**Index.html:**<!DOCTYPE html>

<html lang=*"en"*>

<head>

<meta charset=*"utf-8"*>

<meta name=*"viewport"* content=*"width=device-width,initial-scale=1"*>

<title>Employee Maintenance System</title>

<link href=*"https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"* rel=*"stylesheet"* integrity=*"sha384-EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCOmLASjC"* crossorigin=*"anonymous"*>

<link rel=*"stylesheet"* href=*"https://cdn.jsdelivr.net/npm/bootstrap-icons@1.11.3/font/bootstrap-icons.min.css"*>

<link rel=*"stylesheet"* href=*"https://cdn.jsdelivr.net/npm/sweetalert2@11.12.4/dist/sweetalert2.min.css"*>

</head>

<body>

<header class=*"mb-5"*>

<nav class=*"navbar navbar-expand-lg navbar-light bg-primary"*>

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

<a href=*"#"* class=*"navbar-brand"*>

<img src=*"assets/logo.png"* height=*"40"* alt=*"logo"*>

</a>

</div>

</nav>

</header>

<div class=*"container"*>

<button type=*"button"* class=*"btn btn-primary mb-3"* onclick="triggerAddEmployee()">Add New Employee</button>

<div class=*"card"* style="width: *100%*; height: *700px*;">

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

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

<thead>

<tr>

<th>Employee ID</th>

<th>Employee Name</th>

<th>Employee DOJ</th>

<th>Employee Status</th>

<th>Employee Salary</th>

<th>Action</th>

</tr>

</thead>

<tbody id=*"listingTable"*>

</tbody>

</table>

</div>

</div>

</div>

<div class=*"modal"* id=*"addEmployeeModal"*>

<div class=*"modal-dialog"*>

<div class=*"modal-content"*>

<div class=*"modal-header"*>

<div class=*"modal-title"*>Add Employee</div>

<button type=*"button"* class=*"btn-close"* data-bs-dismiss=*"modal"*></button>

</div>

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

<div class=*"mt-3 mb-3"*>

<label for=*"addEmployeeName"* class=*"form-label"*>Employee Name</label>

<input type=*"text"* class=*"form-control"* id=*"addEmployeeName"* placeholder=*"Enter the name"*>

</div>

<div class=*"mt-3 mb-3"*>

<label for=*"addEmployeeDoj"* class=*"form-label"*>Employee DOJ</label>

<input type=*"date"* class=*"form-control"* id=*"addEmployeeDoj"*>

</div>

<div class=*"mt-3 mb-3"*>

<label for=*"addEmployeeStatus"* class=*"form-label"*>Employee Status</label>

<select type=*"text"* class=*"form-control"* id=*"addEmployeeStatus"*>

<option>Please set Employee Status</option>

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

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

</select>

</div>

<div class=*"mt-3 mb-3"*>

<label for=*"addEmployeeSalary"* class=*"form-label"*>Employee Salary</label>

<input type=*"text"* class=*"form-control"* id=*"addEmployeeSalary"* placeholder=*"Enter the Salary"*>

</div>

<button type=*"button"* class=*"btn btn-secondary"* data-bs-dismiss=*"modal"*>Close</button>

<button type=*"button"* class=*"btn btn-primary"* onclick="triggerSaveEmployee()">Save Employee</button>

</div>

</div>

</div>

</div>

<div class=*"modal"* id=*"editEmployeeModal"*>

<div class=*"modal-dialog"*>

<div class=*"modal-content"*>

<div class=*"modal-header"*>

<div class=*"modal-title"*>Edit Employee</div>

<button type=*"button"* class=*"btn-close"* data-bs-dismiss=*"modal"*></button>

</div>

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

<div class=*"mt-3 mb-3"*>

<label for=*"editEmployeeName"* class=*"form-label"*>Employee Name</label>

<input type=*"text"* class=*"form-control"* id=*"editEmployeeName"* placeholder=*"Enter the name"*>

