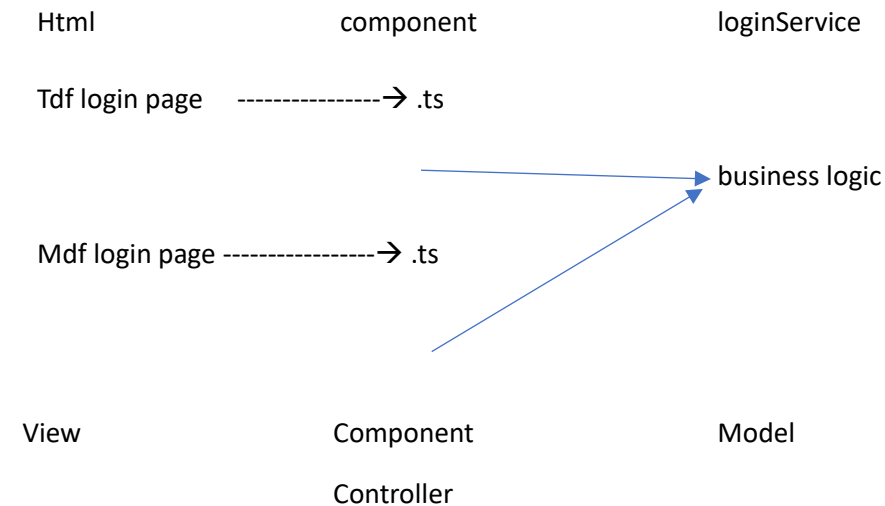


Service layer or class

If we write any simple or complex business logic in component
That logic consider as local to that component which we can
Access within that component or that component html page
But we need to logic must global for more than one component
Then we need to use service class.



MVC : Model View controller

In every component we are creating object of service class using **new keyword**. Because Service is normal type script class not an angular service class. But in angular we are not creating Object of component class because component is a type of special class with decorator **@Component**.

If we want to create object of service class by container then we need to write a class With decorator as **@Injectable**.

Now we need to provide service class details in app.module.ts file in provider section.

In every component base upon requirement, we need to pull the object from a container using **constructor with DI (dependency injection)**.

```
constructor(public loginService:LoginService) { }
```

flow of the application

html or view -----> component .ts -----> service .ts

Angular provided pre defined service class ie **HttpClient**.

Using HttpClient service we can call backend technologies Rest full web service.

REST (Representation State Transfer).

REST API

In Rest API we can consume and produce data in the form of JSON.

Frontend	REST API	backend
		Java
		Python
		Node js

Using HttpClient we can consume Rest API develop in any language.

ng new angular-fake-service

routing → no

css → styling

cd angular-fake-service

ng g c product product component

ng g s product product service

ng g **class** product model class (this class map to json data retrieve from rest api)

now open the project in vs code

ng serve -o

in user defined service ie product service class we need to do the DI for
HttpClient API.

HttpClient provide http protocol methods

ie

get, post, put and delete

all these method return type is Observable.

Observable is a pre defined object part of **rxjs** which help to handle asynchronous event of data. Rxjs means Reactive JS

If we want to load the data from observable we need to take the help of **Subscribe** function.

This function takes 3 parameter as callback.

1st parameter next : it is use to load the data one by one

2nd parameter error : while loading or beginning or end if any error generate then 2nd parameter get called.

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

In app.module.ts file we need to import

HttpClientModule in import section.

Whenever we do DI for HttpClient in service layer or class.

We need to import HttpClientModule in app.module.ts file in import section.

app.component.html --> parent component

inside this component html page we use selector of product component.

```
<app-product></app-product>
```

product.component.html →

2 button

First button display product details in browser console

It will call function

In product.component.ts file

We created di for service class and call service methods.

Second button display product details on browser.

In service layer we need to do the DI for HttpClient. Import HttpClient

Whenever we do the DI for HttpClient we need to import HttpClientModule in app.module.ts file.