**// SPRING BOOT MVC PROJECT TASK //**

**# Employee.java**

package com.ram.sis.entity;

import jakarta.persistence.\*;

*@Entity*

*@Table*(name = "employees")

public class Student {

*@Id*

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

private Long empId;

*@Column*(name = "name", nullable = false)

private String name;

*@Column*(name = "job")

private String job;

*@Column*(name = "salary")

private Double salary;

*@Column*(name = "dept\_no")

private Integer deptNo;

public Student() {

}

public Student(String name, String job, Double salary, Integer deptNo) {

this.name = name;

this.job = job;

this.salary = salary;

this.deptNo = deptNo;

}

public Long getEmpId() {

return empId;

}

public void setEmpId(Long empId) {

this.empId = empId;

}

public String getName() {

return name;

}

public void setName(String name) {

this.name = name;

}

public String getJob() {

return job;

}

public void setJob(String job) {

this.job = job;

}

public Double getSalary() {

return salary;

}

public void setSalary(Double salary) {

this.salary = salary;

}

public Integer getDeptNo() {

return deptNo;

}

public void setDeptNo(Integer deptNo) {

this.deptNo = deptNo;

}

}

**#EmployeeController.java**

package com.ram.sis.controller;

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 com.ram.sis.entity.Student;

import com.ram.sis.service.StudentService;

*@Controller*

public class StudentController {

private StudentService studentService;

public StudentController(StudentService studentService) {

super();

this.studentService = studentService;

}

// Handler method to list employees

*@GetMapping*("/employees")

public String listEmployees(Model model) {

model.addAttribute("employees", studentService.getAllEmployees());

return "employees";

}

// Show form to create a new employee

*@GetMapping*("/employees/new")

public String createEmployeeForm(Model model) {

Student student = new Student();

model.addAttribute("employee", student);

return "create\_employee";

}

// Save employee to the database

*@PostMapping*("/employees")

public String saveEmployee(*@ModelAttribute*("employee") Student student) {

studentService.saveEmployee(student);

return "redirect:/employees";

}

// Show form to edit an employee

*@GetMapping*("/employees/edit/{empId}")

public String editEmployeeForm(*@PathVariable* Long empId, Model model) {

model.addAttribute("employee", studentService.getEmployeeById(empId));

return "edit\_employee";

}

// Update employee details

*@PostMapping*("/employees/{empId}")

public String updateEmployee(*@PathVariable* Long empId,

*@ModelAttribute*("employee") Student student) {

Student existingEmployee = studentService.getEmployeeById(empId);

existingEmployee.setEmpId(empId);

existingEmployee.setName(student.getName());

existingEmployee.setJob(student.getJob());

existingEmployee.setSalary(student.getSalary());

existingEmployee.setDeptNo(student.getDeptNo());

studentService.updateEmployee(existingEmployee);

return "redirect:/employees";

}

// Handler method to delete an employee

*@PostMapping*("/employees/{empId}/delete")

public String deleteEmployee(*@PathVariable* Long empId) {

studentService.deleteEmployeeById(empId);

return "redirect:/employees";

}

// 🔥 NEW: Find Employee by ID and Show Details

*@GetMapping*("/employee/{empId}")

public String getEmployeeById(*@PathVariable* Long empId, Model model) {

Student student = studentService.getEmployeeById(empId);

model.addAttribute("employee", student);

return "employee\_details"; // New page to show employee details

}

}

**#EmployeeRepository.java**

**package com.ram.sis.repository;**

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

**import com.ram.sis.entity.Student;**

**public interface StudentRepository extends JpaRepository<Student, Long>{**

**}**

**#EmployeeService.java**

**package com.ram.sis.repository;**

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

**import com.ram.sis.entity.Student;**

**public interface StudentRepository extends JpaRepository<Student, Long>{**

**}**

**#EmployeeServicelmpl.java**

package com.ram.sis.service.impl;

import java.util.List;

import org.springframework.stereotype.Service;

import com.ram.sis.entity.Student;

import com.ram.sis.repository.StudentRepository;

import com.ram.sis.service.StudentService;

*@Service*

public class StudentServiceImpl implements StudentService{

private StudentRepository studentRepository;

public StudentServiceImpl(StudentRepository studentRepository) {

super();

this.studentRepository = studentRepository;

}

*@Override*

public List<Student> getAllEmployees() {

return studentRepository.findAll();

}

*@Override*

public Student saveEmployee(Student student) {

return studentRepository.save(student);

}

*@Override*

public Student getEmployeeById(Long empId) {

return studentRepository.findById(empId).get();

}

*@Override*

public Student updateEmployee(Student student) {

return studentRepository.save(student);

}

*@Override*

public void deleteEmployeeById(Long empId) {

studentRepository.deleteById(empId);

