# Code

* **pom.xml**

Phase-End Project Vaccination Center

<?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>3.1.0</version>

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

</parent>

<groupId>com.vaccination</groupId>

<artifactId>Vaccination\_Center</artifactId>

<version>0.0.1-SNAPSHOT</version>

<name>Vaccination\_Center</name>

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

<properties>

<java.version>20</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>org.springframework.boot</groupId>

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

<scope>runtime</scope>

<optional>true</optional>

</dependency>

<dependency>

<groupId>com.mysql</groupId>

<artifactId>mysql-connector-j</artifactId>

<scope>runtime</scope>

</dependency>

<dependency>

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

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

</dependency>

<dependency>

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

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

<scope>test</scope>

</dependency>

</dependencies>

<build>

<plugins>

<plugin>

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

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

</plugin>

</plugins>

</build>

</project>

# application.properties

spring.datasource.url=jdbc:mysql://localhost:3306/vaccination?useSSL=fal se&serverTimezone=UTC

spring.datasource.username=root

[spring.datasource.password=Kavuru@12345](mailto:spring.datasource.password=Kavuru@12345)

spring.jpa.show-sql=true spring.jpa.hibernate.ddl-auto=update spring.jpa.properties.hibernate.dialect = org.hibernate.dialect.MySQLDialect

logging.level.org.hibernate.SQL=DEBUG

# VaccinationCenterApplication.java

**package** com.vaccination;

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

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

@SpringBootApplication

**public class** VaccinationCenterApplication {

**public static void** main(String[] args) { SpringApplication.*run*(VaccinationCenterApplication.**class**,

args);

}

}

# CitizenController.java

**package** com.vaccination.controller;

**import** java.util.List;

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

**import** org.springframework.stereotype.Controller;

**import** org.springframework.ui.Model;

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

**import** org.springframework.web.bind.annotation.ModelAttribute; **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.RequestParam; **import** com.vaccination.entity.Citizen;

**import** com.vaccination.entity.VaccineCenter;

**import** com.vaccination.service.CitizenService;

**import** com.vaccination.service.VaccineCenterService;

@Controller @RequestMapping("/citizens") **public class** CitizenController {

**private final** CitizenService citizenService;

**private final** VaccineCenterService vaccineCenterService;

@Autowired

**public** CitizenController(CitizenService citizenService, VaccineCenterService vaccineCenterService) {

**this**.citizenService = citizenService;

**this**.vaccineCenterService = vaccineCenterService;

}

@GetMapping

**public** String getAllCitizens(Model model) {

List<Citizen> citizens = citizenService.getAllCitizens(); model.addAttribute("citizens", citizens);

**return** "citizen-details";

}

@GetMapping("/{id}")

**public** String viewCitizen(@PathVariable("id") Long id, Model model)

{

Citizen citizen = citizenService.getCitizenById(id);

**if** (citizen != **null**) { model.addAttribute("citizen", citizen); **return** "view-citizen";

} **else** {

// Citizen not found, handle the error scenario

**return** "redirect:/citizens";

}

}

@GetMapping("/add")

**public** String addCitizen(Model model) { List<VaccineCenter> vaccineCenters =

vaccineCenterService.getAllVaccineCenters(); model.addAttribute("vaccineCenters", vaccineCenters); model.addAttribute("citizen", **new** Citizen());

**return** "add-citizen";

}

@PostMapping("/add")

**public** String processAddCitizenForm(@ModelAttribute("citizen") Citizen citizen,

@RequestParam("vaccineCenterId") Long vaccineCenterId) {

VaccineCenter vaccineCenter = vaccineCenterService.getVaccineCenterById(vaccineCenterId);

citizen.setVaccinationCenter(vaccineCenter); citizenService.addCitizen(citizen);

**return** "redirect:/citizens";

}

@GetMapping("/{id}/edit")

**public** String showEditCitizenForm(@PathVariable("id") Long id, Model model) {

Citizen citizen = citizenService.getCitizenById(id);

**if** (citizen != **null**) { List<VaccineCenter> vaccineCenters =

vaccineCenterService.getAllVaccineCenters();

model.addAttribute("citizen", citizen); model.addAttribute("vaccineCenters", vaccineCenters); **return** "edit-citizen";

} **else** {

// Citizen not found, handle the error scenario

**return** "redirect:/citizens";

}

}

@PostMapping("/{id}/edit")

**public** String updateCitizen(@PathVariable("id") Long id, @ModelAttribute("citizen") Citizen updatedCitizen,

@RequestParam("vaccineCenterId") Long vaccineCenterId) { VaccineCenter vaccineCenter =

vaccineCenterService.getVaccineCenterById(vaccineCenterId); Citizen citizen = citizenService.getCitizenById(id); **if** (citizen != **null** && vaccineCenter != **null**) {

citizen.setName(updatedCitizen.getName()); citizen.setCity(updatedCitizen.getCity()); citizen.setNoOfDoses(updatedCitizen.getNoOfDoses());

citizen.setVaccinationStatus(updatedCitizen.getVaccinationStatus())

