**SOURCE CODE: FSD JAVA CAPSTONE PROJECT PROBLEM STATEMENT - M-AADHARAPPLICATION – INSIST**

**FRONT-END:**

**Add-request.component.html:**

<div>

    <h2>Apply for Aadhar Card</h2><br>

    <form [formGroup]="reqRef" (ngSubmit)="storeRequest()">

        <!-- <label>Adharid</label>

        <input type="text" formControlName="adharid"><br/> -->

        <label>Email</label>&nbsp;&nbsp;

        <input type="text" formControlName="emailid"><br/><br>

        <label>Name</label>&nbsp;&nbsp;

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

        <label>Age</label>&nbsp;&nbsp;&nbsp;&nbsp;

        <input type="number" formControlName="age"><br/><br>

        <label>Address</label>&nbsp;

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

        <input type="submit" class="btn btn-success" value="APPLY"/>&nbsp;&nbsp;&nbsp;

        <input type="reset" class="btn btn-dark" value="RESET"/><br/>

    </form><br/>

    <span style="color:red">{{storeMsg}}</span>

</div>

**Add-request.component.ts:**

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

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

import { RequestsService } from '../requests.service';

@Component({

  selector: 'app-add-request',

  templateUrl: './add-request.component.html',

  styleUrls: ['./add-request.component.css']

})

export class AddRequestComponent implements OnInit {

reqRef = new FormGroup({

  // adharid:new FormControl(),

  emailid:new FormControl(),

  name:new FormControl(),

  age:new FormControl(),

  address:new FormControl()

})

storeMsg :string =""

  constructor(public rs:RequestsService) { }

  ngOnInit(): void {

  }

  storeRequest() {

    let request = this.reqRef.value;

    console.log(request);

    this.rs.storeRequest(request).subscribe({

      next:(result:any)=>this.storeMsg=result,

      error:(error:any)=>console.log(error),

      complete:()=>console.log("completed")

    })

    this.reqRef.reset();

  }

}

**Admindashboard.component.html:**

<div>

    <h2>Welcome to home page admin {{user}}</h2>

    <a routerLink="viewReq" class="btn btn-primary">View All Request</a>&nbsp;&nbsp;&nbsp;|&nbsp;&nbsp;&nbsp;

    <a routerLink="viewall" class="btn btn-primary">Display all issued Aadhaar Card</a>

    <br/>

    <hr/>

        <router-outlet></router-outlet>

    <hr/>

    <br/>

    <input type="button" class="btn btn-dark" value="logout" (click)="logout()"/>

</div>

**Admindashboard.component.ts:**

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

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

@Component({

  selector: 'app-admindashboard',

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

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

})

export class AdmindashboardComponent implements OnInit {

  user:string ="";

  constructor(private router:Router) { }

  ngOnInit(): void {

    let obj = sessionStorage.getItem("userDetails");

    if(obj!=null){

      this.user=obj;

    }

  }

  logout() {

    sessionStorage.removeItem("userDetails");

    this.router.navigate(["login"]);

  }

}

**displayalladhar.component.html:**

<div>

    <span \*ngFor="let r of requests">

        <!-- <span>{{r.adharid}} {{r.emailid}}</span>

        <input type="button" value="DENY REQUEST" (click)="denyRequest(r.adharid)"/>

        <input type="button" value="APPROVE REQUEST" (click)="approvereq(r)"/> -->

        <div class="container">

            <table class="table">

                <tr>

                    <th>Email ID</th>

                    <th>Name</th>&nbsp;&nbsp;&nbsp;

                    <th>Age</th>&nbsp;

                    <th>Address</th>&nbsp;

                    <th>Aadhar ID</th>

                </tr>

                <tr>

                    <td>{{r.emailid}}</td>

                    <td>{{r.name}}</td>&nbsp;

                    <td>{{r.age}}</td>&nbsp;

                    <td>{{r.address}}</td>&nbsp;

                    <td>{{r.adharid}}</td>

                    <td>

                        <input type="button" value="ISSUED AADHAR CARD"/></td>

                </tr>

            </table>

            <hr>

        </div>

    </span>

</div>

**displayalladhar.component.ts:**

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

import { Requests } from '../requests';

import { RequestsService } from '../requests.service';

@Component({

  selector: 'app-displayalladhar',

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

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

})

export class DisplayalladharComponent implements OnInit {

  requests:Array<Requests>=[]

  constructor(public rs:RequestsService) { }

  ngOnInit(): void {

    this.viewAllRequest();

  }

  viewAllRequest(){

    this.rs.findAllRequest().subscribe({

      next:(result:any)=>this.requests=result,

      error:(error:any)=>console.log(error),

      complete:()=>console.log("completed")

    })

