## ****MainController.java****

## package com.example.UserManager.controllers;

## import java.util.ArrayList;

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

## import org.springframework.stereotype.Controller;

## import org.springframework.ui.ModelMap;

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

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

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

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

## import org.springframework.web.bind.annotation.RequestMethod;

## import org.springframework.web.bind.annotation.RequestParam;

## import org.springframework.web.bind.annotation.ResponseBody;

## import org.springframework.web.bind.annotation.SessionAttributes;

## import com.example.UserManager.entities.User;

## import com.example.UserManager.services.UserService;

## @Controller

## public class MainController {

## @Autowired

## private UserService userService;

## 

## Logger logger = LoggerFactory.getLogger(MainController.class);

## String currID = null;

## 

## @GetMapping(value="/")

## public String showIndexPage(ModelMap model,

## @RequestParam(value="name", required=false, defaultValue="World") String name){

## model.addAttribute("name", name);

## return "index"; }

## public boolean isNumber(String s) {

## if(s == null)

## return false;

## try {

## double db = Double.parseDouble(s);

## }

## catch(NumberFormatException e) {

## return false;

## } return true;

## }

## @PostMapping("/update")

## public String saveDetails(@RequestParam("id") String id, ModelMap modelMap) {

## 

## try

## {

## User user = userService.GetUserById(Integer.valueOf(id));

## ArrayList<User> userList = new ArrayList<>();

## if(user != null)

## {

## userList.add(user);

## Iterable<User> users = userList;

## currID = id;

## modelMap.put("user", users);

## }

## else

## return "nouser";

## }

## catch (NumberFormatException e)

## {

## // TODO Auto-generated catch block

## return "nouser";

## }

## catch (Exception e)

## {

## // TODO Auto-generated catch block

## e.printStackTrace();

## }

## 

## modelMap.put("ID", id);

## return "update";

## }

## 

## @PostMapping("/update2")

## public String updateDetails(@RequestParam("nameedit") String nameedit, @RequestParam("emailedit") String emailedit, @RequestParam("passwordedit") String passwordedit, ModelMap modelMap) {

## ArrayList<User> userList = new ArrayList<>();

## try

## {

## User u = userService.GetUserById(Integer.valueOf(currID));

## userService.setUser(u, nameedit, emailedit, passwordedit);

## userList.add(u);

## Iterable<User> users = userList;

## modelMap.put("user", users);

## }

## catch (NumberFormatException e)

## {

## e.printStackTrace();

## }

## catch(Exception e)

## {

## e.printStackTrace();

## }

## modelMap.put("IDedit", currID);

## 

## return "update2";

## }

## }

## ****UserController.java****

## package com.example.UserManager.controllers;

## import org.slf4j.Logger;

## import org.slf4j.LoggerFactory;

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

## import org.springframework.stereotype.Controller;

## import org.springframework.ui.ModelMap;

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

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

## import org.springframework.web.bind.annotation.ResponseBody;

## import com.example.UserManager.entities.User;

## import com.example.UserManager.services.UserService;

## import org.slf4j.Logger;

## import org.slf4j.LoggerFactory;

## @Controller

## public class UserController {

## 

## @Autowired

## private UserService userService;

## 

## Logger logger = LoggerFactory.getLogger(UserController.class);

## 

## @GetMapping("/users")

## public String showUsers(ModelMap model) {

## 

## 

## logger.info("Getting all Users");

## Iterable<User> users = userService.GetAllUsers();

## 

## logger.info("Passing users to view");

## model.addAttribute("users", users);

## return "users";

## }}

## ****UserExceptionController.java****

## package com.example.UserManager.controllers;

## import org.springframework.http.HttpStatus;

## import org.springframework.http.ResponseEntity;

## import org.springframework.web.bind.annotation.ControllerAdvice;

## import org.springframework.web.bind.annotation.ExceptionHandler;

## import com.example.UserManager.exceptions.UserNotFoundException;

## @ControllerAdvice

## public class UserExceptionController {

## @ExceptionHandler(value = UserNotFoundException.class)

## public ResponseEntity<Object> exception(UserNotFoundException exception) {

## return new ResponseEntity<>("User not found", HttpStatus.NOT\_FOUND);

## }}

## [User.java](https://github.com/UshasriMavuri1999/UserManager/blob/master/src/main/java/com/example/UserManager/entities/User.java)

