.module.ts file in provider section. Angular support only constructor based DI.

ng new angular-service

routing → no

styling -→ css

ng g c first

ng g c second

Here we created user defined service

1. Using new keyword
2. Using IOC and DI.

Template ---→Component --→ Service

Angular provided pre defined API or class ie HttpClient. Which help use to call Rest API develop in any language like Java (Spring boot) or any other technologies.

HttpClient contains get, post, put and delete methods to call Rest API. Using this HttpClient we can communicate and front end and backend technologies.

We will call live rest api

https://api.escuelajs.co/api/v1/products (backend)

ng g c product ---→ component

ng g class product-→ model which help to map the json data retrieve from backend technologies.

ng g s product -→ creating service to call rest api

we will display all product details in html page interact with rest api.

Inside user defined service class we need to do the DI for HttpClient.

HttpClient API is part of HttpClientModule. So in app.module.ts file we need to import HttpClientModule in import section.

http.get(), post(), put(), delete() method return type is Observable class reference.

Observable is part of RxJS (Reactive JS) third party library which help to handle asynchronous event of data. To load the data from Observable we need to use subscribe method. this method help to load the data which takes three parameter as callback.

1st :next to load the data one by one

2nd : error : if any error generate while loading it will call

3rd : complete : after loaded successfully this parameter get call.

Promise is also use to handle asynchronous event of data.