  }

}

**Login.component.html:**

<div>

    <h3>Login Page</h3>

    <form [formGroup]="loginRef" (ngSubmit)="signIn()">

        <label>EmailId </label>&nbsp;

        <input type="email" formControlName="emailid"/><br/><br>

        <label>Password </label>&nbsp;

        <input type="password" formControlName="password"/><br/><br>

        <label>Type Of User</label>&nbsp;&nbsp;&nbsp;

        <input type="radio" name="typeOfUser" value="admin" formControlName="typeOfUser"/>Admin&nbsp;

        <input type="radio" name="typeOfUser" value="user" formControlName="typeOfUser"/>User<br/><br>

        <input type="submit" class="btn btn-dark" value="SIGNIN">&nbsp;

        <input type="reset" class="btn btn-dark" value="RESET">

    </form>

    <p>New User? <a routerLink="/signup">Click Here</a></p>

    <br/><br>

    <span style="color:red">{{msg}}</span>

</div>

**Login.component.ts:**

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

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

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

import { LoginService } from '../login.service';

@Component({

  selector: 'app-login',

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

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

})

export class LoginComponent implements OnInit {

  loginRef = new FormGroup({

    emailid:new FormControl(),

    password:new FormControl(),

    typeOfUser:new FormControl()

  });

  msg:string=""

  constructor(public ls:LoginService,public router:Router) { }

  ngOnInit(): void {

  }

  signIn(){

    let login = this.loginRef.value;

    console.log(login);

    this.ls.signIn(login).subscribe({

      next:(result:any)=>{

        if(result=="Admin sucessfully login"){

            sessionStorage.setItem("userDetails",login.emailid);

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

        }else if(result=="User successfully login"){

          sessionStorage.setItem("userDetails",login.emailid);

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

        }else {

            this.msg=result;

        }

      },

      error:(error:any)=>console.log(error),

      complete:()=>console.log("completed")

    })

  }

}

**Signup.component.html:**

<div>

    <h3>Create Account</h3>

    <form [formGroup]="signUpRef" (ngSubmit)="signUp()">

        <label>EmailId </label>&nbsp;

        <input type="email" formControlName="emailid"/><br/><br>

        <label>Password </label>&nbsp;

        <input type="password" formControlName="password"/><br/><br>

        <label>Type Of User</label>&nbsp;&nbsp;&nbsp;

        <input type="radio" name="typeOfUser" value="admin" formControlName="typeOfUser"/>Admin&nbsp;

        <input type="radio" name="typeOfUser" value="user" formControlName="typeOfUser"/>User<br/><br>

        <input type="submit" class="btn btn-success" value="SIGNUP">&nbsp;

        <input type="reset" class="btn btn-dark" value="RESET">

    </form>

    <a href="javascript:void(0)" (click)="goBack()">

        <-- Go to Login Page

      </a>

    <br/><br>

    <span style="color:red">{{msg}}</span>

    <span style="color:green;">{{user}}</span>

</div>

**Sinup.component.ts:**

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

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

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

import { LoginService } from '../login.service';

import { timer } from 'rxjs';

import { Location } from '@angular/common';

@Component({

  selector: 'app-signup',

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

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

})

export class SignupComponent implements OnInit {

  signUpRef = new FormGroup({

    emailid:new FormControl(),

    password:new FormControl(),

    typeOfUser:new FormControl()

  });

  msg:string=""

  constructor(public ls:LoginService,public router:Router,private location: Location) { }

  user:string ="";

  ngOnInit(): void {

  }

  signUp(){

    let signup = this.signUpRef.value;

    console.log(signup);

    this.ls.signUp(signup).subscribe({

      next:(result:any)=>{

        if(result=="Account created successfully"){

            this.user="Account created successfully! Redirecting to Login Page...";

            timer(5000).subscribe(x => { this.router.navigate(["login"]) })

        }

        else {

            this.msg=result;

        }

      },

      error:(error:any)=>console.log(error),

      complete:()=>console.log("completed")

    })

  }

  goBack() {

    // window.history.back();

    this.location.back();

    console.log( 'goBack()...' );

  }

}

**Userdashboard.component.html:**

<div>

    <h4>Welcome to home page {{user}}</h4>

    <a routerLink="storeReq" class="btn btn-primary">Apply For New Aadhar Card</a>&nbsp;&nbsp;&nbsp;&nbsp;|&nbsp;&nbsp;&nbsp;

    <a routerLink="view" class="btn btn-primary">View My Aadhar Card</a>

    <br/>

    <hr/>

        <router-outlet></router-outlet>

    <hr/>

    <br/>

    <input type="button" class="btn btn-dark" value="Apply For Duplicate Card" (click)="applydup()"/>&nbsp;&nbsp;