## package com.example.UserManager.entities;

## import javax.persistence.Entity;

## import javax.persistence.GeneratedValue;

## import javax.persistence.GenerationType;

## import javax.persistence.Id;

## @Entity // This tells Hibernate to make a table out of this class

## public class User {

## @Id

## @GeneratedValue(strategy=GenerationType.AUTO)

## private Integer id;

## private String name;

## private String email;

## private String password;

## public String getPassword() {

## return password;

## }

## public void setPassword(String password) {

## this.password = password;

## }

## public Integer getId() {

## return id;

## }

## public void setId(Integer id) {

## this.id = id;

## }

## public String getName() {

## return name;

## }

## public void setName(String name) {

## this.name = name;

## }

## public String getEmail() {

## return email;

## }

## public void setEmail(String email) {

## this.email = email;

## }

## 

## @Override

## public String toString() {

## return (id.toString() + " " + name + " " + email + " " + password); }}

## ****UserNotFoundException.java****

## package com.example.UserManager.exceptions;

## public class UserNotFoundException extends RuntimeException {

## private static final long serialVersionUID = 1L;

## }

## ****Repositories****

## ****UserRepository.java****

## package com.example.UserManager.repositories;

## import org.springframework.data.repository.CrudRepository;

## import com.example.UserManager.entities.User;

## public interface UserRepository extends CrudRepository<User, Integer> {

## public User findByName(String name);

## }

## ****UserService.java****

## **package com.example.UserManager.services;**

## **import java.util.Optional;**

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

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

## **import com.example.UserManager.entities.User;**

## **import com.example.UserManager.repositories.UserRepository;**

## **@Service**

## **public class UserService {**

## **@Autowired**

## **private UserRepository userRepository;**

## **public Iterable<User> GetAllUsers()**

## **{**

## **return userRepository.findAll();**

## **}**

## **public User GetUserByName(String name) {**

## **User foundUser = userRepository.findByName(name);**

## **return foundUser;**

## **}**

## **public User GetUserById(int id) throws Exception {**

## **Optional<User> foundUser = userRepository.findById(id);**

## **//TODO: we need to decide how to handle a "Not Found" condition**

## **if(!foundUser.isPresent())**

## **return null;**

## 

## **return(foundUser.get());**

## **}**

## 

## **public void UpdateUser(User usertoUpdate) {**

## **userRepository.save(usertoUpdate);**

## **}**

## 

## **public void setUser(User u, String name, String email, String password) {**

## **//u.setId(id);**

## **u.setName(name);**

## **u.setEmail(email);**

## **u.setPassword(password);**

## **UpdateUser(u);**

## **}**

## **}**

## ****UserManagerApplication.java****

## **package com.example.UserManager;**

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

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

## **@SpringBootApplication**

## **public class UserManagerApplication {**

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

## **SpringApplication.run(UserManagerApplication.class, args);**

## **}}**

## ****Resources****

## ****application.properties****

## **spring.jpa.hibernate.ddl-auto=update**

## **spring.datasource.url=jdbc:mysql://${MYSQL\_HOST:localhost}:3306/userdb**

## **spring.datasource.username=root**

## **spring.datasource.password=usha**

## **logging.level.org.springframework.web: DEBUG**

## **spring.mvc.view.prefix=/WEB-INF/jsp/**

## **spring.mvc.view.suffix=.jsp**

## **server.port=8090**

## ****error.jsp****

## **<html>**

## **<head>**

## **</head>**

## **<body>**

## **<h2 align="center">Error: Page not found</h2>**

## **</body>**

## **</html>**

## ****index.jsp****

## **<html>**

## **<head>**

## **<style>**

## **.center {**

## **text-align: center;**

## **align-items:center;**

## 

## **}**

## **a{**

## **text-decoration:None;**

## **color:black;**

## **}**

## 

## 

## **</style>**

## **</head>**

## **<body>**

## **<div class="center">**

## **<h1>User Manager</h1>**

## 

## **<h2 class="hello-title">Search for a User and Update Information</h2>**

## 

## 

## **<br><br>**

## **<form method="post" action="update">**

## **Enter id : <input type="text" id="id" name="id" placeholder="Type here" required>**

## **<br>**

## **<br>**

## **<input type="submit" value="Submit" /> &nbsp;&nbsp;&nbsp;**

## **<button><a href="/users">View user table</a></button>**

## **</form>**

## **</div>**

## **</body>**

## **</html>**

## ****nouser.jsp****

## **<html>**

## **<head>**

## **</head>**

## **<body>**

## **<h2 align="center">Error: User not found</h2>**

