1. Ng new [Project name]
2. npm install bootstrap@4
3. npm install jquery@3.6.0
4. ng add @angular/material
5. npm install [popper.js@1.16.1](mailto:popper.js@1.16.1)
6. ng add @angular/cdk
7. npm install animate.css --save
8. npm install @angular/fire firebase –save
9. *$ npm i angular-cli-ghpages — save-dev*
10. npm install js-sha512
11. npm install --save font-awesome angular-font-awesome

or

ng add @fortawesome/angular-fontawesome {not sure}

1. ng add angular-datatables

**Need to configure these file and angular.json file to user bootstrap :**

 "styles": [

              "./node\_modules/@angular/material/prebuilt-themes/indigo-pink.css",

              "./node\_modules/font-awesome/css/font-awesome.min.css",

              "./node\_modules/bootstrap/dist/css/bootstrap.min.css",

              "src/styles.css",

              "node\_modules/datatables.net-dt/css/jquery.dataTables.css"

            ],

            "scripts": [

              "./node\_modules/jquery/dist/jquery.min.js",

              "./node\_modules/popper.js/dist/umd/popper.min.js",

              "./node\_modules/bootstrap/dist/js/bootstrap.min.js",

              "node\_modules/jquery/dist/jquery.js",

              "node\_modules/datatables.net/js/jquery.dataTables.js"

            ]

**need to Import 2 module**

FormsModule,ReactiveFormsModule

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

Need to create moduel for using angular material

import {NgModule} from '@angular/core'

import {MatButtonModule} from '@angular/material/button';

const md1=[

    MatButtonModule

]

@NgModule({

    imports:[md1],

    exports:[md1]

})

export class AngularMaterial{}

**How to router guard**

import {Injectable} from '@angular/core'

import { CanActivate, Router } from '@angular/router';

@Injectable()

export class LoginAuth implements CanActivate{

    constructor(private router:Router){

    }

    canActivate():boolean{

        this.router.navigate(["login"])

        return false

    }

}

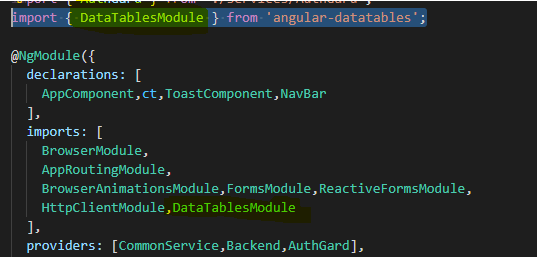
**App.module =>**

providers: [LoginAuth],

**app-routing.module**

{path:"",component:HomeComponent,canActivate:[LoginAuth]},

**Data table**

****

    <table datatable  [dtOptions]="dtOptions"

[dtTrigger]="dtTrigger"  class="row-border hover">

        <thead>

          <tr>

import { Subject } from 'rxjs';

  dtTrigger:Subject<any>=new Subject<any>();

    dtOptions: DataTables.Settings = {};

this.dtOptions = {

            pagingType: 'full\_numbers',

            pageLength: 10,

            destroy: true,

            retrieve: true,

          };

 this.productListsubscription=backend.sendGetRequest("allProduct").subscribe((res:any)=>{

            this.productList=res.data;

            console.log(this.productList)

            this.dtTrigger.next();

        })

Rerendring

  @ViewChild(DataTableDirective, {static: false})

    dtElement: DataTableDirective;

  ngAfterViewInit(){

        this.dtOptions = {

            pagingType: 'full\_numbers',

            pageLength: 10,

            destroy: true,

            retrieve: true

         };

         this.billingsrivce.dtElement=this.dtElement;

         this.billingsrivce.trigger.next();

    }

  this.dtElement.dtInstance.then((i:DataTables.Api)=>{

            i.destroy(false)

            if(!this.addifAlreadyExistInList(pro)){

                this.cartList.push(pro)

             }

            this.trigger.next();

        })

Tomcat page reload issue :

import { HashLocationStrategy, LocationStrategy } from '@angular/common';

 providers: [

    { provide: LocationStrategy, useClass: HashLocationStrategy}],

]