    <input type="button" class="btn btn-dark" value="Apply For Close Adhar Card" (click)="closeadhar()"/><br>

    <span style="color:green">{{close}}</span><br>

    <span style="color:green">{{msg}}</span><br><br>

    <input type="button" class="btn btn-dark" value="logout" (click)="logout()"/>

</div>

**Userdashboard.component.ts:**

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

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

@Component({

  selector: 'app-userdashboard',

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

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

})

export class UserdashboardComponent implements OnInit {

  user:string ="";

  msg:string=""

  close:string=""

  constructor(private router:Router) { }

  ngOnInit(): void {

    let obj = sessionStorage.getItem("userDetails");

    if(obj!=null){

      this.user=obj;

    }

  }

  logout() {

    sessionStorage.removeItem("userDetails");

    this.router.navigate(["login"]);

  }

  applydup(){

    this.msg="Application for Duplicate adhar of "+this.user+ " requested"

  }

  closeadhar(){

    this.close="Application for Closing adhar of "+this.user+ " requested"

  }

}

**View-request.component.html:**

<div>

    <div \*ngIf="flag">

        <h2>Approve Application</h2><br>

        <form (ngSubmit)="saveReqtoDB()">

            <label>Adharid</label>

            <input type="text" name="adharid" [(ngModel)]="adharid" readonly>&nbsp;&nbsp;&nbsp;&nbsp;

            <label>Email</label>

            <input type="text" name="emailid" [(ngModel)]="emailid" readonly><br/><br>

            <label>Name</label>

            <input type="text" name="name" [(ngModel)]="name" readonly>&nbsp;&nbsp;&nbsp;&nbsp;

            <label>Age</label>

            <input type="number" name="age" [(ngModel)]="age" readonly>&nbsp;&nbsp;&nbsp;&nbsp;

            <label>Address</label>

            <input type="text" name="address" [(ngModel)]="address" readonly><br/><br>

            <input type="submit" class="btn btn-success" value="Approve Request"/>&nbsp;&nbsp;

            <input type="reset" class="btn btn-dark" value="reset"/><br/>

        </form><br/>

    </div>

    <span \*ngFor="let r of requests">

        <!-- <span>{{r.adharid}} {{r.emailid}}</span>

        <input type="button" value="DENY REQUEST" (click)="denyRequest(r.adharid)"/>

        <input type="button" value="APPROVE REQUEST" (click)="approvereq(r)"/> -->

        <div class="container">

            <table class="table">

                <tr>

                    <th>Email ID</th>

                    <th>Name</th>&nbsp;&nbsp;&nbsp;

                    <th>Age</th>&nbsp;

                    <th>Address</th>&nbsp;

                    <th>Aadhar ID</th>

                </tr>

                <br>

                <tr>

                    <td>{{r.emailid}}</td>

                    <td>{{r.name}}</td>&nbsp;

                    <td>{{r.age}}</td>&nbsp;

                    <td>{{r.address}}</td>&nbsp;

                    <td>{{r.adharid}}</td>

                    <td><input type="button" value="DENY REQUEST" (click)="denyRequest(r.adharid)"/>&nbsp;&nbsp;&nbsp;

                        <input type="button" value="APPROVE REQUEST" (click)="approvereq(r)"/></td>

                </tr>

            </table>

            <hr><br>

        </div>

    </span>

    <br/><br>

    <span style="color:red">{{msg}}</span>

</div>

**View-request.component.ts:**

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

import { Requests } from '../requests';

import { RequestsService } from '../requests.service';

@Component({

  selector: 'app-view-request',

  templateUrl: './view-request.component.html',

  styleUrls: ['./view-request.component.css']

})

export class ViewRequestComponent implements OnInit {

  msg:string=""

  requests:Array<Requests>=[]

  flag:boolean = false;

  adharid:string=""

  emailid:string=""

  name:string=""

  age:number=0

  address:string=""

  constructor(public rs:RequestsService) { }

  ngOnInit(): void {

    this.viewAllRequest();

  }

  viewAllRequest(){

    this.rs.findAllRequest().subscribe({

      next:(result:any)=>this.requests=result,

      error:(error:any)=>console.log(error),

      complete:()=>console.log("completed")

    })

  }

  denyRequest(adharid:string){

    //console.log(pid)

    this.rs.denyRequest(adharid).subscribe({

      next:(result:any)=>this.msg=result,

      error:(error:any)=>console.log(error),

      complete:()=>{

          this.viewAllRequest();

      }

    })

  }

  approvereq(request:any){

    this.flag= true;

    this.adharid=request.adharid;

    this.emailid=request.emailid;

    this.name=request.name;

    this.age=request.age;

    this.address=request.address;