## **</body>**

## **</html>**

## ****update.jsp****

## **<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>**

## **<html>**

## **<head>**

## **<style>**

## **table, th, td {**

## **border: 1px solid black;**

## **margin: auto;**

## 

## **}**

## **.center {**

## **text-align: center;**

## **align-items:center;**

## **}**

## **</style>**

## **</head>**

## **<body >**

## **<div class="center">**

## **<h2>Update Table</h2>**

## 

## **<p> User ID: ${ID}</p>**

## **<table style="float:inherit">**

## **<tr><th>ID</th><th>Name</th><th>Email</th><th>Password</th></tr>**

## **<c:forEach items="${user}" var="userE" varStatus="count">**

## **<tr id="${count.index}">**

## **<td>${userE.id}</td>**

## **<td>${userE.name}</td>**

## **<td>${userE.email}</td>**

## **<td>${userE.password}</td>**

## **</tr>**

## **</c:forEach>**

## **</table>**

## **<br><br>**

## **<form method="post" action="update2">**

## **<br><h3>Edit user: ${ID}</h3>**

## **<input type="text" id="nameedit" name="nameedit" placeholder="Enter name here..." required>**

## **<input type="text" id="emailedit" name="emailedit" placeholder="Enter Email here..." required>**

## **<input type="text" id="passwordedit" name="passwordedit" placeholder="Enter Password here..." required>**

## **<br>**

## **<br>**

## **<input type="submit" value="Enter" />**

## **</form>**

## **</div>**

## **</body>**

## **</html>**

## ****update2.jsp****

## **<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>**

## **<html>**

## **<head>**

## **<style>**

## **table, th, td {**

## **border: 1px solid black;**

## **margin: auto;**

## **}**

## **.center {**

## **text-align: center;**

## **align-items:center;**

## **}**

## **a{**

## **text-decoration:None;**

## **color:black;}**

## **</style>**

## **</head>**

## **<body>**

## **<div class="center">**

## **<h2>Successfully Updated User</h2>**

## 

## **<p> User ID: ${IDedit}</p>**

## **<div>**

## **<table style="float:inherit">**

## **<tr><th>ID</th><th>Name</th><th>Email</th><th>Password</th></tr>**

## **<c:forEach items="${user}" var="userE" varStatus="count">**

## **<tr id="${count.index}">**

## **<td>${userE.id}</td>**

## **<td>${userE.name}</td>**

## **<td>${userE.email}</td>**

## **<td>${userE.password}</td>**

## **</tr>**

## **</c:forEach>**

## **</table>**

## **</div>**

## **<br><br>**

## **<h3>Return to Homepage</h3>**

## **<div>**

## **<button><a href="/">Return</a></button>**

## 

## **</div>**

## **</div>**

## **</body>**

## **</html>**

## ****users.jsp****

## <%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>

## <html>

## <head>

## <style>

## table, th, td {

## border: 1px solid black;

## margin: auto;

## 

## }

## .center {

## text-align: center;

## align-items:center;

## }

## </style>

## </head>

## <body>

## <div class="center">

## <h2>Users</h2>

## 

## <table style="float:inherit">

## <tr><th>ID</th><th>Name</th><th>Email</th><th>Password</th></tr>

## <c:forEach items="${users}" var="user" varStatus="count">

## <tr id="${count.index}">

## <td>${user.id}</td>

## <td>${user.name}</td>

## <td>${user.email}</td>

## <td>${user.password}</td>

## </tr>

## </c:forEach>

## </table>

## 

## </div>

## </body>

## </html>

## ****UserManagerApplicationTests.java****

## package com.example.UserManager;

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

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

## @SpringBootTest

## class UserManagerApplicationTests {

## @Test

## void contextLoads() {

## }

## }

## 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>2.4.3</version>

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

## </parent>

## <groupId>com.example</groupId>

## <artifactId>UserManager</artifactId>

## <version>0.0.1-SNAPSHOT</version>

## <name>UserManager</name>

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

## <properties>

## <java.version>1.8</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>mysql</groupId>

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

## <scope>runtime</scope>

## </dependency>

## <dependency>

## <groupId>org.projectlombok</groupId>

## <artifactId>lombok</artifactId>

## <optional>true</optional>

## </dependency>

## 

## <dependency>

## <groupId>javax.servlet</groupId>

## <artifactId>jstl</artifactId>

## <version>1.2</version>

## </dependency>

## 

## <dependency>

## <groupId>org.apache.tomcat.embed</groupId>

## <artifactId>tomcat-embed-jasper</artifactId>

## <scope>provided</scope>

## </dependency>

## 

## <dependency>

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

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

## <scope>test</scope>

## </dependency>

## <dependency>

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

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

## </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>