}

}

**#Application.properties**

spring.datasource.driver-class-name=com.mysql.cj.jdbc.Driver

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

spring.datasource.username=root

spring.datasource.password=Mohit@#1234

#Hibernate

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

#Hibernate auto ddl

spring.jpa.hibernate.ddl-auto=update

logging.level.org.hibernate.SQL=DEBUG

**#employees.html**

<!**DOCTYPE** html>

<**html** xmlns:th=*"http://www.thymeleaf.org"*>

<**head**>

<**meta** charset=*"ISO-8859-1"*>

<**title**>Employee Management System</**title**>

<**link** rel=*"stylesheet"*

href=*"https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css"*

crossorigin=*"anonymous"*>

</**head**>

<**body**>

<**nav** class=*"navbar navbar-expand-md bg-dark navbar-dark"*>

<**a** class=*"navbar-brand"* href=*"#"*>Employee Management System</**a**>

<**button** class=*"navbar-toggler"* type=*"button"* data-toggle=*"collapse"* data-target=*"#collapsibleNavbar"*>

<**span** class=*"navbar-toggler-icon"*></**span**>

</**button**>

<**div** class=*"collapse navbar-collapse"* id=*"collapsibleNavbar"*>

<**ul** class=*"navbar-nav"*>

<**li** class=*"nav-item"*>

<**a** class=*"nav-link"* th:href=*"@{/employees}"*>Employee List</**a**>

</**li**>

</**ul**>

</**div**>

</**nav**>

<**div** class=*"container"*>

<**div** class=*"row"*>

<**h1**> List Employees </**h1**>

</**div**>

<**div** class=*"row"*>

<**div** class=*"col-lg-3"*>

<**a** th:href=*"@{/employees/new}"* class=*"btn btn-primary btn-sm mb-3"*> Add Employee</**a**>

</**div**>

</**div**>

<**table** class=*"table table-striped table-bordered"*>

<**thead** class=*"table-dark"*>

<**tr**>

<**th**> Employee ID</**th**>

<**th**> Employee Name</**th**>

<**th**> Job</**th**>

<**th**> Salary</**th**>

<**th**> Department Number</**th**>

<**th**> Actions </**th**>

</**tr**>

</**thead**>

<**tbody**>

<**tr** th:each=*"employee: ${employees}"*>

<**td** th:text=*"${employee.empId}"*></**td**>

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

<**td** th:text=*"${employee.job}"*></**td**>

<**td** th:text=*"${employee.salary}"*></**td**>

<**td** th:text=*"${employee.deptNo}"*></**td**>

<**td**>

<**a** th:href=*"@{/employees/edit/{empId}(empId=${employee.empId})}"* class=*"btn btn-primary"*>Update</**a**>

<**form** th:action=*"@{/employees/{empId}/delete(empId=${employee.empId})}"* method=*"post"* style="display:*inline*;">

<**button** type=*"submit"* class=*"btn btn-danger"*>Delete</**button**>

</**form**>

</**td**>

</**tr**>

</**tbody**>

</**table**>

</**div**>

<**hr**>

<**center**><**h1**>Developed By Mohit Yadav</**h1**></**center**>

<**hr**>

</**body**>

</**html**>

**#create\_employee.html**

<!**DOCTYPE** html>

<**html** xmlns:th=*"http://www.thymeleaf.org"*>

<**head**>

<**meta** charset=*"ISO-8859-1"*>

<**title**>Employee Management System</**title**>

<**link** rel=*"stylesheet"*

href=*"https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css"*

integrity=*"sha384-Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFcJlSAwiGgFAW/dAiS6JXm"*

crossorigin=*"anonymous"*>

</**head**>

<**body**>

<**nav** class=*"navbar navbar-expand-md bg-dark navbar-dark"*>

<!-- Brand -->

<**a** class=*"navbar-brand"* href=*"#"*>Employee Management System</**a**>

<!-- Toggler/collapsible Button -->

<**button** class=*"navbar-toggler"* type=*"button"* data-toggle=*"collapse"* data-target=*"#collapsibleNavbar"*>

<**span** class=*"navbar-toggler-icon"*></**span**>

</**button**>

<!-- Navbar links -->

<**div** class=*"collapse navbar-collapse"* id=*"collapsibleNavbar"*>

<**ul** class=*"navbar-nav"*>

<**li** class=*"nav-item"*>

<**a** class=*"nav-link"* th:href=*"@{/employees}"*>Employee List</**a**>

</**li**>

</**ul**>

</**div**>

</**nav**>

<**br**>

<**br**>

<**div** class=*"container"*>

<**div** class=*"row"*>

<**div** class=*"col-lg-6 col-md-6 col-sm-6 container justify-content-center card"*>