</div>

<div class=*"mt-3 mb-3"*>

<label for=*"editEmployeeDoj"* class=*"form-label"*>Employee DOJ</label>

<input type=*"date"* class=*"form-control"* id=*"editEmployeeDoj"*>

</div>

<div class=*"mt-3 mb-3"*>

<label for=*"editEmployeeStatus"* class=*"form-label"*>Employee Status</label>

<select type=*"text"* class=*"form-control"* id=*"editEmployeeStatus"*>

<option>Please set Employee Status</option>

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

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

</select>

</div>

<div class=*"mt-3 mb-3"*>

<label for=*"editEmployeeSalary"* class=*"form-label"*>Employee Salary</label>

<input type=*"text"* class=*"form-control"* id=*"editEmployeeSalary"* placeholder=*"Enter the Salary"*>

</div>

<input type=*"hidden"* id=*"editEmployeeId"*>

<button type=*"button"* class=*"btn btn-secondary"* data-bs-dismiss=*"modal"*>Close</button>

<button type=*"button"* class=*"btn btn-primary"* onclick="triggerUpdateEmployee()">Update Employee</button>

</div>

</div>

</div>

</div>

<footer class=*"bg-primary mt-5"*>

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

<div class=*"row"*>

<div class=*"text-white text-center"*>

<p>All Rights Reserved | &copy 2024</p>

</div>

</div>

</div>

</footer>

<script src=*"https://code.jquery.com/jquery-3.7.1.js"* integrity=*"sha256-eKhayi8LEQwp4NKxN+CfCh+3qOVUtJn3QNZ0TciWLP4="* crossorigin=*"anonymous"*></script>

<script src=*"https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"* integrity=*"sha384-MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/tWtIaxVXM"* crossorigin=*"anonymous"*></script>

<script src=*"https://cdn.jsdelivr.net/npm/sweetalert2@11.12.4/dist/sweetalert2.all.min.js"*></script>

<script>

loadEmployees();

**function** loadEmployees(){

**var** html="";

$.ajax({

type:"get",

url:"http://localhost:8082/api/employee",

contentType:"application/json",

dataType:"json",

success:**function**(data){

**var** html="";

**for**(**var** i=0;i<data.length;i++){

**var** badge = data[i]['status']==1?"bg-success":"bg-secondary";

**var** status = data[i]['status']==1?"Active":"Retired";

html =html+"<tr>"+

"<td>"+data[i]['id']+"</td>"+

"<td>"+data[i]['name']+"</td>"+

"<td>"+data[i]['doj']+"</td>"+

"<td><span class='badge rounded-pill "+badge+"'><span class='text-white'>"+status+"</span></span></td>"+

"<td>"+data[i]['salary']+"</td>"+

"<td>"+

"<i class='bi bi-pencil-square text-primary fs-5' onclick='triggerEditEmployee("+data[i]["id"]+")'></i>"+

"<i class='bi bi-trash2 text-danger fs-5' onclick='triggerDeleteEmployee("+data[i]["id"]+")'></i>"+

"</td>"+

"</tr>";

}

$("#listingTable").html(html);

},

error:**function**(){

Swal.fire("Error!",'Something Went Wrong','error')

}

});

}

**function** triggerAddEmployee(){

$("#addEmployeeModal").modal('show');

}

**function** triggerSaveEmployee(){

**var** name = $("#addEmployeeName").val();

**var** doj = $("#addEmployeeDoj").val();

**var** status = $("#addEmployeeStatus").val();

**var** salary = $("#addEmployeeSalary").val();

$.ajax({

type:"post",

url:"http://localhost:8082/api/employee",

contentType:"application/json",

dataType:"json",

data:JSON.stringify({

"name":name,

"doj":doj,

"status":status,

"salary":salary

}),

success:**function**(){

Swal.fire("Saved!",'Employee has been Saved Successfully!','success')

loadEmployees();

},

error:**function**(){

Swal.fire("Error!",'Something Went Wrong!','error')

}

});

