

Angular

Tahaluf Training Center 2021



Chapter 7

1 RXJS

2 Toastr



RXJS

RxJS is Reactive Extension for JavaScript. It is a JavaScript library that **uses** observables to work with reactive programming that deals with asynchronous data calls, callbacks and event-based programs.

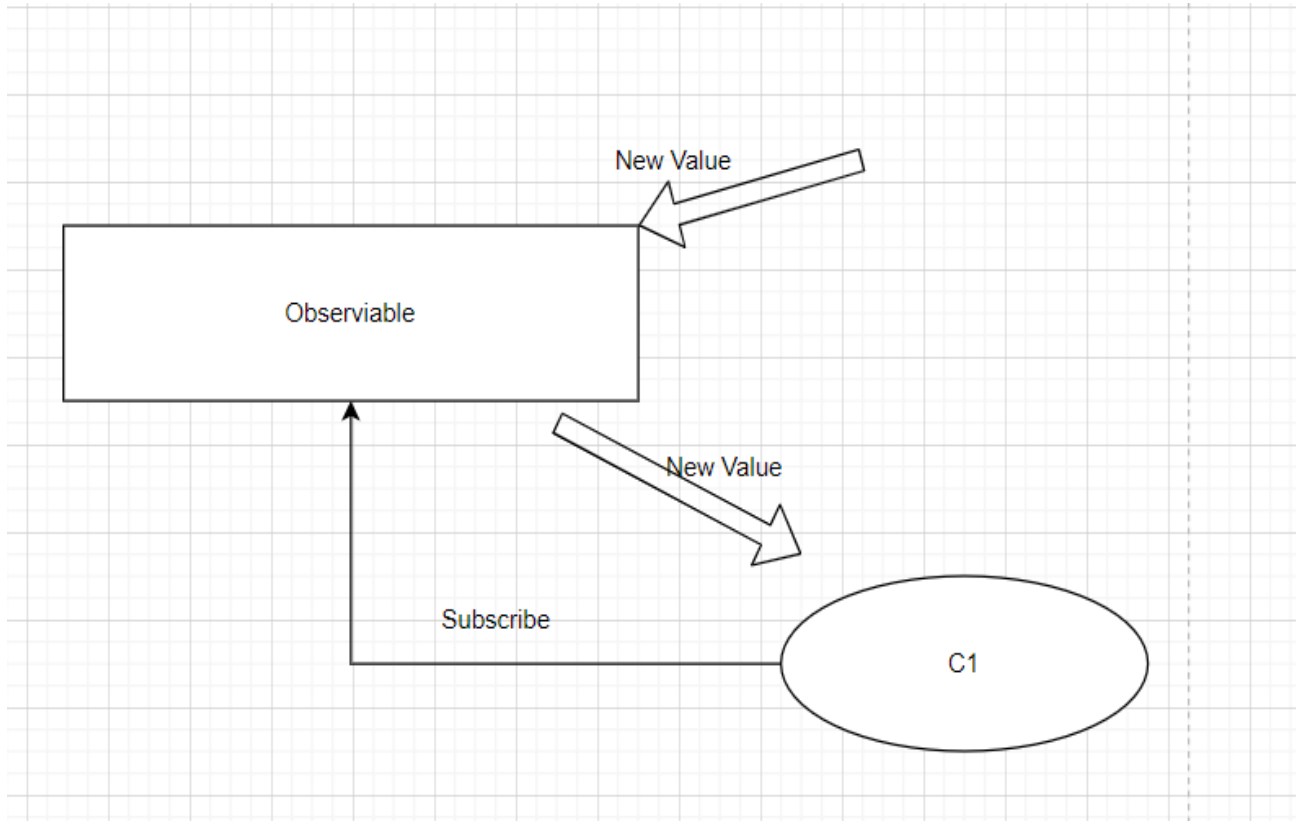


RXJS

An **Observable** is a Producer of multiple values, "pushing" them to Observers (Consumers). A Function is a lazily evaluated computation that synchronously returns a single value on invocation



RXJS



RXJS

- In homeServices : delectration an object of behavior subject and give the default value =0

```
numberOfActiveCourse =new BehaviorSubject(0);
```



RXJS

➤ Inside OnInit function:

```
ngOnInit(): void {  
    console.log("Strated !!!");  
    this.AlertActiveCourse()  
    setInterval(()=>{  
  
        this.homeServices.numberOfActiveCourse  
        .next(this.homeServices.numberOfActive  
        Course .value+1)  
        },3000)
```



RXJS

- And use this object in home component :

```
AlertActiveCourse() {  
    this  
    .homeServices.numberOfActiveCourse  
    .subscribe((value)=>{  
        alert('the new value is '+va  
lue);  
    })  
}
```



Exercise

- Other Example for using RXJS (Observable):
Add another variable in **home.component.ts**
and make the value for this variable is the value for
number of active course and display it in the home page.
And in the same way for profile page.



