**Spring boot & Angular**

<https://github.com/in28minutes/full-stack-with-angular-and-spring-boot>

Installing NodeJs and NPM - Node Package Manager

Diagram

Description automatically generated

**Type Script:**

*Java Script ->*

*Var vari;*

*Vari = 5*

*Vari= “five”*

Type Script ->

*Vari:number*

*Vari =1*

*Vari=”five” // compilation error*

*Fuction add(vari1:number ,vari2:number) :number{*

*Return (vari1+vari2)*

*}*

*Interface interface1{*

*}*

**Angular CLI**

*>node -v*

*>npm -v*

*>npm install angular -g @angular/cli@7.03*

*>****ng version***

**Ng:**

*>ng version*

*>ng help*

***>ng new - New app***

***>ng generate – generate components and files***

***>ng build – pushing to Dist folder***

*>ng lint – code quality check (deprecated)*

***>ng run – run the application***

***>ng test – Run unit test (jasmine language and Karma to run )***

***>ng e2e - Selenimum protractor***

***>ng serve -- updates happens immediately (dev tools in spring boot)***

***http://localhost:4200***

*Exa:*

*>ng new sam\_app*

*Choose routing and CSS*

*>ng serve - run the application*

***Angular folder structure :***

***SRC ->****index.html*

*SRC ->main.js*

***SRC/App ->****appcomponent.html*

***SRC/App ->****appcomponent.ts*

***SRC/App ->****appcomponent.spec.ts - unit test*

*SRC/assets -> img*

*SRC/Environment ->*

***SRC/node\_modules -> all packages***

***DIST:*** *production deployable complete code using ng build*

***Component.ts***

***Decorator (similar to annotation )***

*@component({*

*Selector :’app-root’,*

*tmplateUrl : ‘./app.component.html’*

*styleUrls : [‘./app.component.css’]*

*})*

*Export class AppComponent {*

*Title: ‘tods’;*

*}*

***Accessing this “title” variable in html is {{title}}***

*>ng generate component Welcome*

*App.module.ts -- has been added there as declaration. @NgModule.*

*Export welcomecomponent implements onInit{*

*Username:string =’siva’*

*ngOnInit(){*

*}*

*handleLogin(){*

*console.log(‘welcome’)*

*}*

***Import***

***Import {Component,OnInt} from ‘@angular/core’***

***Form Handling***

***<input type=text name="username" value="{{titile}}">***

***<input type=text name="username" [(ngModel)] ="userName">***

***<button (click)= functionLoing()>login </button>***

*App.module.ts -- FormModule has been imported for ngModel has to be added.*

***Error Handling***

*handleLogin(){*

*if(this.user===’siva’){*

*invalidFlag=false;*

*}else{*

*invalidFlag=true;*

*}*

*<small \*ngIf =’invalidlogin’ >{{erromessage}}</small>*

***Routing***

*App-routing.module.ts*

***Constant rounts: Routes= [***

***{path:’ ’ component:LoginComponent},***

***{path:’login’ component:LoginComponent},***

***{path:’welcome/:name’ component:WelcomeComponent}***

***{path:’\*\*’ component:ErrorComponent}***

***]***

***App.componets.ts***

***<router-outlet></router-outlet>***

***TS***

*Import { Router } from ‘@angular/router’*

*Constructor(router :Router){}*

*Constructor(router :ActivatedRouter){} (parameter passing)*

*handleLogin(){*

*this.router.navigate([‘welcome’,this.username])*

*}*

*this.rout.snaphsot.params[‘welcome’] (used in Welcome component)*

*<a \*ngIf= “userLoggedIn” routerlink=”Itemspage”><>*

***ListIternation:***

***TS***

*Items = [*

*{id=’siva’ ,desc=”employee’,dob=”date” },*

*{id=’ra’ ,desc=”owner’},*

*{}*

*]*

*Html*

*<tr \*ngFor=”let item of Items”>*

*<td>{{item.id}}*

*<td>{{item.date | date}}*

***Service***

*> Ng g service authservice*

*@Injectable({*

*providerIn :root*

*})*

*Constructor(private authservice:AuthService){} -Injecting to main classs*

***SessionStorage***

*sessionStorage.setItem(“authUser“,userID);*

*sessionStorage.getItem(“authUser”)*

*sessionStorage.removeItem(“authUser”)*

***RouteGuards***

***Constant rounts: Routes= [***

***{path:’ ’ component:LoginComponent,canActivate :RouteGuartService},***

***{path:’login’ component:LoginComponent},***

***{path:’welcome/:name’ component:WelcomeComponent}***

***{path:’\*\*’ component:ErrorComponent}***

***]***

*Export class RouteGauarService implments CanActivate*

*canActivate(route : ActivatedRouteSnaphshot,state :RouteStateSnaphshot){*

*}*

***Calling HTTPRest***

*> Ng g service dataservice*

*Constructor (Private http:Httpclient)*

*http.get(“http://localhost:8080/helloworld);*

* *App.moudule.ts import httpclientmodule.*

*.subscribe() -in service*

*.subscribe(*

*Reposn=>this.mehotdname (response);*

*Error =>*

*) -in service*

*http.get<Bean >(“http://localhost:8080/helloworld);*

*http.get<Bean >(“http://localhost:8080/helloworld/$name);*

*CORS Policy @crossorgin (orgin =”localhost:20202) in spring boot application*