HTML FILE FOR event binding and data binding

<!--The content below is only a placeholder and can be replaced.-->

<div style="text-align:center">

<h1>

Welcome to {{ title }}!

</h1>

<img width="300" alt="Angular Logo" src="">

</div>

<h2>Here are some links to help you start: </h2>

<div>

months

<br>

<select (change)="mysel($event)">

<option \*ngFor="let i of abc "> {{i}}</option>

</select>

</div>

<button (click)="fun($event)">

click here

</button>

TS

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

@Component({

selector: 'app-root',

templateUrl: './app.component.html',

styleUrls: ['./app.component.css']

})

export class AppComponent {

title = 'hello';

abc=["jan","feb"];

fun(event){

alert("hello sahana");

}

mysel(){

alert("hello");

}

}

………………………………….

Template & ngif html

<!--The content below is only a placeholder and can be replaced.-->

<div style="text-align:center">

<h1>

Welcome to {{ title }}!

</h1>

<img width="300" alt="Angular Logo" src="">

</div>

<h2>Here are some links to help you start: </h2>

<div>

months

<br>

<select (change)="mysel($event)">

<option \*ngFor="let i of abc "> {{i}}</option>

</select>

</div>

<br/>

<div>

<span \*ngIf = "isavailable;then condition1 else condition2">Condition is valid.</span>

<ng-template #condition1>Condition is valid from template</ng-template>

<ng-template #condition2>Condition is invalid from template</ng-template>

</div>

<button (click)="fun($event)">

click here

</button>

Ts

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

@Component({

selector: 'app-root',

templateUrl: './app.component.html',

styleUrls: ['./app.component.css']

})

export class AppComponent {

title = 'hello';

abc=["jan","feb"];

fun(event){

this.isavailable=false;

}

isavailable = true;

mysel(){

alert("hello");

}

}

………………………….

To create a new directive we type

ng g directive “directiveneme”

html file

<!--The content below is only a placeholder and can be replaced.-->

<div style="text-align:center">

<h1>

Welcome to {{ title }}!

</h1>

<img width="300" alt="Angular Logo" src="">

</div>

<h2>Here are some links to help you start: </h2>

<div>

months

<br>

<select (change)="mysel($event)">

<option \*ngFor="let i of abc "> {{i}}</option>

</select>

</div>

<br/>

<div>

<span \*ngIf = "isavailable;then condition1 else condition2">Condition is valid.</span>

<ng-template #condition1>Condition is valid from template</ng-template>

<ng-template #condition2>Condition is invalid from template</ng-template>

</div>

<button (click)="fun($event)">

click here

</button>

<div style="text-align: center">

<span appSahana>

Welcome

</span>

</div>

Directivename.ts file

import { Directive,ElementRef } from '@angular/core';

@Directive({

selector: '[appSahana]'

})

export class SahanaDirective {

constructor(Element: ElementRef) {

console.log(Element);

Element.nativeElement.innerText="Text is changed by changeText Directive. ";

}

}

Pipe html

<!--The content below is only a placeholder and can be replaced.-->

<div style="text-align:center">

<h1>

Welcome to {{ title |uppercase }}!

Welcome to {{ title |lowercase }}!

</h1>

<h1>

currencypipe

</h1>

<b>

{{67 | currency:"USD":true}}

</b>

<h1>datepipe</h1>

<b>{{todaydate | date:'d/M/y'}}</b><br/>

<b>{{todaydate | date:'shortTime'}}</b>

<h1>Decimal Pipe</h1>

<b>{{ 454.78787814 | number: '3.4-4' }}</b> // 3 is for main integer, 4 -4 are for integers to be displayed.

</div>

<div style = "width:40%;float:left;border:solid 1px black;">

<h1>Json Pipe</h1>

<b>{{ jsonval | json }}</b>

<h1>Percent Pipe</h1>

<b>{{00.54565 | percent}}</b>

<h1>Slice Pipe</h1>

<b>{{abc | slice:1:3}}</b>

// here 2 and 6 refers to the start and the end index

</div>

<h1>Custom Pipe</h1>

<b>Square root of 25 is: {{25 | sqrt}}</b>

<br/>

<b>Square root of 729 is: {{729 | sqrt}}</b>

In Module.ts we have imported the class and declaration is done

import { BrowserModule } from '@angular/platform-browser';

import { NgModule } from '@angular/core';

import { AppComponent } from './app.component';

import { SahanaDirective } from './sahana.directive';

import { SqrtPipe } from './app.sqrt';