;

citizen.setVaccinationCenter(vaccineCenter); citizenService.updateCitizen(citizen);

}

**return** "redirect:/citizens";

}

@GetMapping("/{id}/delete")

**public** String deleteCitizen(@PathVariable("id") Long id) { citizenService.deleteCitizen(id);

**return** "redirect:/citizens";

}

}

# UserController.java

**package** com.vaccination.controller;

**import** org.springframework.http.ResponseEntity;

**import** org.springframework.stereotype.Controller;

**import** org.springframework.web.bind.annotation.GetMapping; **import** org.springframework.web.bind.annotation.PostMapping; **import** org.springframework.web.bind.annotation.RequestMapping; **import** org.springframework.web.bind.annotation.RequestParam; **import** com.vaccination.entity.User;

**import** com.vaccination.repository.UserRepository;

**import** com.vaccination.service.UserService;

@Controller @RequestMapping("/")

**public class** UserController {

**private final** UserService userService;

**private final** UserRepository userRepository;

**public** UserController(UserService userService, UserRepository userRepository) {

**this**.userService = userService;

**this**.userRepository = userRepository;

}

@GetMapping

**public** String showRLoginPage() {

**return** "redirect:/login.html";

}

@PostMapping("/login")

**public** String processLogin(@RequestParam("username") String username, @RequestParam("password") String password) {

User user = userRepository.findByUsername(username);

**if** (user != **null** && user.getPassword().equals(password)) {

**return** "redirect:/vaccine-centers";

} **else** {

**return** "redirect:/errorpage.html";

}

}

@GetMapping("/register")

**public** String showRegisterPage() {

**return** "redirect:/register.html";

}

@PostMapping("/register")

**public** ResponseEntity<String> registerUser(@RequestParam("username") String username,

@RequestParam("email") String email, @RequestParam("password") String password) {

User user = **new** User(username, email, password); userService.registerUser(user);

**return** ResponseEntity.*ok*("User registered successfully");

}

}

# VaccineCenterController.java

**package** com.vaccination.controller;

**import** java.util.List;

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

**import** org.springframework.stereotype.Controller;

**import** org.springframework.ui.Model;

**import** org.springframework.web.bind.annotation.GetMapping; **import** org.springframework.web.bind.annotation.ModelAttribute; **import** org.springframework.web.bind.annotation.PathVariable; **import** org.springframework.web.bind.annotation.PostMapping; **import** org.springframework.web.bind.annotation.RequestMapping; **import** com.vaccination.entity.Citizen;

**import** com.vaccination.entity.VaccineCenter;

**import** com.vaccination.service.CitizenService;

**import** com.vaccination.service.VaccineCenterService;

@Controller @RequestMapping("/vaccine-centers")

**public class** VaccineCenterController {

**private final** VaccineCenterService vaccineCenterService;

**private final** CitizenService citizenService;

@Autowired

**public** VaccineCenterController(VaccineCenterService vaccineCenterService, CitizenService citizenService) {

**this**.vaccineCenterService = vaccineCenterService;

**this**.citizenService = citizenService;

}

@GetMapping

**public** String getAllVaccineCenters(Model model) { List<VaccineCenter> vaccineCenters =

vaccineCenterService.getAllVaccineCenters(); model.addAttribute("vaccineCenters", vaccineCenters); **return** "vaccine-center-details";

}

@GetMapping("/add")

**public** String showAddVaccineCenterForm(Model model) { model.addAttribute("vaccineCenter", **new** VaccineCenter()); **return** "add-vaccine-center";

}

@PostMapping("/add")

**public** String addVaccineCenter(@ModelAttribute("vaccineCenter") VaccineCenter vaccineCenter) {

vaccineCenterService.addVaccineCenter(vaccineCenter);

**return** "redirect:/vaccine-centers";

}

@GetMapping("/{id}")

**public** String viewVaccineCenter(@PathVariable("id") Long id, Model model) {

VaccineCenter vaccineCenter = vaccineCenterService.getVaccineCenterById(id);

List<Citizen> citizens = citizenService.getCitizensByVaccinationCenter(vaccineCenter);

model.addAttribute("vaccineCenter", vaccineCenter); model.addAttribute("citizens", citizens);

**return** "vaccine-center-view";

}

@GetMapping("/{id}/edit")

**public** String showEditVaccineCenterForm(@PathVariable("id") Long id, Model model) {

VaccineCenter vaccineCenter = vaccineCenterService.getVaccineCenterById(id);

**if** (vaccineCenter != **null**) { model.addAttribute("vaccineCenter", vaccineCenter); **return** "edit-vaccine-center";

} **else** {

**return** "redirect:/vaccine-centers";

}

}

@PostMapping("/{id}/edit")

**public** String updateVaccineCenter(@PathVariable("id") Long id, @ModelAttribute("vaccineCenter") VaccineCenter

updatedVaccineCenter) {

VaccineCenter vaccineCenter = vaccineCenterService.getVaccineCenterById(id);