Solution

In home.component.ts

```
CurrentActiveCourse:number =0;
```

```
AlertActiveCourse() {  
    this  
    .homeServices.numberOfActiveCourse.subscribe((v  
    alue)=>{  
        //alert('the new value is '+value);  
        this.CurrentActiveCourse=value;  
    })  
}
```



Solution

In home.component.html

```
<h2>Welcome to our portal</h2>  
<h2>Current Active Course is  
:{{CurrentActiveCourse}}</h2>  
    <h2>{{homeServices.message}}</h2>
```



Solution

In profile.component.ts

```
currentCourse:number=0;
```

```
ngOnInit(): void {  
    this  
    .home.numberOfActiveCourse.subscribe(value=>{  
        this.currentCourse=value;  
    })  
}
```



Chapter 7

1 RXJS Observable

2 **Toastr**



Toastr

➤ To use toaster in you project :

First : Install the toastr package using this command :
`npm install ng - x toastr`

Then : Install angular animations :

`npm install @angular/animations --save`



Toastr

- **After that** , add css in your project (in style.css) .
- Import the style in angular.Json.

```
"styles": [  
  "./node_modules/@angular/material/prebuilt-  
  themes/indigo-pink.css",  
  "src/styles.css",  
  "node_modules/ngx-toastr/toastr.css"  
],
```



Toastr

- Add ToastrModule to app NgModule, make sure you have BrowserAnimationsModule as well

```
import {  
    ToastrModule, ToastNoAnimation,  
    ToastNoAnimationModule} from 'ngx-toastr';
```

And in import section

```
ToastNoAnimationModule.forRoot(),  
ToastrModule.forRoot()
```



Toastr

- In home.component. ts define an object for this services in the pconstructor .

```
private toast:ToastrService
```

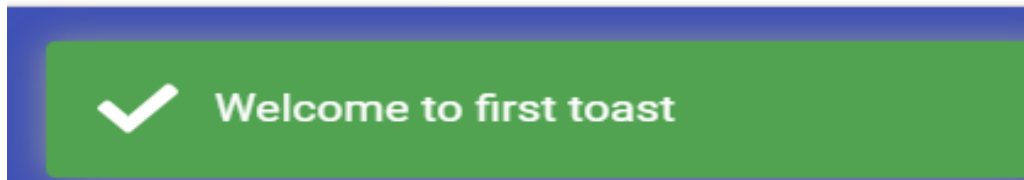
- And use this object on OnInit function

```
ngOnInit(): void {  
    //this .getAllCourse();  
    this .toast.success("Welcome to first toast ");  
}
```



Toastr

The result is



Chapter 7

1 RXJS Observable

2 Toastr



Solution

In profile.component.html

```
<h2>Current Active Course {{currentCourse}}</h2>
<h1>{{home.selctorCours.description}}</h1>
<h1>
    {{home.selctorCours.subTitle}}
</h1>
<h1>{{home.selctorCours.type}}</h1>
```



Hits API

- Angular provide a built in package called http .
- To use this package , first you must add the module for this package on shared module for our project.

```
import{HttpClientModule}from '@angular/common/http'
```

And add **HttpClientModule** in import and export section



Hits API

Create an object from httpclient to use api request like delete, update , put ,get.

```
constructor(  
    private http:HttpClient)
```



Hits API

Example for create a get function using http object .

```
getCourse(){  
  return this.http.get("https://localhost:44320/api/course/GetAllCourse",{  
    headers:{  
      Authorization:'Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1bm1xdWVfbmFtZSI6  
    }  
  })  
}
```



Hits API

Test in postman

GET

▼

https://localhost:44320/api/course/GetAllCourse

Params

Authorization ●

Headers (9)

Body ●

Pre-request Script

Tests

Settings

Type

Bearer Token ▼

The authorization header will be automatically generated when you send the request.
[Learn more about authorization](#) ↗

! Heads up! These parameters hold sensitive data. To keep this data secure while working in a collaborative environment, we recommend using variables. [Learn more about variables](#) ↗

Token

eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ...



Hits API

In home.component .ts

```
getAllCourse(){  
    //call services  
  
    this.homeServices.getCourse().subscribe(result  
=> { console.log(result) },  
    err => { console.log(err) })  
}
```



Hits API

In home.component .ts , because the Oninit function calles by default I will call the function inside it .

```
ngOnInit(): void {  
    this.getAllCourse();  
}
```



Hits API

The process is :

- 1) Show loader
- 2) Hits api
- 3) After response : hide loader
- 4) Show toaster “small masseage”