CHARts

npm install ng2-charts@2.4.2 –save

npm install chart.js

**import** { ChartsModule } **from** 'ng2-charts';

*// In your App's module:*

imports: [

   ChartsModule

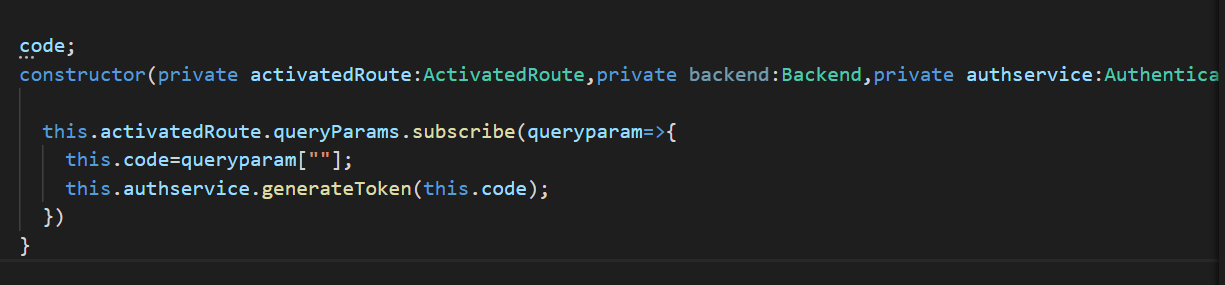
]

Angular sementic

ng generate @angular/material:navigation <component-name>

**Getting request param**

[**http://localhost:4200/?data=deepak**](http://localhost:4200/?data=deepak)

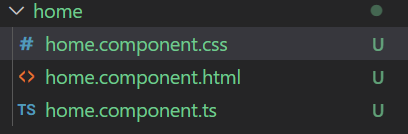


**How to integrate key clock server**

npm install keycloak-angular keycloak-js

**How to create new Component .**

Step 1 .



Step 2 . (home.component.ts)

import { Component } from "@angular/core";

@Component({

     selector:"home",

     templateUrl:"./home.component.html",

     styleUrls:["./home.component.css"]

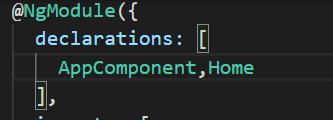
})

export class Home{

}

Step 3 .(app.module.ts)





**How to create Service**

Step 1 : 

import {Injectable} from '@angular/core'

@Injectable()

export class Backend{

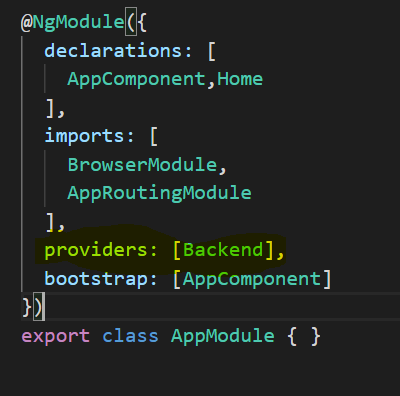
     printhello(){

         console.log("Hello service");

     }

}

Step2 : app.module.ts



Step 3 inject this service.

constructor(private backend:Backend){

        backend.printhello();

    }

**How to upload File**

Html ->

<input type="file" #fl multiple >

<button (click)="upload(fl)">upload</button>

TS ->

    public upload(fl){

        console.log(fl.files)

        let formdata=new FormData();

        formdata.set("files",fl.files[0]);

        this.http.post("http://localhost:8080/upload",formdata,

        {reportProgress:true,observe:'events'})

        .subscribe((resp:any)=>{

            if(resp.type==HttpEventType.UploadProgress){

                console.log((resp.loaded/resp.total )\*100)

            }

            if(resp.type==HttpEventType.Response){

                console.log("success");

            }

        });