**if** (vaccineCenter != **null**) {

vaccineCenter.setCenter(updatedVaccineCenter.getCenter()); vaccineCenter.setCity(updatedVaccineCenter.getCity()); vaccineCenterService.updateVaccineCenter(vaccineCenter);

}

**return** "redirect:/vaccine-centers";

}

@GetMapping("/{id}/delete")

**public** String deleteVaccineCenter(@PathVariable("id") Long id) { vaccineCenterService.deleteVaccineCenter(id);

**return** "redirect:/vaccine-centers";

}

}

# Citizen.java

**package** com.vaccination.entity;

**import** jakarta.persistence.Column; **import** jakarta.persistence.Entity; **import** jakarta.persistence.FetchType;

**import** jakarta.persistence.GeneratedValue;

**import** jakarta.persistence.GenerationType;

**import** jakarta.persistence.Id;

**import** jakarta.persistence.JoinColumn; **import** jakarta.persistence.ManyToOne; **import** jakarta.persistence.Table;

@Entity

@Table(name = "citizens")

**public class** Citizen { @Id

@GeneratedValue(strategy = GenerationType.***IDENTITY***)

**private** Long id; @Column(name = "name") **private** String name; @Column(name = "city") **private** String city;

@Column(name = "no\_of\_doses")

**private int** noOfDoses;

@Column(name = "vaccination\_status") **private** String vaccinationStatus; @ManyToOne(fetch = FetchType.***LAZY***) @JoinColumn(name = "vaccination\_center") **private** VaccineCenter vaccinationCenter;

// Constructors, getters, setters, and other properties

**public** Long getId() {

**return** id;

}

**public void** setId(Long id) {

**this**.id = id;

}

**public** String getName() {

**return** name;

}

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

**this**.name = name;

}

**public** String getCity() {

**return** city;

}

**public void** setCity(String city) {

**this**.city = city;

}

**public int** getNoOfDoses() {

**return** noOfDoses;

}

**public void** setNoOfDoses(**int** noOfDoses) {

**this**.noOfDoses = noOfDoses;

}

**public** String getVaccinationStatus() {

**return** vaccinationStatus;

}

**public void** setVaccinationStatus(String vaccinationStatus) {

**this**.vaccinationStatus = vaccinationStatus;

}

**public** VaccineCenter getVaccinationCenter() {

**return** vaccinationCenter;

}

**public void** setVaccinationCenter(VaccineCenter vaccinationCenter) {

**this**.vaccinationCenter = vaccinationCenter;

}

}

# User.java

**package** com.vaccination.entity;

**import** jakarta.persistence.Column;

**import** jakarta.persistence.Entity;

**import** jakarta.persistence.GeneratedValue; **import** jakarta.persistence.GenerationType; **import** jakarta.persistence.Id;

**import** jakarta.persistence.Table;

@Entity

@Table(name = "users")

**public class** User { @Id

@GeneratedValue(strategy = GenerationType.***IDENTITY***)

**private** Long id;

@Column(nullable = **false**, unique = **true**) **private** String username; @Column(nullable = **false**, unique = **true**) **private** String email;

@Column(nullable = **false**) **private** String password;

**public** User() {

}

**public** User(String username, String email, String password) {

**this**.username = username; **this**.password = password; **this**.email = email;

}

**public** Long getId() {

**return** id;

}

**public void** setId(Long id) {

**this**.id = id;

}

**public** String getUsername() {

**return** username;

}

**public void** setUsername(String username) {

**this**.username = username;

}

**public** String getEmail() {

**return** email;

}

**public void** setEmail(String email) {

**this**.email = email;

}

**public** String getPassword() {

**return** password;

}

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

**this**.password = password;

}

}

# VaccineCenter.java

**package** com.vaccination.entity;

**import** jakarta.persistence.Column;

**import** jakarta.persistence.Entity;

**import** jakarta.persistence.GeneratedValue; **import** jakarta.persistence.GenerationType; **import** jakarta.persistence.Id;

**import** jakarta.persistence.Table;

@Entity

@Table(name = "vaccine\_centers")

**public class** VaccineCenter { @Id

@GeneratedValue(strategy = GenerationType.***IDENTITY***)

**private** Long id; @Column(name = "center") **private** String center; @Column(name = "city") **private** String city;

**public** VaccineCenter() {

// Default constructor required by JPA

}

**public** VaccineCenter(String center, String city) {

**this**.center = center;

**this**.city = city;

}

**public** Long getId() {

**return** id;

}

**public void** setId(Long id) {

**this**.id = id;

}

**public** String getCenter() {

**return** center;

}

**public void** setCenter(String center) {

**this**.center = center;

}

**public** String getCity() {

**return** city;

}

**public void** setCity(String city) {

**this**.city = city;

}

}

# CitizenRepository.java

**package** com.vaccination.repository;

**import** java.util.List;

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

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

**import** com.vaccination.entity.Citizen;

**import** com.vaccination.entity.VaccineCenter;

@Repository

**public interface** CitizenRepository **extends** JpaRepository<Citizen, Long>

{

List<Citizen> findByVaccinationCenter(VaccineCenter vaccinationCenter);

