

# Angular

Tahaluf Training Center 2021



## Chapter 6

**1 Services**

**2 Pipeline**



# Services

## Services

Angular services help is intended to exemplify business rationale and information with various components of Angular.



## Services

In order to create services:

In terminal:

ng generate services Folder\_name/Service\_name

or

ng g s folder\_name/service\_name



## Services

Generate new services called home.

```
PS C:\Users\User\Desktop\Training\TrainingWebSite> ng g s services/home
```



## Services

In the home service define a string and read it in home component.

In home.service.ts

```
export class HomeService {  
  message: string =  
  "This is from home service"  
  constructor() {  
  }  
}
```



## Services

Read this services from home component.

**First:** define an object of services in home.component.ts as a parameter of the constructor.

In home.component.ts

```
constructor(private router: Router,  
public homeServices : HomeService) { }
```



## Services

Then in home.component.ts

```
<div class=container>  
  <h2>Welcome to our Portal</h2>  
  <h2>{{ homeServices.message }}</h2>  
</div>
```





### Exercise :

Read the home service from login component and if the user logged successfully, update the message to “You are logged In”.



### Exercise Solution:

In login.component.ts define an object of the services:

```
constructor(private spinner:  
  NgxSpinnerService, private router: Router,  
    public homeservices: HomeService)  
{  
}
```

In login.component.html:

```
<h2>{{homeservices.message}}</h2>
```



### Exercise Solution:

In login.component.ts, in submit function:

```
submit(){  
    //Go to Loader  
    this.spinner.show();  
    setTimeout(() => {  
        this.spinner.hide();  
        this.homeservices.message =  
        "You are logged In"  
        //go to the home page  
  
        this.router.navigate(['client'])  
        }, 2000)  
}
```



## Services

Now , we will define an array in home services called `selectedCourse` , and if the user enter for the type of this course will navigate to profile page and load the data for this course.

In the `homeServices`:

```
selectorCours :any = {};
```



# Services

In Course-card.ts :

```
showCoursePorfile(){  
    this.homeservice.selctorCours = {  
        typeLang: this.typeLang,  
        description: this.description,  
        subtitle: this.subText  
    }  
  
    //call openProfile method();  
    this.openProfile.emit();  
}  
}
```



# Services

In profile.component.ts: define the home services.

```
constructor(public homeServices:  
  HomeService) { }
```

In profile.component.html:

```
<h2>Welcome to {{homeServices.selectorCours.  
  subtitle}}profile</h2>  
<h2>Type of course is {{homeServices.selectorCours.  
  typeLang}}</h2>  
<h2>bio: {{homeServices.selectorCours.description}}  
</h2>
```



## Services

The goal of creating the service is to reduce the writing of code and arrange it so that we reach the best practices.

So all the logic must be written inside the service.



## Services

The logic in home component is the array  
so , remove the array from home component and  
rewrite it in home services.

Update the home.component.html:

```
<div class="cards">  
  <app-Course-card *ngFor="let card of  
homeServices.data"  
[typeLang]="card.typeLang"  
[subText]="card.subText"  
description="card.description"  
(openProfile)=" goToprofile()"></app-  
Course-card>  
</div>
```





## Services

The logic of the login component, create a new services called auth.

Remove the submit body from login.ts and rewrite it in auth services.

**Note:** You can defined services or package inside another services like NgSpinnerServices and Route package.



## Services

In auth services :

```
constructor(private spinner: NgxSpinnerService,  
  private router: Router,  
  private homeservices: HomeService) { }  
login(email: any, password: any){  
  console.log(email, password)  
  //Go to Loader  
  this.spinner.show();  
  setTimeout(() => {  
    this.spinner.hide();  
    this.homeservices.message = "You are logged In"  
    //go to the home page  
    this.router.navigate(['client'])    }, 2000)  
}  
}
```



## Services

In login.component.ts:

```
submit(){  
  
  this.authService.login(this.emailFormContr  
ol, this.passwordFormControl)  
}
```



## Chapter 6

1 Services

2 Pipeline



# Pipeline

**Pipes** are a feature in Angular.

They are a simple way to transform values in an Angular template (In html tags).

There are some built in pipes like date using **| date**, uppercase using **| uppercase** and lowercase using **| lowercase**.



# Pipeline

Built in Pipes in angular:

1. **date** which return formatted date.
2. **uppercase** which return upper case formatted.
3. **lowercase** which return lowercase formatted.
4. **percent** which convert a value to a percentage.



# Pipeline

Example for using date pipes:

In homeServices.ts :

```
{  
  typeLang: 'HTML',  
  subText: new Date(), },
```

In Course-card.component.html :

```
<mat-card-subtitle>{{subText | date}}</mat-card-  
subtitle>
```



# Pipeline

Example for using uppercase pipes:

In homeServices.ts:

```
{  
  typeLang: 'HTML',  
  subText: 'html',  
},
```

In Portal-card.component.html :

```
<mat-card-subtitle>{{subText |  
uppercase}}</mat-card-subtitle>
```





# Pipeline

Example for using percent pipes:

In homeServices.ts:

```
{  
  typeLang: 'HTML',  
  subText: 55,},
```

In Portal-card.component.html :

```
<mat-card-subtitle>{{subText | percent}}</mat-  
card-subtitle>
```



# Pipeline

Since there are built in pipes , you can also make a custom pipe.

The syntax to generate new pipes is :

```
ng g p folder_name/pipe_name
```



# Pipeline

Generate a new pipeline called dateFormat inside a Pipes folder.

```
PS C:\Users\User\Desktop\Training\TrainingWebSite> ng g p pipes/dateFormat  
CREATE src/app/pipes/date-format.pipe.spec.ts (208 bytes)  
CREATE src/app/pipes/date-format.pipe.ts (227 bytes)  
UPDATE src/app/app.module.ts (475 bytes)
```



# Pipeline

To use the pipe and module from different modules we will generate **a shared module** contains all modules and pipes which is used from another modules.

```
PS C:\Users\User\Desktop\Training\TrainingWebSite> ng g m shared  
CREATE src/app/shared/shared.module.ts (192 bytes)  
PS C:\Users\User\Desktop\Training\TrainingWebSite> |
```



# Pipeline

In shared module , import all module and declared all component or pipes you will used more than one module.

```
imports: [ CommonModule,  
  MatFormFieldModule,  
  MatInputModule,  
  ReactiveFormsModule,  
  FormsModule,  
  MatButtonModule,  
  NgxSpinnerModule,  
  MatToolbarModule,  
  MatCardModule,  
 ],
```



# Pipeline

And you must export these module in export array :

```
exports:[ MatFormFieldModule,  
MatInputModule,  
ReactiveFormsModule,  
FormsModule,  
MatButtonModule,  
NgxSpinnerModule,  
MatToolbarModule,  
MatCardModule,  
]
```



# Pipeline

Inside dateFormat pipe

```
transform(value: string, ...args: unknown[]):  
unknown {  
    const date=new Date(value);  
    //day/month/year  
    const formattedDate=`${date.getDate()}/${  
    {date.getMonth()+1}/${date .getFullYear}`;  
    return formattedDate;  
}
```



# Pipeline

In home services

```
{  
  typeLang: 'HTML',  
  subText: new Date(),},
```

And in portalCard.component.html:

```
<mat-card-subtitle > {  
  
  {  
    subText | dateFormat  
  }  
  
</mat-card-subtitle >
```