<**h1** class=*"text-center"*> Create New Employee </**h1**>

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

<**form** th:action=*"@{/employees}"* th:object=*"${employee}"* method=*"POST"*>

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

<**label**> Employee Name </**label**>

<**input** type=*"text"* name=*"name"* th:field=*"\*{name}"* class=*"form-control"*

placeholder=*"Enter Employee Name"* />

</**div**>

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

<**label**> Job Title </**label**>

<**input** type=*"text"* name=*"job"* th:field=*"\*{job}"* class=*"form-control"*

placeholder=*"Enter Job Title"* />

</**div**>

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

<**label**> Salary </**label**>

<**input** type=*"number"* name=*"salary"* th:field=*"\*{salary}"* class=*"form-control"*

placeholder=*"Enter Salary"* />

</**div**>

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

<**label**> Department Number </**label**>

<**input** type=*"number"* name=*"deptNo"* th:field=*"\*{deptNo}"* class=*"form-control"*

placeholder=*"Enter Department Number"* />

</**div**>

<**div** class=*"box-footer"*>

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

Submit

</**button**>

</**div**>

</**form**>

</**div**>

</**div**>

</**div**>

</**div**>

<**hr** color=*'red'*>

<**center**><**h1**>Developed By Mohit Yadav</**h1**></**center**>

<**hr** color=*'green'*>

</**body**>

</**html**>

**#edit\_employee.html**

<!**DOCTYPE** html>

<**html** xmlns:th=*"http://www.thymeleaf.org"*>

<**head**>

<**meta** charset=*"ISO-8859-1"*>

<**title**>Employee Management System</**title**>

<**link** rel=*"stylesheet"*

href=*"https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css"*

integrity=*"sha384-Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFcJlSAwiGgFAW/dAiS6JXm"*

crossorigin=*"anonymous"*>

</**head**>

<**body**>

<**nav** class=*"navbar navbar-expand-md bg-dark navbar-dark"*>

<!-- Brand -->

<**a** class=*"navbar-brand"* href=*"#"*>Employee Management System</**a**>

<!-- Toggler/collapsible Button -->

<**button** class=*"navbar-toggler"* type=*"button"* data-toggle=*"collapse"* data-target=*"#collapsibleNavbar"*>

<**span** class=*"navbar-toggler-icon"*></**span**>

</**button**>

<!-- Navbar links -->

<**div** class=*"collapse navbar-collapse"* id=*"collapsibleNavbar"*>

<**ul** class=*"navbar-nav"*>

<**li** class=*"nav-item"*>

<**a** class=*"nav-link"* th:href=*"@{/employees}"*>Employee List</**a**>

</**li**>

</**ul**>

</**div**>

</**nav**>

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

<**div** class=*"container"*>

<**div** class=*"row"*>

<**div** class=*"col-lg-6 col-md-6 col-sm-6 container justify-content-center card"*>

<**h1** class=*"text-center"*>Update Employee</**h1**>

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

<**form** th:action=*"@{/employees/{id} (id=${employee.empId})}"* th:object=*"${employee}"* method=*"POST"*>

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

<**label**> Employee Name </**label**>

<**input** type=*"text"* name=*"name"* th:field=*"\*{name}"* class=*"form-control"*

placeholder=*"Enter Employee Name"* />

</**div**>

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

<**label**> Job Title </**label**>

<**input** type=*"text"* name=*"job"* th:field=*"\*{job}"* class=*"form-control"*

placeholder=*"Enter Job Title"* />

</**div**>

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

<**label**> Salary </**label**>

<**input** type=*"number"* name=*"salary"* th:field=*"\*{salary}"* class=*"form-control"*

placeholder=*"Enter Salary"* />

</**div**>

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

<**label**> Department Number </**label**>

<**input** type=*"number"* name=*"deptNo"* th:field=*"\*{deptNo}"* class=*"form-control"*

placeholder=*"Enter Department Number"* />

</**div**>

<**div** class=*"box-footer"*>

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

Update Employee

</**button**>

</**div**>

</**form**>

</**div**>

</**div**>

</**div**>

</**div**>

<**hr** color=*'red'*>

<**center**><**h1**>Developed By Mohit Yadav</**h1**></**center**>

<**hr** color=*'green'*>

</**body**>

</**html**>

**#employee\_details.html ( for findby id)**

<!**DOCTYPE** html>

<**html** xmlns:th=*"http://www.thymeleaf.org"*>

<**head**>

<**meta** charset=*"ISO-8859-1"*>

<**title**>Employee Details</**title**>

<**link** rel=*"stylesheet"*

href=*"https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css"*>

</**head**>

<**body**>

<**nav** class=*"navbar navbar-expand-md bg-dark navbar-dark"*>

<**a** class=*"navbar-brand"* href=*"#"*>Employee Management System</**a**>

</**nav**>

<**br**>

<**div** class=*"container"*>

<**h2** class=*"text-center"*>Employee Details</**h2**>

<**table** class=*"table table-bordered"*>

<**tr**>

<**th**>Employee ID</**th**>

<**td** th:text=*"${employee.empId}"*></**td**>

</**tr**>

<**tr**>

<**th**>Name</**th**>

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

</**tr**>

<**tr**>

<**th**>Job Title</**th**>

<**td** th:text=*"${employee.job}"*></**td**>

</**tr**>

<**tr**>

<**th**>Salary</**th**>

<**td** th:text=*"${employee.salary}"*></**td**>

</**tr**>

<**tr**>

<**th**>Department Number</**th**>

<**td** th:text=*"${employee.deptNo}"*></**td**>

</**tr**>

</**table**>

<**a** href=*"/employees"* class=*"btn btn-primary"*>Back to Employee List</**a**>

</**div**>

</**body**>

</**html**>

**// OUTPUT //**

**1. listAllEmployees**