}

saveReqtoDB(){

  let request = {adharid:this.adharid,emailid:this.emailid,name:this.name,age:this.age,address:this.address};

  this.rs.approvereq(request).subscribe({

    next:(result:any)=>this.msg=result,

    error:(error:any)=>console.log(error),

    complete:()=>{"completed"

    }

  })

  this.flag=false;

}

}

**Viewadhar.component.html:**

<div>

  <div>

    <img src="../../assets/adharimg.jpeg" alt="" srcset="" />

    <div class="">

      <h4>Name:&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;{{ myadhar.name }}</h4>

    </div>

    <div class="">

      <h4>Age:&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;{{ myadhar.age }}</h4>

    </div>

    <div class="">

      <h4>Address:&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;{{ myadhar.address }}</h4>

    </div>

    <div class="">

      <h6>

        &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;{{

          myadhar.adharid

        }}

      </h6>

    </div>

  </div>

  <br />

  <span style="color: green">{{ msg }}</span

  ><br />

  <input

    type="button"

    class="btn btn-dark"

    value="Update My Aadhar"

    (click)="approvereq(myadhar)"

  /><br /><br />

  <div \*ngIf="flag">

    <form (ngSubmit)="saveReqtoDB()">

      <label>Adharid</label>&nbsp;&nbsp;

      <input

        type="text"

        name="adharid"

        [(ngModel)]="myadhar.adharid"

        readonly

      />&nbsp;&nbsp;&nbsp; <label>Email</label>&nbsp;&nbsp;

      <input

        type="text"

        name="emailid"

        [(ngModel)]="myadhar.emailid"

        readonly

      /><br /><br />

      <label>Name</label>&nbsp;&nbsp;

      <input

        type="text"

        name="name"

        [(ngModel)]="myadhar.name"

      />&nbsp;&nbsp;&nbsp; <label>Age</label>&nbsp;&nbsp;

      <input

        type="number"

        name="age"

        [(ngModel)]="myadhar.age"

      />&nbsp;&nbsp;&nbsp; <label>Address</label>&nbsp;&nbsp;

      <input

        type="text"

        name="address"

        [(ngModel)]="myadhar.address"

      /><br /><br />

      <input

        type="submit"

        class="btn btn-dark"

        value="Update"

      />&nbsp;&nbsp;&nbsp;&nbsp;

      <input type="reset" class="btn btn-dark" value="reset" /><br />

    </form>

    <br />

  </div>

</div>

**Viewadhar.component.ts:**

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

import { Requests } from '../requests';

import { RequestsService } from '../requests.service';

@Component({

  selector: 'app-viewadhar',

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

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

})

export class ViewadharComponent implements OnInit {

  msg:string=""

  requests:Array<Requests>=[]

  myadhar:any

  flag:boolean = false;

  adharid:string=""

  emailid:string=""

  name:string=""

  age:number=0

  address:string=""

  constructor(public rs:RequestsService) { }

  ngOnInit(): void {

    let obj = sessionStorage.getItem("userDetails");

    if(obj!=null){

      this.emailid=obj;

    }

    this.viewmyadhar(this.emailid);

  }

  approvereq(request:any){

    this.flag= true;

    this.adharid=request.adharid;

    this.emailid=request.emailid;

    this.name=request.name;

    this.age=request.age;

    this.address=request.address;

}

  viewmyadhar(emailid:string){

    this.rs.viewmyAdhar(this.emailid).subscribe({

      next:(result:any)=>this.myadhar=JSON.parse(result),

      error:(error:any)=>console.log(error),

      complete:()=>console.log("completed")

    })

  }

  saveReqtoDB(){

    let request = {adharid:this.adharid,emailid:this.emailid,name:this.name,age:this.age,address:this.address};

    this.rs.updateAdhar(request).subscribe({

      next:(result:any)=>this.msg=result,

      error:(error:any)=>console.log(error),

      complete:()=>{"completed"

      }

    })

    this.flag=false;

  }

}

**App.component.html:**

<div align="center">

  <h2 align="left" >

    <img src="assets/adhar.png" alt="logo" height="100px" /> <b><em>mAadhar Application</em></b>  </h2>

  <hr />

  <router-outlet></router-outlet>

</div>

**App.component.ts:**

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

@Component({

  selector: 'app-root',

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

  styleUrls: ['./app.component.css']

})

export class AppComponent {

  title = 'mAadharFrontend-app';

}

**App.module.ts:**

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

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

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

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

import { AppRoutingModule } from './app-routing.module';

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

import { LoginComponent } from './login/login.component';

import { SignupComponent } from './signup/signup.component';

import { UserdashboardComponent } from './userdashboard/userdashboard.component';

import { AdmindashboardComponent } from './admindashboard/admindashboard.component';

import { AddRequestComponent } from './add-request/add-request.component';

import { ViewRequestComponent } from './view-request/view-request.component';

import { ViewadharComponent } from './viewadhar/viewadhar.component';

import { DisplayalladharComponent } from './displayalladhar/displayalladhar.component';