$("#addEmployeeModal").modal('hide');

}

**function** triggerEditEmployee(id){

$.ajax({

type:"get",

url:"http://localhost:8082/api/employee/"+id,

contentType:"application/json",

dataType:"json",

success:**function**(data){

**var** date = **new** Date(data.doj);

$("#editEmployeeName").val(data.name);

$("#editEmployeeDoj").val(date.toISOString().substring(0,10));

$("#editEmployeeStatus").val(data.status);

$("#editEmployeeSalary").val(data.salary);

$("#editEmployeeId").val(data.id);

$("#editEmployeeModal").modal('show');

},

error:**function**(){

Swal.fire("Error!",'Something Went Wrong!','error')

}

});

}

**function** triggerUpdateEmployee(){

**var** name = $("#editEmployeeName").val();

**var** doj = $("#editEmployeeDoj").val();

**var** status = $("#editEmployeeStatus").val();

**var** salary = $("#editEmployeeSalary").val();

**var** id = $("#editEmployeeId").val();

$.ajax({

type:"put",

url:"http://localhost:8082/api/employee/"+id,

contentType:"application/json",

dataType:"json",

data:JSON.stringify({"name":name,"doj":doj,"status":status,"salary":salary}),

success:**function**(){

Swal.fire("Updated!",'Employee has been Updated Successfully!','success')

loadEmployees();

},

error:**function**(){

Swal.fire("Error!",'Something Went Wrong!','error')

}

});

$("#editEmployeeModal").modal('hide');

}

**function** triggerDeleteEmployee(id){

Swal.fire({

title:"Are you sure?",

text:"You cannot reverse this operation",

icon:"warning",

showCancelButton:**true**,

confirmButtonColor:'#3085d6',

cancelButtonColor:'#d33',

confirmButtonText:"Proceed"

}).then((result)=>{

**if**(result.isConfirmed){

$.ajax({

type:"delete",

url:"http://localhost:8082/api/employee/"+id,

contentType:"application/json",

dataType:"json",

error:**function**(){

Swal.fire("Deleted!",'Employee has been Deleted Successfully!','success')

loadEmployees();

}

});

}

})

}

</script>

</body>

</html>

**application.properties:**server.port=8082

spring.jpa.hibernate.ddl-auto=update

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

spring.datasource.username=root

spring.datasource.password=12345678

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

spring.jpa.show-sql:true

server.error.include-exception=true

server.error.include-stacktrace=always

**CrudApplication.java:**package com.employee.crud;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication

public class CrudApplication {

public static void main(String[] args) {

SpringApplication.run(CrudApplication.class, args);

}

}

**Employee.java:**

package com.employee.crud.entity;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue;

import javax.persistence.GenerationType;

import javax.persistence.Id;

@Entity

public class Employee {

@Id

@GeneratedValue(strategy = GenerationType.AUTO)

private Long id;

private String name;

private String doj;

private int status;

private float salary;

public Employee() {}

public Employee(String name, String doj, int status, float salary) {

this.name=name;

this.doj=doj;

this.status=status;

this.salary=salary;

}

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 getDoj() {

return doj;

}

public void setDoj(String doj) {

this.doj=doj;

}

public float getSalary() {

return salary;

}

public void setSalary(float salary) {

this.salary=salary;

}

public int getStatus() {

return status;

}

public void setStatus(int status) {

this.status=status;

}

}  
**EmployeeRepository.java:**

package com.employee.crud.repository;

import com.employee.crud.entity.Employee;

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

import org.springframework.stereotype.Repository;

@Repository

public interface EmployeeRepository extends JpaRepository<Employee,Long> {

}

**EmployeeService.java:**package com.employee.crud.service;

import com.employee.crud.entity.Employee;

import java.util.List;

public interface EmployeeService {

Employee saveEmployee(Employee employee);

List<Employee> fetchAllEmployees();

Employee getEmployeeById(Long id);

Employee updateEmployeeById(Long id,Employee employee);