}

# UserRepository.java

**package** com.vaccination.repository;

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

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

**import** com.vaccination.entity.User;

@Repository

**public interface** UserRepository **extends** JpaRepository<User, Long> {

User findByUsername(String username);

}

# VaccineCenterRepository.java

**package** com.vaccination.repository;

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

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

**import** com.vaccination.entity.VaccineCenter;

@Repository

**public interface** VaccineCenterRepository **extends**

JpaRepository<VaccineCenter, Long> {

// Add custom query methods if needed

}

# CitizenService.java

**package** com.vaccination.service;

**import** java.util.List;

**import** com.vaccination.entity.Citizen;

**import** com.vaccination.entity.VaccineCenter;

**public interface** CitizenService {

**void** addCitizen(Citizen citizen); **void** updateCitizen(Citizen citizen); **void** deleteCitizen(Long id);

Citizen getCitizenById(Long id); List<Citizen> getAllCitizens();

List<Citizen> getCitizensByVaccinationCenter(VaccineCenter vaccineCenter);

}

# CitizenServiceImpl.java

**package** com.vaccination.service;

**import** java.util.List;

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

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

**import** com.vaccination.entity.Citizen;

**import** com.vaccination.entity.VaccineCenter;

**import** com.vaccination.repository.CitizenRepository;

@Service

**public class** CitizenServiceImpl **implements** CitizenService { @Autowired

**private** CitizenRepository citizenRepository;

@Override

**public void** addCitizen(Citizen citizen) { citizenRepository.save(citizen);

}

@Override

**public void** updateCitizen(Citizen citizen) { citizenRepository.save(citizen);

}

@Override

**public void** deleteCitizen(Long id) { citizenRepository.deleteById(id);

}

@Override

**public** Citizen getCitizenById(Long id) {

**return** citizenRepository.findById(id).orElseThrow(() -> **new**

NotFoundException("Citizen not found"));

}

@Override

**public** List<Citizen> getAllCitizens() {

**return** citizenRepository.findAll();

}

@Override

**public** List<Citizen> getCitizensByVaccinationCenter(VaccineCenter vaccineCenter) {

**return**

citizenRepository.findByVaccinationCenter(vaccineCenter);

}

**public class** NotFoundException **extends** RuntimeException {

**public** NotFoundException(String message) {

**super**(message);

}

}

}

# UserService.java

**package** com.vaccination.service;

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

**import** com.vaccination.entity.User;

**import** com.vaccination.repository.UserRepository;

@Service

**public class** UserService {

**private final** UserRepository userRepository;

**public** UserService(UserRepository userRepository) {

**this**.userRepository = userRepository;

}

**public void** registerUser(User user) { userRepository.save(user);

}

}

# VaccineCenterService.java

**package** com.vaccination.service;

**import** java.util.List;

**import** com.vaccination.entity.VaccineCenter;

**public interface** VaccineCenterService {

VaccineCenter addVaccineCenter(VaccineCenter vaccineCenter); **void** updateVaccineCenter(VaccineCenter updatedVaccineCenter); **void** deleteVaccineCenter(Long id);

VaccineCenter getVaccineCenterById(Long id);

List<VaccineCenter> getAllVaccineCenters();

}

# VaccineCenterServiceImpl.java

**package** com.vaccination.service;

**import** java.util.List;

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

**import** com.vaccination.entity.VaccineCenter;

**import** com.vaccination.repository.VaccineCenterRepository;

@Service

**public class** VaccineCenterServiceImpl **implements** VaccineCenterService {

**private final** VaccineCenterRepository vaccineCenterRepository;

**public** VaccineCenterServiceImpl(VaccineCenterRepository vaccineCenterRepository) {

**this**.vaccineCenterRepository = vaccineCenterRepository;

}

@Override

**public** VaccineCenter addVaccineCenter(VaccineCenter vaccineCenter)

{

**return** vaccineCenterRepository.save(vaccineCenter);

}

@Override

**public void** updateVaccineCenter(VaccineCenter updatedVaccineCenter)

{

VaccineCenter existingCenter =

vaccineCenterRepository.findById(updatedVaccineCenter.getId())

.orElseThrow(() -> **new** NotFoundException("Vaccine center not found"));

existingCenter.setCenter(updatedVaccineCenter.getCenter()); existingCenter.setCity(updatedVaccineCenter.getCity()); vaccineCenterRepository.save(existingCenter);

}

@Override

**public void** deleteVaccineCenter(Long id) { VaccineCenter existingCenter =

vaccineCenterRepository.findById(id)

.orElseThrow(() -> **new** NotFoundException("Vaccine center not found"));

vaccineCenterRepository.delete(existingCenter);

}

@Override

**public** VaccineCenter getVaccineCenterById(Long id) {

**return** vaccineCenterRepository.findById(id)

.orElseThrow(() -> **new** NotFoundException("Vaccine center not found"));