@NgModule({

  declarations: [

    AppComponent,

    LoginComponent,

    SignupComponent,

    UserdashboardComponent,

    AdmindashboardComponent,

    AddRequestComponent,

    ViewRequestComponent,

    ViewadharComponent,

    DisplayalladharComponent,

  ],

  imports: [

    BrowserModule,

    AppRoutingModule,HttpClientModule,FormsModule,ReactiveFormsModule

  ],

  providers: [],

  bootstrap: [AppComponent]

})

export class AppModule { }

**login.service.ts:**

import { HttpClient } from '@angular/common/http';

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

import { Observable } from 'rxjs';

@Injectable({

  providedIn: 'root'

})

export class LoginService {

  baseURL:string ="http://localhost:9191/login";

  constructor(public http:HttpClient) { }

  signIn(login:any):Observable<string> {

    return this.http.post(this.baseURL+"/signIn",login,{responseType:"text"});

  }

  signUp(login:any):Observable<string> {

    return this.http.post(this.baseURL+"/signUp",login,{responseType:"text"});

  }

}

**Request.service.ts:**

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

import { HttpClient } from '@angular/common/http';

import { Observable } from 'rxjs';

import { Requests } from './requests';

@Injectable({

  providedIn: 'root'

})

export class RequestsService {

  baseUrl:string ="http://localhost:9191/request"

  constructor(public http:HttpClient) { }

  storeRequest(requests:any):Observable<string> {

    return this.http.post(this.baseUrl+"/apply",requests,{responseType:"text"});

  }

  findAllRequest():Observable<Requests[]> {

    return this.http.get<Requests[]>(this.baseUrl+"/viewAllRequest");

  }

  denyRequest(adharid:string):Observable<string> {

    return this.http.delete(this.baseUrl+"/deny/"+adharid,{responseType:"text"});

  }

  approvereq(request:any):Observable<string> {

    return this.http.patch(this.baseUrl+"/approve",request,{responseType:"text"});

  }

  viewmyAdhar(emailid:String):Observable<string> {

    return this.http.get(this.baseUrl+"/viewmyadhar/"+emailid,{responseType:"text"});

  }

  updateAdhar(request:any):Observable<string> {

    return this.http.patch(this.baseUrl+"/updateadhar",request,{responseType:"text"});

  }

}

**BACK-END:**

**MAadharbackendAppApplication.java:**

**package** com;

**import** org.springframework.boot.SpringApplication;

**import** org.springframework.boot.autoconfigure.SpringBootApplication;

**import** org.springframework.boot.autoconfigure.domain.EntityScan;

**import** org.springframework.data.jpa.repository.config.EnableJpaRepositories;

@SpringBootApplication(scanBasePackages = "com")

@EntityScan(basePackages = "com.mAadhar.bean")

@EnableJpaRepositories(basePackages = "com.mAadhar.repository")

**public** **class** MAadharAppApplication {

**public** **static** **void** main(String[] args) {

SpringApplication.*run*(MAadharbackendAppApplication.**class**, args);

System.***out***.println("Server Running on 8080");

}

}

**Login.java:**

**package** com.mAadhar.bean;

**import** javax.persistence.Column;

**import** javax.persistence.Entity;

**import** javax.persistence.Id;

@Entity

**public** **class** Login {

@Id

**private** String emailid;

**private** String password;

@Column(name = "typeofuser")

**private** String typeOfUser;

**public** String getEmailid() {

**return** emailid;

}

**public** **void** setEmailid(String emailid) {

**this**.emailid = emailid;

}

**public** String getPassword() {

**return** password;

}

**public** **void** setPassword(String password) {

**this**.password = password;

}

**public** String getTypeOfUser() {

**return** typeOfUser;

}

**public** **void** setTypeOfUser(String typeOfUser) {

**this**.typeOfUser = typeOfUser;

}

}

**Requests.java:**

**package** com.mAadhar.bean;

**import** javax.persistence.Column;

**import** javax.persistence.Entity;

**import** javax.persistence.GeneratedValue;

**import** javax.persistence.GenerationType;

**import** javax.persistence.Id;

**import** org.hibernate.annotations.GenericGenerator;

@Entity

**public** **class** Requests {

@GeneratedValue(generator = "uid")

@GenericGenerator(name = "uid", strategy = "uid")

@Column(columnDefinition = "CHAR(32)")

