package com.bean;

import org.springframework.context.annotation.Scope;

import org.springframework.stereotype.Component;

@Component

@Scope("prototype")

public class Employee {

private int id;

private String name;

private float salary;

public Employee() {

super();

// TODO Auto-generated constructor stub

}

public Employee(int id, String name, float salary) {

super();

this.id = id;

this.name = name;

this.salary = salary;

}

public int getId() {

return id;

}

public void setId(int id) {

this.id = id;

}

public String getName() {

return name;

}

public void setName(String name) {

this.name = name;

}

public float getSalary() {

return salary;

}

public void setSalary(float salary) {

this.salary = salary;

}

@Override

public String toString() {

return "Employee [id=" + id + ", name=" + name + ", salary=" + salary + "]";

}

}

package com.dao;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.util.List;

import java.util.Map;

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

import org.springframework.jdbc.core.JdbcTemplate;

import org.springframework.jdbc.core.RowMapper;

import org.springframework.stereotype.Repository;

import com.bean.Employee;

@Repository

public class EmployeeDao {

@Autowired

JdbcTemplate jdbcTemplate;

public int storeEmployee(Employee employee) {

try {

return jdbcTemplate.update("insert into employee values(?,?,?)", employee.getId(),employee.getName(),employee.getSalary());

} catch (Exception e) {

System.err.println(e);

return 0;

}

}

public int updateEmployee(Employee employee) {

try {

return jdbcTemplate.update("update employee set salary = ? where id = ?",employee.getSalary(),employee.getId());

} catch (Exception e) {

System.err.println(e);

return 0;

}

}

public int deleteEmployee(int id) {

try {

return jdbcTemplate.update("delete from employee where id =?", id);

} catch (Exception e) {

System.err.println(e);

return 0;

}

}

public List<Map<String, Object>> findEmployee() {

try {

return jdbcTemplate.queryForList("select \* from employee");

} catch (Exception e) {

System.err.println(e);

return null;

}

}

public List<Employee> findEmployeeByRowMapper() {

try {

return jdbcTemplate.query("select \* from employee", new MyRowMapper());

} catch (Exception e) {

System.err.println(e);

return null;

}

}

}

// this class is responsible to convert each record as employee objects.

class MyRowMapper implements RowMapper<Employee>{

@Override

public Employee mapRow(ResultSet rs, int rowNum) throws SQLException { // it is use to map the row

Employee emp = new Employee();

emp.setId(rs.getInt(1));

emp.setName(rs.getString(2));

emp.setSalary(rs.getFloat(3));

return emp;

}

}

package com.main;

import java.util.Iterator;

import java.util.List;

import java.util.Map;

import java.util.Scanner;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

import com.bean.Employee;

import com.service.EmployeeService;

public class App {

public static void main(String[] args) {

// TODO Auto-generated method stub

Scanner sc = new Scanner(System.in);

String con = "";

int id;

String name;

float salary;

ApplicationContext ac = new ClassPathXmlApplicationContext("beans.xml");

EmployeeService es = (EmployeeService)ac.getBean("employeeService");

Employee emp = (Employee)ac.getBean("employee");

String result;

do {

System.out.println("1:Add 2: Update 3: Delete 4: Find Employee in map 5 : Find Employee in List");

System.out.println("enter your choice");

int choice = sc.nextInt();

switch (choice) {

case 1:System.out.println("Enter the id");

id = sc.nextInt();

System.out.println("Enter the name");

name = sc.next();

System.out.println("Enter the salary");

salary = sc.nextFloat();

emp.setId(id);

emp.setName(name);

emp.setSalary(salary);

result = es.storeEmployee(emp);

System.out.println(result);

break;

case 2:System.out.println("Enter the id");

id = sc.nextInt();

System.out.println("Enter the salary");

salary = sc.nextFloat();

emp.setId(id);

emp.setSalary(salary);

result = es.updateEmployee(emp);

System.out.println(result);

break;

case 3:System.out.println("Enter the id");

id = sc.nextInt();

result = es.deleteEmployee(id);

System.out.println(result);

break;

case 4:System.out.println("All employee in map");

List<Map<String, Object>> ll = es.findEmployeeInMapFormat();

Iterator<Map<String, Object>> li = ll.iterator();

while(li.hasNext()) {

Map<String, Object> mm = li.next();

System.out.println(mm); // in string format as map

}

break;

case 5:System.out.println("All Employee in list");

List<Employee> ll1 = es.findEmployeeInListFormat();

Iterator<Employee> li1 = ll1.iterator();

while(li1.hasNext()){

Employee emp1 = li1.next();

System.out.println(emp1);

}

break;

default:System.out.println("Wrong choice");

break;

}

System.out.println("do you want to continue?");

con = sc.next();

} while (con.equalsIgnoreCase("y"));

}

}  
  
  
  
  
  
  
  
  
package com.service;

import java.util.List;

import java.util.Map;

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

import org.springframework.stereotype.Service;

import com.bean.Employee;

import com.dao.EmployeeDao;

@Service

public class EmployeeService {

@Autowired

EmployeeDao employeeDao;

public String storeEmployee(Employee employee) {

if(employeeDao.storeEmployee(employee)>0) {

return "Employee record stored successfully";

}else {

return "Employee record didn't store";

}

}

public String updateEmployee(Employee employee) {

if(employeeDao.updateEmployee(employee)>0) {

return "Employee record updated successfully";

}else {

return "Employee record didn't update";

}

}

public String deleteEmployee(int id) {

if(employeeDao.deleteEmployee(id)>0) {

return "Employee record deleted successfully";

}else {

return "Employee record didn't delete";

}

}

public List<Map<String, Object>> findEmployeeInMapFormat() {

return employeeDao.findEmployee();

}

public List<Employee> findEmployeeInListFormat() {

return employeeDao.findEmployeeByRowMapper();

}

}