}

@Override

**public** List<VaccineCenter> getAllVaccineCenters() {

**return** vaccineCenterRepository.findAll();

}

**public class** NotFoundException **extends** RuntimeException {

**public** NotFoundException(String message) {

**super**(message);

}

}

}

# errorpage.html

<!DOCTYPE html>

<html>

<head>

<title>Error - Vaccination Project</title>

<link rel=*"stylesheet"* href=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootst*

*rap.min.css"*>

</head>

<body>

<div class=*"container"*>

<h1 class=*"mt-4"*>Error</h1>

<div class=*"alert alert-danger"* role=*"alert"*>Invalid username

or

href=*"/"*

password. Please try again or register.</div>

<a href=*"/register"* class=*"btn btn-primary"*>Register</a> <a

class=*"btn btn-secondary"*>Try Again</a>

</div>

<script src=*"https://code.jquery.com/jquery- 3.5.1.slim.min.js"*></script>

<script

src=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstra p.min.js"*></script>

</body>

</html>

# login.html

<!DOCTYPE html>

<html>

<head>

<title>Login - Vaccination Project</title>

<link rel=*"stylesheet"* href=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootst*

*rap.min.css"*>

</head>

<body>

<div class=*"container"*>

<h1 class=*"mt-4"*>Login</h1>

<form action=*"/login"* method=*"POST"*>

<div class=*"form-group"*>

<label for=*"username"*>Username:</label> <input

type=*"text"*

class=*"form-control"* id=*"username"*

name=*"username"* required>

</div>

<div class=*"form-group"*>

<label for=*"password"*>Password:</label> <input

type=*"password"*

class=*"form-control"* id=*"password"*

name=*"password"* required>

</div>

<button type=*"submit"* class=*"btn btn- primary"*>Login</button>

</form>

<p class=*"mt-3"*>

Don't have an account? <a href=*"/register"*>Register

here</a>.

</p>

</div>

<script src=*"https://code.jquery.com/jquery- 3.5.1.slim.min.js"*></script>

<script

src=[*"https://cdn.jsdelivr.net/npm/@popperjs/core@1.16.1/dist/umd/po*](https://cdn.jsdelivr.net/npm/%40popperjs/core%401.16.1/dist/umd/po) *pper.min.js"*>

</script>

<script src=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min*

*.js"*>

</script>

</body>

</html>

# register.html

<!DOCTYPE html>

<html>

<head>

<title>Register - Vaccination Project</title>

<link rel=*"stylesheet"* href=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootst*

*rap.min.css"*>

</head>

<body>

<div class=*"container"*>

<h1 class=*"mt-4"*>Register</h1>

<form action=*"/register"* method=*"POST"*>

<div class=*"form-group"*>

<label for=*"username"*>Username:</label> <input

type=*"text"*

class=*"form-control"* id=*"username"*

name=*"username"* required>

</div>

<div class=*"form-group"*>

<label for=*"email"*>Email:</label> <input

type=*"email"* required>

</div>

class=*"form-control"* id=*"email"* name=*"email"*

<div class=*"form-group"*>

<label for=*"password"*>Password:</label> <input

type=*"password"*

class=*"form-control"* id=*"password"*

name=*"password"* required>

</div>

<button type=*"submit"* class=*"btn btn- primary"*>Register</button>

</form>

<p class=*"mt-3"*>

Already have an account? <a href=*"/"*>Login here</a>.

</p>

</div>

<script src=*"https://code.jquery.com/jquery- 3.5.1.slim.min.js"*></script>

<script

src=*"*[*https://cdn.jsdelivr.net/npm/@popperjs/core@1.16.1/dist/umd/po*](https://cdn.jsdelivr.net/npm/%40popperjs/core%401.16.1/dist/umd/po) *pper.min.js"*></script>

<script

src=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstra p.min.js"*></script>

</body>

</html>

# add-citizen.html

<!DOCTYPE html>

<html xmlns:th=*"*[*http://www.thymeleaf.org"*](http://www.thymeleaf.org/)>

<head>

<title>Add Citizen</title>

<link rel=*"stylesheet"* href=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootst*

*rap.min.css"*>

</head>

<body>

<div class=*"container"*>

<h1 class=*"mt-4"*>Add Citizen</h1>

<form action=*"/citizens/add"* method=*"POST"*>

<div class=*"form-group"*>

<label for=*"name"*>Name:</label> <input type=*"text"* class=*"form-control"* id=*"name"* name=*"name"*

required>

required>

</div>

<div class=*"form-group"*>

<label for=*"city"*>City:</label> <input type=*"text"* class=*"form-control"* id=*"city"* name=*"city"*

</div>

<div class=*"form-group"*>

<label for=*"noOfDoses"*>No. of Doses:</label> <select class=*"form-control"* id=*"noOfDoses"*

name=*"noOfDoses"* required>

<option value=*"0"*>0</option>

<option value=*"1"*>1</option>

<option value=*"2"*>2</option>

</select>

</div>

<div class=*"form-group"*>

<label for=*"vaccinationStatus"*>Vaccination Status:</label> <input

id=*"vaccinationStatus"*

</div>

<script>

type=*"text"* class=*"form-control"* name=*"vaccinationStatus"* required readonly>