@Id

**private** String adharid;

**private** String emailid;

**private** String name;

**private** **int** age;

**private** String address;

**public** String getEmailid() {

**return** emailid;

}

**public** **void** setEmailid(String emailid) {

**this**.emailid = emailid;

}

**public** String getName() {

**return** name;

}

**public** **void** setName(String name) {

**this**.name = name;

}

**public** **int** getAge() {

**return** age;

}

**public** **void** setAge(**int** age) {

**this**.age = age;

}

**public** String getAddress() {

**return** address;

}

**public** **void** setAddress(String address) {

**this**.address = address;

}

**public** String getAdharid() {

**return** adharid;

}

**public** **void** setAdharid(String adharid) {

**this**.adharid = adharid;

}

@Override

**public** String toString() {

**return** "Requests [adharid=" + adharid + ", emailid=" + emailid + ", name=" + name + ", age=" + age

+ ", address=" + address + "]";

}

}

**LoginController.java:**

**package** com.mAadhar.controller;

**import** org.springframework.beans.factory.annotation.Autowired;

**import** org.springframework.http.MediaType;

**import** org.springframework.web.bind.annotation.CrossOrigin;

**import** org.springframework.web.bind.annotation.PostMapping;

**import** org.springframework.web.bind.annotation.RequestBody;

**import** org.springframework.web.bind.annotation.RequestMapping;

**import** org.springframework.web.bind.annotation.RestController;

**import** com.mAadhar.bean.Login;

**import** com.mAadhar.service.LoginService;

@RestController

@RequestMapping("login")

@CrossOrigin

**public** **class** LoginController {

@Autowired

LoginService loginservice;

@PostMapping(value = "signIn", consumes = MediaType.***APPLICATION\_JSON\_VALUE***)

**public** String signIn(@RequestBody Login login) {

**return** loginservice.signIn(login);

}

@PostMapping(value = "signUp", consumes = MediaType.***APPLICATION\_JSON\_VALUE***)

**public** String signUp(@RequestBody Login login) {

**return** loginservice.signUp(login);

}

}

**RequestController.java:**

**package** com.mAadhar.controller;

**import** java.util.List;

**import** org.springframework.beans.factory.annotation.Autowired;

**import** org.springframework.http.MediaType;

**import** org.springframework.web.bind.annotation.CrossOrigin;

**import** org.springframework.web.bind.annotation.DeleteMapping;

**import** org.springframework.web.bind.annotation.GetMapping;

**import** org.springframework.web.bind.annotation.PatchMapping;

**import** org.springframework.web.bind.annotation.PathVariable;

**import** org.springframework.web.bind.annotation.PostMapping;

**import** org.springframework.web.bind.annotation.RequestBody;

**import** org.springframework.web.bind.annotation.RequestMapping;

**import** org.springframework.web.bind.annotation.RestController;

**import** com.mAadhar.bean.Requests;

**import** com.mAadhar.service.RequestService;

@RestController

@RequestMapping("request")

@CrossOrigin

**public** **class** RequestController {

@Autowired

RequestService reqservice;

@PostMapping(value = "apply",consumes = MediaType.***APPLICATION\_JSON\_VALUE***)

**public** String requestadhar(@RequestBody Requests req) {

**return** reqservice.storeRequest(req);

}

@GetMapping(value="viewAllRequest",produces = MediaType.***APPLICATION\_JSON\_VALUE***)

**public** List<Requests> getAllReq() {

**return** reqservice.getAllRequests();

}

@DeleteMapping(value="deny/{adharid}")

**public** String deleteReq(@PathVariable("adharid") String adharid) {

**return** reqservice.denyRequest(adharid);

}

@PatchMapping(value = "approve",consumes = MediaType.***APPLICATION\_JSON\_VALUE***)

**public** String approveRequest(@RequestBody Requests req) {

**return** reqservice.approveRequest(req);

}

@PatchMapping(value = "updateadhar",consumes = MediaType.***APPLICATION\_JSON\_VALUE***)

**public** String updateadhar(@RequestBody Requests req) {

**return** reqservice.updateAdhar(req);

}

@GetMapping(value="viewmyadhar/{emailid}",produces = MediaType.***APPLICATION\_JSON\_VALUE***)

**public** Requests viewmyAdhar(@PathVariable("emailid") String emailid) {

**return** reqservice.viewmyAdhar(emailid);

}

}

**LoginRepository.java:**

**package** com.mAadhar.repository;

**import** org.springframework.data.jpa.repository.JpaRepository;

**import** org.springframework.stereotype.Repository;

**import** com.mAadhar.bean.Login;

@Repository

**public** **interface** LoginRepository **extends** JpaRepository<Login, String>{

}

**RequestRepository.java:**

**package** com.mAadhar.repository;

**import** java.util.List;

**import** org.springframework.data.jpa.repository.JpaRepository;

**import** org.springframework.data.jpa.repository.Query;

**import** org.springframework.data.repository.query.Param;

**import** org.springframework.stereotype.Repository;

**import** com.mAadhar.bean.Requests;

@Repository

**public** **interface** RequestRepository **extends** JpaRepository<Requests, String>{

//JPQL

@Query("select r from Requests r where r.emailid = :emailid")