@NgModule({

declarations: [

AppComponent,

SqrtPipe,

SahanaDirective

],

imports: [

BrowserModule

],

providers: [],

bootstrap: [AppComponent]

})

export class AppModule { }

new ts file is created

import {Pipe, PipeTransform} from '@angular/core';

@Pipe ({

name : 'sqrt'

})

export class SqrtPipe implements PipeTransform {

transform(val : number) : number {

return Math.sqrt(val);

}

}

App.component.ts jsonval is added

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

@Component({

selector: 'app-root',

templateUrl: './app.component.html',

styleUrls: ['./app.component.css']

})

export class AppComponent {

title = 'hello';

abc=["jan","feb","mar"];

jsonval = {name:'Rox', age:'25', address:{a1:'Mumbai', a2:'Karnataka'}};

todaydate=new Date();

fun(event){

this.isavailable=false;

}

isavailable = true;

mysel(){

alert("hello");

}

}

…………………

Html page for routing

<!--The content below is only a placeholder and can be replaced.-->

<ul>

<li><a [routerLink] = "['/Product']">Product</a></li>

<li><a [routerLink] = "['/Inventory']">Inventory</a></li>

</ul>

<router-outlet></router-outlet>

Product.ts

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

@Component ({

selector: 'my-app',

template: 'Products',

})

export class Appproduct {

}

Inventory.ts

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

@Component ({

selector: 'my-app',

template: 'Inventory',

})

export class AppInventory {

}

App.module.ts

import { BrowserModule } from '@angular/platform-browser';

import { NgModule } from '@angular/core';

import { AppComponent } from './app.component';

import { Appproduct } from './product.component';

import { AppInventory } from './Inventory.component';

import { RouterModule, Routes } from '@angular/router';

const appRoutes: Routes = [

{ path: 'Product', component: Appproduct },

{ path: 'Inventory', component: AppInventory },

];

@NgModule({

declarations: [

AppInventory,

Appproduct,

AppComponent,

],

imports: [

BrowserModule,

RouterModule.forRoot(appRoutes)],

providers: [],

bootstrap: [AppComponent]

})

export class AppModule { }

service

in command window

ng g service “myservice”

import { Injectable } from '@angular/core';

@Injectable({

providedIn: 'root'

})

export class MyserviceService {

constructor() { }

showTodayDate() {

let ndate = new Date();

return ndate;

}

}

Import files and provide

Service provider

import { BrowserModule } from '@angular/platform-browser';

import { NgModule } from '@angular/core';

import { AppComponent } from './app.component';

import { MyserviceService } from './myservice.service';

@NgModule({

declarations: [

AppComponent,

],

imports: [

BrowserModule,

providers: [MyserviceService],

bootstrap: [AppComponent]

})

export class AppModule { }

html

{{todaydate}}

App.comp.ts

We hv imported service class and todaydate variable is created to store the date.

In constructr we hv stored the service class in myservice

Inside ngOnInit we hav cald service name with functn name and store it in todaydate

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

import { MyserviceService } from './myservice.service';

@Component({

selector: 'app-root',

templateUrl: './app.component.html',

styleUrls: ['./app.component.css']

})

export class AppComponent {

title = 'hello';

todaydate;

constructor(private myservice: MyserviceService) {}

ngOnInit() {

this.todaydate = this.myservice.showTodayDate();

}

}

Forms: loginform

import { BrowserModule } from '@angular/platform-browser';

import { NgModule } from '@angular/core';

import { AppComponent } from './app.component';

import { FormsModule } from '@angular/forms';

@NgModule({

declarations: [

imports: [

FormsModule,

BrowserModule,

bootstrap: [AppComponent]

})

export class AppModule { }

html

<form #userlogin = "ngForm" (ngSubmit) = "onClickSubmit(userlogin.value)" >

<input type = "text" name = "emailid" placeholder = "emailid" ngModel>

<br/>

<input type = "password" name = "passwd" placeholder = "passwd" ngModel>

<br/>

<input type = "submit" value = "submit">

</form>

Ts

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

@Component({

selector: 'app-root',

templateUrl: './app.component.html',

styleUrls: ['./app.component.css']