**const** noOfDosesSelect = document.getElementById('noOfDoses');

**const** vaccinationStatusInput = document

.getElementById('vaccinationStatus'); noOfDosesSelect.addEventListener('change',

**function**() {

**const** selectedDoses =

parseInt(noOfDosesSelect.value);

**if** (selectedDoses === 0) { vaccinationStatusInput.value = 'Not

Vaccinated';

Vaccinated'; Vaccinated';

} **else if** (selectedDoses === 1) { vaccinationStatusInput.value = 'One

} **else if** (selectedDoses === 2) { vaccinationStatusInput.value = 'Fully

}

});

</script>

<select

<div class=*"form-group"*>

<label for=*"vaccineCenterId"*>Vaccine Center:</label>

class=*"form-control"* id=*"vaccineCenterId"*

name=*"vaccineCenterId"*

Vaccine Centers -->

*${vaccineCenters}"*

required>

<!-- Populate the options with available

<option th:each=*"vaccineCenter :*

th:value=*"${vaccineCenter.id}"*

th:text=*"${vaccineCenter.center}"*></option>

</select>

</div>

<button type=*"submit"* class=*"btn btn-primary"*>Add Citizen</button>

<a href=*"/citizens"* class=*"btn btn-secondary"*>Back</a>

</form>

</div>

<script src=*"https://code.jquery.com/jquery- 3.5.1.slim.min.js"*></script>

<script

src=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstra p.min.js"*></script>

</body>

</html>

# add-vaccine-center.html

<!DOCTYPE html>

<html xmlns:th=[*"http://www.thymeleaf.org"*](http://www.thymeleaf.org/)>

<head>

<title>Add Vaccination Center</title>

<link rel=*"stylesheet"* href=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootst*

*rap.min.css"*>

</head>

<body>

<div class=*"container"*>

<h1 class=*"mt-4"*>Add Vaccination Center</h1>

<form th:action=*"@{/vaccine-centers/add}"* method=*"POST"*>

<div class=*"form-group"*>

<label for=*"center"*>Center:</label> <input

type=*"text"* required>

</div>

class=*"form-control"* id=*"center"* name=*"center"*

required>

<div class=*"form-group"*>

<label for=*"city"*>City:</label> <input type=*"text"* class=*"form-control"* id=*"city"* name=*"city"*

</div>

<button type=*"submit"* class=*"btn btn- primary"*>Submit</button>

</form>

</div>

<script src=*"https://code.jquery.com/jquery- 3.5.1.slim.min.js"*></script>

<script src=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min*

*.js"*></script>

</body>

</html>

# citizen-details.html

<!DOCTYPE html>

<html xmlns:th=[*"http://www.thymeleaf.org"*](http://www.thymeleaf.org/)>

<head>

<title>Citizen Details</title>

<link rel=*"stylesheet"* href=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootst*

*rap.min.css"*>

</head>

<body>

<div class=*"container"*>

<h1 class=*"mt-4"*>Citizen Details</h1>

<a href=*"/citizens/add"* class=*"btn btn-success"*>Add Citizen</a> <a

href=*"/vaccine-centers"* class=*"btn btn-secondary"*>Back to

Home</a><br>

<br>

<table class=*"table"*>

<thead>

<tr>

<th>ID</th>

<th>Name</th>

<th>City</th>

<th>No. of Doses</th>

<th>Vaccination Status</th>

<th>Vaccination Center</th>

<th>Actions</th>

</tr>

</thead>

<tbody>

<tr th:each=*"citizen : ${citizens}"*>

<td th:text=*"${citizen.id}"*></td>

<td th:text=*"${citizen.name}"*></td>

<td th:text=*"${citizen.city}"*></td>

<td th:text=*"${citizen.noOfDoses}"*></td>

<td th:text=*"${citizen.vaccinationStatus}"*></td>

<td th:text=*"${citizen.vaccinationCenter?.center}"*></td>

<td><a th:href=*"@{/citizens/{id}(id=${citizen.id})}"*

class=*"btn btn-primary"*>View</a> <a

th:href=*"@{/citizens/{id}/edit(id=${citizen.id})}"*

class=*"btn btn-secondary"*>Edit</a> <a

th:href=*"@{/citizens/{id}/delete(id=${citizen.id})}"*

class=*"btn btn-danger"*>Delete</a></td>

</tr>

</tbody>

</table>

<h6 style="text-align: *left*;">

<strong>Total </strong><strong th:text=*"${#lists.size(citizens)}"*></strong><strong> Citizens found</strong>