**public** Requests viewmyAdhar(@Param("emailid") String emailid);

}

**LoginService.java:**

**package** com.mAadhar.service;

**import** java.util.Optional;

**import** org.springframework.beans.factory.annotation.Autowired;

**import** org.springframework.stereotype.Service;

**import** com.mAadhar.bean.Login;

**import** com.mAadhar.repository.LoginRepository;

@Service

**public** **class** LoginService {

@Autowired

LoginRepository loginRepository;

**public** String signIn(Login login) {

Optional<Login> result = loginRepository.findById(login.getEmailid());

**if**(result.isPresent()) {

Login ll = result.get();

**if**(ll.getPassword().equals(login.getPassword())) {

**if**(login.getTypeOfUser().equals(ll.getTypeOfUser())) {

**if**(login.getTypeOfUser().equals("admin")) {

**return** "Admin sucessfully login";

}

**else**{

**return** "User successfully login";

}

}**else** {

**return** "Invalid Credentials! Try Again!";

}

}**else** {

**return** "Invalid Password! Try Again!";

}

}**else**{

**return** "Invalid EmailId! Try Again!";

}

}

**public** String signUp(Login login) {

Optional<Login> result = loginRepository.findById(login.getEmailid());

**if**(result.isPresent()) {

**return** "Email Id alreay exist";

}**else** {

**if**(login.getTypeOfUser().equals("admin")) {

**return** "You can't create admin account";

}**else** {

loginRepository.save(login);

**return** "Account created successfully";

}

}

}

}

**RequestService.java:**

**package** com.mAadhar.service;

**import** java.util.List;

**import** java.util.Optional;

**import** org.springframework.beans.factory.annotation.Autowired;

**import** org.springframework.stereotype.Service;

**import** com.mAadhar.bean.Requests;

**import** com.mAadhar.repository.RequestRepository;

@Service

**public** **class** RequestService {

@Autowired

RequestRepository reqrepo;

**public** String storeRequest(Requests req) {

reqrepo.save(req);

**return** "Aadhar Application Request Submitted";

}

**public** List<Requests> getAllRequests() {

**return** reqrepo.findAll();

}

**public** String denyRequest(String adharid) {

Optional<Requests> result = reqrepo.findById(adharid);

**if**(result.isPresent()) {

Requests p = result.get();

reqrepo.delete(p);

**return** "Application Denied";

}**else** {

**return** "Application not present";

}

}

**public** String approveRequest(Requests req) {

Optional<Requests> result = reqrepo.findById(req.getAdharid());

**if**(result.isPresent()) {

Requests p = result.get();

reqrepo.saveAndFlush(p);

**return** "Application Approved";

}**else** {

**return** "Application not present";

}

}

**public** String updateAdhar(Requests req) {

Optional<Requests> result = reqrepo.findById(req.getAdharid());

**if**(result.isPresent()) {

Requests p = result.get();

p.setAge(req.getAge());

p.setName(req.getName());

p.setAddress(req.getAddress());

reqrepo.saveAndFlush(p);

**return** "Aadhar Card Updation Requested";

}**else** {

**return** "Aadhar not present";

}

}

**public** Requests viewmyAdhar(String emailid) {

**return** reqrepo.viewmyAdhar(emailid);

}

}

**Application.properties:**

spring.datasource.username=root

spring.datasource.password=root

spring.datasource.url=jdbc:mysql://localhost:3306/maadhar

spring.jpa.properties.hibernate.dialect=org.hibernate.dialect.MySQL8Dialect

spring.jpa.hibernate.ddl-auto=update

spring.jpa.show-sql=true

server.port=8080

**TESTING:**

**MAadharbackendAppApplicationTests.java:**

**package** com;

**import** org.junit.jupiter.api.Test;

**import** org.springframework.boot.test.context.SpringBootTest;

@SpringBootTest

**class** MAadharbackendAppApplicationTests {

@Test

**void** contextLoads() {

}

}

**LoginServiceTest.java:**

**package** com.mAadhar.testing;

**import** org.testng.annotations.Test;

**import** io.github.bonigarcia.wdm.WebDriverManager;

**import** org.testng.annotations.BeforeClass;

**import** org.testng.annotations.BeforeTest;

**import** org.openqa.selenium.WebDriver;

**import** org.openqa.selenium.chrome.ChromeDriver;

**import** org.openqa.selenium.chrome.ChromeOptions;

**import** org.testng.annotations.AfterClass;

**import** org.testng.annotations.AfterTest;

**public** **class** LoginServiceTest {

WebDriver driver;