String deleteEmployeeById(Long id);

}

EmployeeServiceImpl.java:  
package com.employee.crud.service;

import com.employee.crud.entity.Employee;

import com.employee.crud.repository.EmployeeRepository;

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

import org.springframework.stereotype.Service;

import java.util.List;

import java.util.Objects;

import java.util.Optional;

@Service

public class EmployeeServiceImpl implements EmployeeService {

@Autowired

private EmployeeRepository employeeRepository;

@Override

public Employee saveEmployee(Employee employee) {

return employeeRepository.save(employee);

}

@Override

public List<Employee> fetchAllEmployees(){

List<Employee> allEmployees = employeeRepository.findAll();

return allEmployees;

}

@Override

public Employee getEmployeeById(Long id) {

Optional<Employee> employee = employeeRepository.findById(id);

if(employee.isPresent()) {

return employee.get();

}else {

return null;

}

}

@Override

public Employee updateEmployeeById(Long id, Employee employee) {

Optional<Employee> employee1 = employeeRepository.findById(id);

if(employee1.isPresent()) {

Employee originalEmployee = employee1.get();

if(Objects.nonNull(employee.getName()) && !"".equalsIgnoreCase(employee.getName())){

originalEmployee.setName(employee.getName());

}

if(Objects.nonNull(employee.getDoj()) && employee.getDoj()!=""){

originalEmployee.setDoj(employee.getDoj());

}

if(Objects.nonNull(employee.getSalary()) && employee.getSalary()!= 0){

originalEmployee.setSalary(employee.getSalary());

}

if(Objects.nonNull(employee.getStatus()) && employee.getStatus()!=-1){

originalEmployee.setStatus(employee.getStatus());

}

return employeeRepository.save(originalEmployee);

}

return null;

}

@Override

public String deleteEmployeeById(Long id) {

if(employeeRepository.findById(id).isPresent()) {

employeeRepository.deleteById(id);

return "Employee Deleted Successfully";

}

return "Employee by this ID doesn't Exist";

}

}

**EmployeeController.java:**package com.employee.crud.controller;

import com.employee.crud.entity.Employee;

import com.employee.crud.service.EmployeeService;

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

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

import java.util.List;

@CrossOrigin(origins="http://localhost")

@RestController

public class EmployeeController {

@Autowired

private EmployeeService employeeService;

@PostMapping("/api/employee")

public Employee saveEmployee(@RequestBody Employee employee) {

return employeeService.saveEmployee(employee);

}

@GetMapping("/api/employee")

public List<Employee> getAllEmployees(){

return employeeService.fetchAllEmployees();

}

@GetMapping("/api/employee/{id}")

public Employee getEmployeeById(@PathVariable("id") Long id) {

return employeeService.getEmployeeById(id);

}

@PutMapping("/api/employee/{id}")

public Employee UpdateEmployeeId(@PathVariable("id") Long id,@RequestBody Employee employee) {

return employeeService.updateEmployeeById(id, employee);

}

@DeleteMapping("/api/employee/{id}")

public String deleteEmployee(@PathVariable("id") Long id) {

return employeeService.deleteEmployeeById(id);

}

}

**crud/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>2.7.5</version>

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

</parent>

<groupId>com.employee</groupId>

<artifactId>crud</artifactId>

<version>0.0.1-SNAPSHOT</version>

<name>crud</name>

<description>Employee API Provider</description>

<url/>

<licenses>

<license/>

</licenses>

<developers>

<developer/>

</developers>

<scm>

<connection/>

<developerConnection/>

<tag/>

<url/>

</scm>

<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-thymeleaf</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-test</artifactId>

<scope>test</scope>

</dependency>

<dependency>

<groupId>javax.persistence</groupId>

<artifactId>javax.persistence-api</artifactId>

<version>2.2</version><!--$NO-MVN-MAN-VER$-->

</dependency>

</dependencies>

<build>

<plugins>

<plugin>

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

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

</plugin>

</plugins>

</build>

</project>