</h6>

</div>

<script src=*"https://code.jquery.com/jquery- 3.5.1.slim.min.js"*></script>

<script src=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min*

*.js"*></script>

</body>

</html>

# edit-citizen.html

<!DOCTYPE html>

<html xmlns:th=[*"http://www.thymeleaf.org"*](http://www.thymeleaf.org/)>

<head>

<title>Edit Citizen</title>

<link rel=*"stylesheet"*

href=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootst rap.min.css"*>

</head>

<body>

<div class=*"container"*>

<h1 class=*"mt-4"*>Edit Citizen</h1>

<form th:action=*"@{/citizens/{id}/edit(id=${citizen.id})}"* method=*"POST"*>

<div class=*"form-group"*>

<label for=*"name"*>Name:</label> <input type=*"text"* class=*"form-control"* id=*"name"* name=*"name"* th:value=*"${citizen.name}"* required>

</div>

<div class=*"form-group"*>

<label for=*"city"*>City:</label> <input type=*"text"* class=*"form-control"* id=*"city"* name=*"city"* th:value=*"${citizen.city}"* required>

</div>

<div class=*"form-group"*>

<label for=*"noOfDoses"*>No. of Doses:</label> <select class=*"form-control"* id=*"noOfDoses"*

name=*"noOfDoses"* required>

<option value=*"0"* th:selected=*"${citizen.noOfDoses == 0}"*>0</option>

<option value=*"1"* th:selected=*"${citizen.noOfDoses == 1}"*>1</option>

<option value=*"2"* th:selected=*"${citizen.noOfDoses == 2}"*>2</option>

</select>

</div>

<div class=*"form-group"*>

<label for=*"vaccinationStatus"*>Vaccination Status:</label> <input

id=*"vaccinationStatus"*

type=*"text"* class=*"form-control"*

name=*"vaccinationStatus"*

th:value=*"${citizen.vaccinationStatus}"*

required readonly>

<select

</div>

<div class=*"form-group"*>

<label for=*"vaccineCenterId"*>Vaccine Center:</label>

class=*"form-control"* id=*"vaccineCenterId"*

name=*"vaccineCenterId"*

Vaccine Centers -->

*${vaccineCenters}"*

required>

<!-- Populate the options with available

<option th:each=*"vaccineCenter :*

th:value=*"${vaccineCenter.id}"*

th:text=*"${vaccineCenter.center}"*

th:selected=*"${vaccineCenter.id == citizen.vaccinationCenter.id}"*></option>

</select>

</div>

<button type=*"submit"* class=*"btn btn-primary"*>Update Citizen</button>

<a href=*"/citizens"* class=*"btn btn-secondary"*>Back</a>

</form>

</div>

<script src=*"https://code.jquery.com/jquery- 3.5.1.slim.min.js"*></script>

<script

src=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstra p.min.js"*></script>

<script>

**const** noOfDosesSelect = document.getElementById('noOfDoses');

**const** vaccinationStatusInput = document

.getElementById('vaccinationStatus'); noOfDosesSelect.addEventListener('change', **function**() {

**const** selectedDoses = parseInt(noOfDosesSelect.value);

**if** (selectedDoses === 0) { vaccinationStatusInput.value = 'Not Vaccinated';

} **else if** (selectedDoses === 1) { vaccinationStatusInput.value = 'One Vaccinated';

} **else if** (selectedDoses === 2) { vaccinationStatusInput.value = 'Fully Vaccinated';

}

});

</script>

</body>

</html>

# edit-vaccine-center.html

<!DOCTYPE html>

<html xmlns:th=[*"http://www.thymeleaf.org"*](http://www.thymeleaf.org/)>

<head>

<title>Edit Vaccine Center</title>

<link rel=*"stylesheet"* href=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootst*

*rap.min.css"*>

</head>

<body>

<div class=*"container"*>

<h1 class=*"mt-4"*>Edit Vaccine Center</h1>

<form

th:action=*"@{/vaccine- centers/{id}/edit(id=${vaccineCenter.id})}"*

method=*"POST"*>

<div class=*"form-group"*>

<label for=*"center"*>Center:</label> <input

type=*"text"*

class=*"form-control"* id=*"center"*

th:field=*"${vaccineCenter.center}"*

required>

</div>

<div class=*"form-group"*>

<label for=*"city"*>City:</label> <input type=*"text"*

class=*"form-control"* id=*"city"* th:field=*"${vaccineCenter.city}"*

required>

Vaccine

</div>

<!-- Add other fields as needed -->

<button type=*"submit"* class=*"btn btn-primary"*>Update

Center</button>

</form>

</div>

<script src=*"https://code.jquery.com/jquery- 3.5.1.slim.min.js"*></script>

<script

src=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstra p.min.js"*></script>

</body>

</html>

# vaccine-center-details.html

<!DOCTYPE html>

<html xmlns:th=*"*[*http://www.thymeleaf.org"*](http://www.thymeleaf.org/)>

<head>

<title>Vaccination Center Details</title>

<link rel=*"stylesheet"* href=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootst*

*rap.min.css"*>

<style>

/\* Styles here \*/

</style>

</head>

<body>

<div class=*"container"*>

<h1 class=*"mt-4"*>Welcome to Vaccination Center</h1>

<ul>

*mb-4"*>Add

<li><a href=*"/citizens"* style="color: *#007bff*;">Go to Citizen Details</a></li>