})

export class AppComponent {

constructor() { }

ngOnInit() {

}

onClickSubmit(data) {

alert("Entered password: " + data.passwd);

}

}

End of template driven form

…………………………………………………….

model driven form

module.ts

import { BrowserModule } from '@angular/platform-browser';

import { NgModule } from '@angular/core';

import { AppComponent } from './app.component';

import { ReactiveFormsModule } from '@angular/forms'

@NgModule({

declarations: [

imports: [

ReactiveFormsModule,

FormsModule,

BrowserModule,

bootstrap: [AppComponent]

})

export class AppModule { }

html

<div>

<form [formGroup]="formdata" (ngSubmit) = "onClickSubmit(formdata.value)" >

<input type="text" class="fortextbox" name="emailid" placeholder="emailid"

formControlName="emailid">

<br/>

<input type="password" class="fortextbox" name="passwd"

placeholder="passwd" formControlName="passwd">

<br/>

<input type="submit" class="forsubmit" value="Log In">

</form>

</div>

<p>

Email entered is : {{emgailid}}

</p>

App.component.ts

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

import { FormGroup, FormControl } from '@angular/forms';

@Component({

selector: 'app-root',

templateUrl: './app.component.html',

styleUrls: ['./app.component.css']

})

export class AppComponent {

emailid;

formdata;

constructor() { }

ngOnInit() {

this.formdata = new FormGroup({

emailid: new FormControl("angular@gmail.com"),

passwd: new FormControl("abcd1234")

});

}

onClickSubmit(data) {this.emailid = data.emailid;}

}

………………..

Form validation in model driven form

App.component.ts

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

import { FormGroup, FormControl, Validators} from '@angular/forms'

@Component({

selector: 'app-root',

templateUrl: './app.component.html',

styleUrls: ['./app.component.css']

})

export class AppComponent {

emailid;

formdata;

constructor() { }

ngOnInit() {

this.formdata = new FormGroup({

emailid: new FormControl("abcd", Validators.compose([

Validators.required,

Validators.pattern("[^ @]\*@[^ @]\*")

])),

passwd: new FormControl("")

});

}

onClickSubmit(data) {this.emailid = data.emailid;}

}

App.component.html

<div>

<form [formGroup] = "formdata" (ngSubmit) = "onClickSubmit(formdata.value)" >

<input type = "text" class = "fortextbox" name = "emailid" placeholder = "emailid"

formControlName = "emailid">

<br/>

<input type = "password" class = "fortextbox" name = "passwd"

placeholder = "passwd" formControlName = "passwd">

<br/>

<input type = "submit" [disabled] = "!formdata.valid" class = "forsubmit"

value = "Log In">

</form>

</div>

<p>

Email entered is : {{emailid}}

</p>

…………………………………………………

Custom validation

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

import { FormGroup, FormControl, Validators} from '@angular/forms';

@Component({

selector: 'app-root',

templateUrl: './app.component.html',

styleUrls: ['./app.component.css']

})

export class AppComponent {

title = 'Angular 4 Project!';

todaydate;

componentproperty;

emailid;

formdata;

ngOnInit() {

this.formdata = new FormGroup({

emailid: new FormControl("", Validators.compose([

Validators.required,

Validators.pattern("[^ @]\*@[^ @]\*")

])),

passwd: new FormControl("", this.passwordvalidation)

});

}

passwordvalidation(formcontrol) {

if (formcontrol.value.length < 5)

{

return {"passwd" : true};

}

}

onClickSubmit(data) {this.emailid = data.emailid;}

}

Animation

App.module.ts

import { BrowserModule } from '@angular/platform-browser';

import { NgModule } from '@angular/core';

import { AppComponent } from './app.component';

import { SahanaDirective } from './sahana.directive';

import { SqrtPipe } from './app.sqrt';

import { Appproduct } from './product.component';

import { AppInventory } from './Inventory.component';

import { RouterModule, Routes } from '@angular/router';

import { MyserviceService } from './myservice.service';

import { HttpModule } from '@angular/http';

import { FormsModule } from '@angular/forms';

import { ReactiveFormsModule } from '@angular/forms';

import { BrowserAnimationsModule } from '@angular/platform-browser/animations';

const appRoutes: Routes = [

{ path: 'Product', component: Appproduct },

{ path: 'Inventory', component: AppInventory },

];