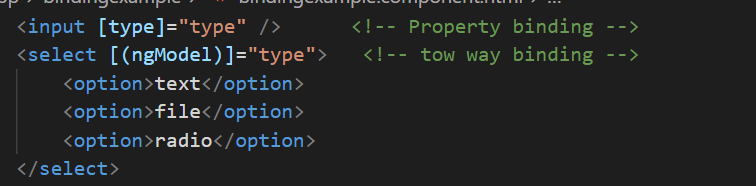
    }



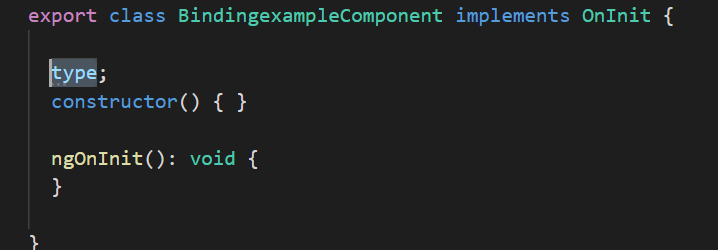
**Binding**

**Property binding and two way pinding :**

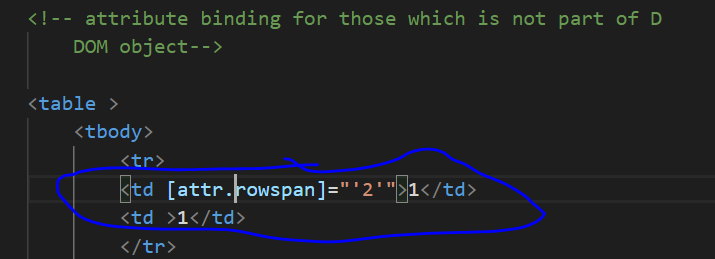
**Html:**



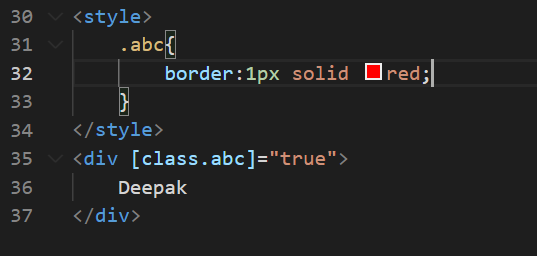
**TS :**



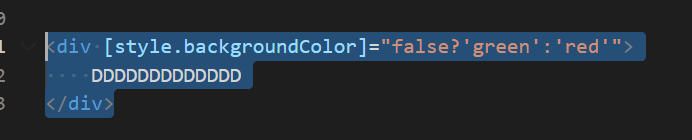
**Attrbute binding :**



**Class binding:**



**Style binding**



**Event binding:**

<button (event)=”method()”>

**Event Filter :**

<input type="text" (keyup.enter)="enter()"/>

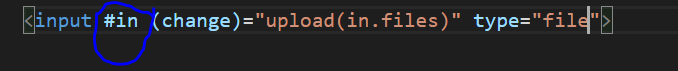
Ts :

enter(){

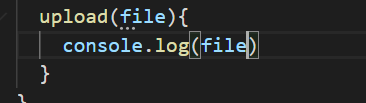
}

**Template variable :**

Html:



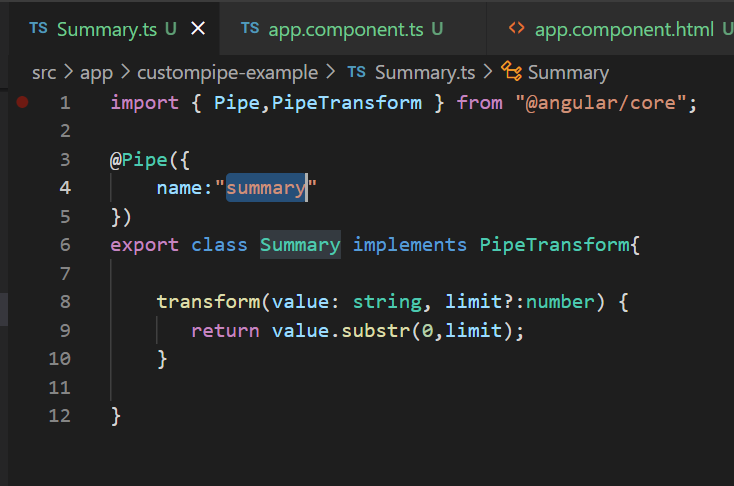
Ts :



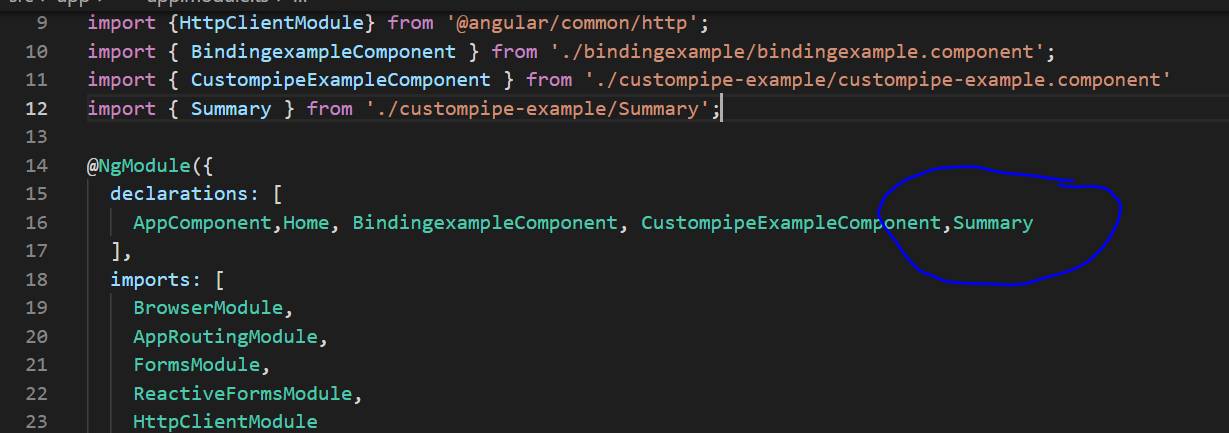


**PIPE :**

**Step 1:**



**Step 2 : app.module 🡪declarations**



**Step 3 :**