<li><a href=*"/"* style="color: *#dc3545*;">Logout</a></li>

</ul>

<hr>

<h2 class=*"mt-4"*>Vaccination Center Details</h2>

<a th:href=*"@{/vaccine-centers/add}"* class=*"btn btn-primary*

Vaccination Center</a>

<table class=*"table"*>

<thead>

<tr>

<th>ID</th>

<th>Center</th>

<th>City</th>

<th>Actions</th>

</tr>

</thead>

<tbody id=*"vaccineCenterTableBody"*>

<!-- Loop through the vaccination centers and display their details -->

<tr th:each=*"vaccineCenter : ${vaccineCenters}"*>

<td th:text=*"${vaccineCenter.id}"*></td>

<td th:text=*"${vaccineCenter.center}"*></td>

<td th:text=*"${vaccineCenter.city}"*></td>

<td><a

th:href=*"@{/vaccine- centers/{id}(id=${vaccineCenter.id})}"*

class=*"btn btn-primary"*>View</a> <a th:href=*"@{/vaccine-*

*centers/{id}/edit(id=${vaccineCenter.id})}"*

class=*"btn btn-secondary"*>Edit</a> <a th:href=*"@{/vaccine-*

*centers/{id}/delete(id=${vaccineCenter.id})}"*

class=*"btn btn-danger"*>Delete</a></td>

</tr>

</tbody>

</table>

<h6 style="text-align: *left*;">

<strong>Total </strong><strong th:text=*"${#lists.size(vaccineCenters)}*

*"*></strong><strong>

</h6>

</div>

Vaccination Center found</strong>

<script src=*"https://code.jquery.com/jquery- 3.5.1.slim.min.js"*></script>

<script

src=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstra p.min.js"*></script>

</body>

</html>

# vaccine-center-view.html

<!DOCTYPE html>

<html xmlns:th=[*"http://www.thymeleaf.org"*](http://www.thymeleaf.org/)>

<head>

<title>Vaccination Center Details</title>

<link rel=*"stylesheet"* href=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootst*

*rap.min.css"*>

</head>

<body>

<div class=*"container"*>

<h1 class=*"mt-4"*>Vaccination Center Details</h1>

<hr>

<h2 class=*"mt-4"*>Vaccination Center</h2>

<table class=*"table"*>

<thead>

<tr>

<th>ID</th>

<th>Center</th>

<th>City</th>

</tr>

</thead>

<tbody>

<tr>

<td th:text=*"${vaccineCenter.id}"*></td>

<td th:text=*"${vaccineCenter.center}"*></td>

<td th:text=*"${vaccineCenter.city}"*></td>

</tr>

</tbody>

</table>

<h2 class=*"mt-4"*>Associated Citizens</h2>

<table class=*"table"*>

<thead>

<tr>

<th>ID</th>

<th>Name</th>

<th>City</th>

<th>No. of Doses</th>

<th>Vaccination Status</th>

</tr>

</thead>

<tbody>

<tr th:each=*"citizen : ${citizens}"*>

<td th:text=*"${citizen.id}"*></td>

<td th:text=*"${citizen.name}"*></td>

<td th:text=*"${citizen.city}"*></td>

<td th:text=*"${citizen.noOfDoses}"*></td>

<td th:text=*"${citizen.vaccinationStatus}"*></td>

</tr>

</tbody>

</table>

<a href=*"/vaccine-centers"* class=*"btn btn-secondary"*>Back to Vaccination Centers</a>

</div>

<script src=*"https://code.jquery.com/jquery- 3.5.1.slim.min.js"*></script>

<script

src=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstra p.min.js"*></script>

</body>

</html>

# view-citizen.html

<!DOCTYPE html>

<html xmlns:th=[*"http://www.thymeleaf.org"*](http://www.thymeleaf.org/)>

<head>

<title>View Citizen</title>

<link rel=*"stylesheet"* href=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootst*

*rap.min.css"*>

</head>

<body>

<div class=*"container"*>

<h1 class=*"mt-4"*>Citizen Details</h1>

<div class=*"card"*>

<div class=*"card-body"*>

<h5 class=*"card-title"*>

Name: <span th:text=*"${citizen.name}"*></span>

</h5>

<h6 class=*"card-subtitle mb-2 text-muted"*>

City: <span th:text=*"${citizen.city}"*></span>

</h6>

<p class=*"card-text"*>

No. of Doses: <span th:text=*"${citizen.noOfDoses}"*></span>

</p>

<p class=*"card-text"*>

Vaccination Status: <span th:text=*"${citizen.vaccinationStatus}"*></span>

</p>

<p class=*"card-text"*>

Vaccine Center: <span th:text=*"${citizen.vaccinationCenter.center}"*></span>

</p>

</div>

</div>

<a href=*"/citizens"* class=*"btn btn-primary mt-4"*>Back</a>

</div>

<script src=*"https://code.jquery.com/jquery- 3.5.1.slim.min.js"*></script>

<script

src=*"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstra p.min.js"*></script>

</body>

</html>