@BeforeTest

**public** **void** config() {

WebDriverManager.*chromedriver*().setup();

driver=**new** ChromeDriver();

driver.manage().window().maximize();

}

@AfterTest

**public** **void** afterClass() {

driver.close();

}

@Test

**public** **void** signInTest() {

driver.get("http://localhost:8080/login");

}

@Test

**public** **void** signUpTest() {

driver.get("http://localhost:8081/signup");

}

}

**RequestServiceTest.java:**

**package** com.mAadhar.testing;

**import** org.testng.annotations.Test;

**import** io.github.bonigarcia.wdm.WebDriverManager;

**import** org.testng.annotations.BeforeClass;

**import** org.testng.annotations.BeforeTest;

**import** org.openqa.selenium.WebDriver;

**import** org.openqa.selenium.chrome.ChromeDriver;

**import** org.openqa.selenium.chrome.ChromeOptions;

**import** org.testng.annotations.AfterClass;

**import** org.testng.annotations.AfterTest;

**public** **class** RequestServiceTest {

WebDriver driver;

@BeforeTest

**public** **void** config() {

WebDriverManager.*chromedriver*().setup();

driver=**new** ChromeDriver();

driver.manage().window().maximize();

}

@AfterTest

**public** **void** afterClass() {

driver.close();

}

@Test

**public** **void** approveRequestTest() {

driver.get("http://localhost:8081/approve");

}

@Test

**public** **void** denyRequestTest() {

driver.get("http://localhost:8081/deny");

}

@Test

**public** **void** getAllRequestsTest() {

driver.get("http://localhost:8081/veiwAll");

}

@Test

**public** **void** storeRequestTest() {

driver.get("http://localhost:8081/apply");

}

@Test

**public** **void** updateAdharTest() {

driver.get("http://localhost:8081/updateaadhar");

}

@Test

**public** **void** viewmyAdharTest() {

driver.get("http://localhost:8081/viewmyadhar");

}

}

**Docker File:**

FROM openjdk:8

COPY target/mAadharbackend-app-0.0.1-SNAPSHOT.jar . mAadharbackend-app-0.0.1-SNAPSHOT.jar

CMD ["java", "-jar", "mAadharbackend-app-0.0.1-SNAPSHOT.jar"]

**Pom.xml:**

<?xml version="1.0" encoding="UTF-8"?>

<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd">

<modelVersion>4.0.0</modelVersion>

<parent>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-parent</artifactId>

<version>2.6.12</version>

<relativePath/> <!-- lookup parent from repository -->

</parent>

<groupId>com.example</groupId>

<artifactId>mAadharbackend-app</artifactId>

<version>0.0.1-SNAPSHOT</version>

<name>mAadharbackend-app</name>

<description>Demo project for Spring Boot</description>

<properties>

<java.version>11</java.version>

</properties>

<dependencies>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-data-jpa</artifactId>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-web</artifactId>

</dependency>

<dependency>

<groupId>io.github.bonigarcia</groupId>

<artifactId>webdrivermanager</artifactId>

<version>5.3.0</version>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-devtools</artifactId>

<scope>runtime</scope>

<optional>true</optional>

</dependency>

<dependency>

<groupId>mysql</groupId>

<artifactId>mysql-connector-java</artifactId>

<scope>runtime</scope>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-test</artifactId>

<scope>test</scope>

</dependency>

<dependency>

<groupId>org.seleniumhq.selenium</groupId>

<artifactId>selenium-java</artifactId>

<version>4.2.1</version>

</dependency>

<dependency>

<groupId>org.testng</groupId>

<artifactId>testng</artifactId>

<version>7.5</version>

<scope>test</scope>

</dependency>

<dependency>

<groupId>org.projectlombok</groupId>

<artifactId>lombok</artifactId>

<optional>true</optional>

</dependency>

</dependencies>

<build>

<plugins>

<plugin>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-maven-plugin</artifactId>

<configuration>

<excludes>

<exclude>

<groupId>org.projectlombok</groupId>

<artifactId>lombok</artifactId>

</exclude>

</excludes>

</configuration>

</plugin>

</plugins>

</build>

</project>

**Testing.xml:**

<?xml version="1.0" encoding="UTF-8"?>

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Suite">

<test thread-count="5" name="Test">

<classes>

<class name="com.mAadhar.testing.LoginServiceTest"/>

<class name="com.mAadhar.testing.RequestServiceTest"/>

</classes>

</test> <!-- Test -->

</suite> <!-- Suite -->

**MySql:**

create database maadhar;

use maadhar;