@NgModule({

declarations: [

AppInventory,

Appproduct,

AppComponent,

SqrtPipe,

SahanaDirective

],

imports: [

ReactiveFormsModule,

HttpModule,

FormsModule,

BrowserModule,

BrowserAnimationsModule,

RouterModule.forRoot(appRoutes)],

providers: [MyserviceService],

bootstrap: [AppComponent]

})

export class AppModule { }

html

<div>

<button (click)="animate()">Click Me</button>

<div [@myanimation] = "state" class="rotate">

<img src="assets/images/dessert.png" width="100" height="100">

</div>

</div>

Component.ts

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

import { trigger, state, style, transition, animate } from '@angular/animations';

@Component({

selector: 'app-root',

templateUrl: './app.component.html',

styleUrls: ['./app.component.css'],

styles:[`

div{

margin: 0 auto;

text-align: center;

width:200px;

}

.rotate{

width:100px;

height:100px;

border:solid 1px red;

}

`],

animations: [

trigger('myanimation',[

state('smaller',style({

transform : 'translateY(100px)'

})),

state('larger',style({

transform : 'translateY(0px)'

})),

transition('smaller <=> larger',animate('300ms ease-in'))

])

]

})

export class AppComponent {

state: string = "smaller";

animate() {

this.state= this.state == 'larger' ? 'smaller' : 'larger';

}

}

………………………………….

Example

App.mod ts

import { BrowserModule } from '@angular/platform-browser';

import { NgModule } from '@angular/core';

import { ReactiveFormsModule } from '@angular/forms';

import { RouterModule, Routes} from '@angular/router';

import {MatTableModule} from '@angular/material';

import {HttpModule} from "@angular/http";

import {MatInputModule} from '@angular/material';

import 'rxjs';

import { AppComponent } from './app.component';

import { HeaderComponent } from './header/header.component';

import { FooterComponent } from './footer/footer.component';

import { UserloginComponent } from './userlogin/userlogin.component';

import { MainpageComponent } from './mainpage/mainpage.component';

const appRoutes: Routes = [

{

path: '',

component: UserloginComponent

},

{

path: 'app-mainpage',

component: MainpageComponent

}

];

@NgModule({

declarations: [

AppComponent,

HeaderComponent,

FooterComponent,

UserloginComponent,

MainpageComponent

],

imports: [

BrowserModule,

ReactiveFormsModule,

RouterModule.forRoot(appRoutes),

HttpModule,

MatTableModule,

MatInputModule

],

providers: [],

bootstrap: [AppComponent]

})

export class AppModule { }

app.com.html

<div class="mainpage">

<app-header></app-header>

<router-outlet></router-outlet>

<app-footer></app-footer>

</div>

App.comp.ts

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

@Component({

selector: 'app-root',

templateUrl: './app.component.html',

styleUrls: ['./app.component.css']

})

export class AppComponent {

title = 'demo2';

}

Header html

<div>

<hr />

</div>

Header ts

import { Component, OnInit } from '@angular/core';

@Component({

selector: 'app-header',

templateUrl: './header.component.html',

styleUrls: ['./header.component.css']

})

export class HeaderComponent implements OnInit {

constructor() { }

ngOnInit() {

}

}

Footer html

</tr>

</table>

</div>

Footer ts is

import { Component, OnInit } from '@angular/core';

@Component({

selector: 'app-footer',

templateUrl: './footer.component.html',

styleUrls: ['./footer.component.css']

})

export class FooterComponent implements OnInit {

constructor() { }

ngOnInit() {

}

}

Userlogin.html

<div class="form\_container">

<form [formGroup]="formdata" (ngSubmit) = "onClickSubmit(formdata.value)" >

<header>Login</header>

<label>Username <span>\*</span></label>

<input type="text" name="uname" formControlName="uname"/>

<div class="help">At least 6 character</div>

<label>Password <span>\*</span></label>

<input type="password" class="fortextbox" name="passwd" formControlName="passwd"/>

<div class="help">Use upper and lowercase lettes as well</div>

<button [disabled]="!formdata.valid" value="Login">Login</button>

</form>

</div>

Userlogin css

.form\_container{

margin : 0 auto;

width:600px;

}

form {

background: white;

width: 500px;

box-shadow: 0px 0px 20px rgba(0, 0, 0, 0.7);

font-family: lato;

position: relative;

color: #333;

border-radius: 10px;

}

form header {

background: #FF3838;

padding: 30px 20px;

color: white;

font-size: 1.2em;

font-weight: 600;

border-radius: 10px 10px 0 0;

}

form label {

margin-left: 20px;

display: inline-block;

margin-top: 30px;

margin-bottom: 5px;

position: relative;

}

form label span {

color: #FF3838;

font-size: 2em;

position: absolute;

left: 2.3em;

top: -10px;

}

form input {

display: block;

width: 50%;

margin-left: 20px;

padding: 5px 20px;

font-size: 1em;

border-radius: 3px;

outline: none;

border: 1px solid #ccc;

}

form .help {

margin-left: 20px;

font-size: 0.8em;

color: #777;

}

form button {

position: relative;

margin-top: 30px;

margin-bottom: 30px;

left: 50%;

transform: translate(-50%, 0);

font-family: inherit;

color: white;

background: #FF3838;

outline: none;

border: none;

padding: 5px 15px;

font-size: 1.3em;

font-weight: 400;

border-radius: 3px;

box-shadow: 0px 0px 10px rgba(51, 51, 51, 0.4);

cursor: pointer;

transition: all 0.15s ease-in-out;

}

form button:hover {

background: #ff5252;

}

Userlogin ts

import { Component, OnInit } from '@angular/core';

import { FormGroup, FormControl, Validators} from '@angular/forms';

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

@Component({

selector: 'app-userlogin',

templateUrl: './userlogin.component.html',

styleUrls: ['./userlogin.component.css']

})

export class UserloginComponent implements OnInit {

formdata;

constructor(private router: Router) { }

ngOnInit() {

this.formdata = new FormGroup({

uname: new FormControl("", Validators.compose([

Validators.required,

Validators.minLength(6)

])),

passwd: new FormControl("", this.passwordvalidation)

});

}

passwordvalidation(formcontrol) {

if (formcontrol.value.length < 5) {

return {"passwd" : true};

}

}

onClickSubmit(data) {

console.log(data.uname);

if (data.uname=="systemadmin" && data.passwd=="admin123") {

alert("Login Successful");

this.router.navigate(['app-mainpage'])

} else {

alert("Invalid Login");

return false;

}

}

}

Main html

<div class="form\_container">

<form [formGroup]="formdata" (ngSubmit) = "onClickSubmit(formdata.value)" >

<header>Customer Details</header>

<label>FirstName <span>\*</span></label>

<input type="text" name="fname" formControlName="fname"/>

<label>LastName <span>\*</span></label>

<input type="text" name="lname" formControlName="lname"/>

<label>Address <span></span></label>

<input type="text" name="address" formControlName="address"/>

<label>Phone No <span></span></label>

<input type="text" name="phoneno" formControlName="phoneno"/>

<button [disabled]="!formdata.valid" value="Submit">Submit</button>

</form>

</div>

<br/>

<div id="custtable" style="display:none;margin:1 auto;">

<table>

<tr>

<td>FirstName</td>

<td>LastName</td>

<td>Address</td>

<td>Phone No</td>

</tr>

<tr>

<td \*ngFor="let data of cutomerdata">

<h5>{{data}}</h5>

</td>

</tr>

</table>

</div>

Main ts

import { Component, OnInit, ViewChild} from '@angular/core';

import { FormGroup, FormControl, Validators} from '@angular/forms';

import {Http, Response, Headers, RequestOptions } from "@angular/http";

import 'rxjs/add/operator/map';

@Component({

selector: 'app-mainpage',

templateUrl: './mainpage.component.html',

styleUrls: ['./mainpage.component.css']

})

export class MainpageComponent implements OnInit {

formdata;

cutomerdata;

constructor(private http: Http) { }

stateCtrl: FormControl;

ngOnInit() {

this.formdata = new FormGroup({

fname: new FormControl("", Validators.compose([

Validators.required,

Validators.minLength(3)

])),

lname: new FormControl("", Validators.compose([

Validators.required,

Validators.minLength(3)

])),

address:new FormControl(""),

phoneno:new FormControl("")

});

}

onClickSubmit(data) {

document.getElementById("custtable").style.display="";

this.cutomerdata = [];

for (var prop in data) {

this.cutomerdata.push(data[prop]);

}

console.log(this.cutomerdata);

}

}