1)

package com.textfield.controller;

public class Reservation {

private String firstName;

private String lastName;

private String Gender;

private String[] Food;

private String CityFrom;

private String CityTo;

public Reservation() {

}

public String getFirstName() {

return firstName;

}

public String getLastName() {

return lastName;

}

public void setFirstName(String firstName) {

this.firstName = firstName;

}

public void setLastName(String lastName) {

this.lastName = lastName;

}

public String getGender() {

return Gender;

}

public String[] getFood() {

return Food;

}

public void setGender(String gender) {

Gender = gender;

}

public void setFood(String[] food) {

Food = food;

}

public String getCityFrom() {

return CityFrom;

}

public String getCityTo() {

return CityTo;

}

public void setCityFrom(String cityFrom) {

CityFrom = cityFrom;

}

public void setCityTo(String cityTo) {

CityTo = cityTo;

}

}

package com.textfield.controller;

import org.springframework.stereotype.Controller;

import org.springframework.ui.Model;

import org.springframework.web.bind.annotation.ModelAttribute;

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

@RequestMapping("/reservation")

@Controller

public class ReservationController {

@RequestMapping("/bookingForm")

public String bookingForm(Model model) {

Reservation res=new Reservation();

model.addAttribute("reservation",res);

return "reservation-page";

}

@RequestMapping("/submitForm")

public String submitForm(@ModelAttribute("reservation") Reservation res) {

return "confirmation-form";

}

}

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"

pageEncoding="ISO-8859-1"%>

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

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<h3>Reservation Form</h3>

<body>

<p>Your reservation is confirmed Successfully.Please,re-check the details.</p>

First Name: ${reservation.firstName} <br>

Last Name: ${reservation.lastName}<br>

Gender: ${reservation.gender}<br>

Meals:

<ul>

<c:forEach var="meal" items="${reservation.food}">

<li>${meal}</li>

</c:forEach>

</ul>

Leaving From: ${reservation.cityFrom }<br>

Going To: ${reservation.cityTo }<br>

</body>

</html>

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"

pageEncoding="ISO-8859-1"%>

<%@ taglib prefix="form" uri="http://www.springframework.org/tags/form" %>

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<h3>Reservation Form</h3>

<body>

<form:form action="submitForm" modelAttribute="reservation">

First name:<form:input path="firstName"/>

<br><br>

Last name:<form:input path="lastName"/>

<br><br>

Gender:

Male<form:radiobutton path="Gender" value="Male"/>

Female<form:radiobutton path="Gender" value="Female"/>

<br><br>

Meals:

BreakFast<form:checkbox path="Food" value="BreakFast"/>

Lunch<form:checkbox path="Food" value="Lunch"/>

Dinner<form:checkbox path="Food" value="Dinner"/>

<br><br>

Leaving from: <form:select path="cityFrom">

<form:option value="Bihar" label="Bihar"></form:option>

<form:option value="UP" label="UP"></form:option>

<form:option value="Meerut" label="Meerut"></form:option>

<form:option value="Rajsthan" label="Rajsthan"></form:option>

</form:select>

<br><br>

Going to:<form:select path="cityTo">

<form:option value="Meerut" label="Meerut"></form:option>

<form:option value="UP" label="UP"></form:option>

<form:option value="Bihar" label="Bihar"></form:option>

<form:option value="Amritshar" label="Amritshar"></form:option>

<input type="submit" value="Submit"/>

</form:select>

</form:form>

</body>

</html>

<?xml version="1.0" encoding="UTF-8"?>

<beans xmlns="http://www.springframework.org/schema/beans"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xmlns:context="http://www.springframework.org/schema/context"

xmlns:mvc="http://www.springframework.org/schema/mvc"

xsi:schemaLocation="http://www.springframework.org/schema/beans http://www.springframework.org/schema/beans/spring-beans.xsd

http://www.springframework.org/schema/context http://www.springframework.org/schema/context/spring-context.xsd

http://www.springframework.org/schema/mvc

http://www.springframework.org/schema/mvc/spring-mvc.xsd">

<context:component-scan base-package="com.textfield.controller">

</context:component-scan>

<mvc:annotation-driven/>

<bean id="viewResolver" class="org.springframework.web.servlet.view.InternalResourceViewResolver">

<property name="prefix" value="/WEB-INF/jsp/"></property>

<property name="suffix" value=".jsp"></property>

</bean>

</beans>

<?xml version="1.0" encoding="UTF-8"?>

<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xmlns="http://java.sun.com/xml/ns/javaee"

xsi:schemaLocation="http://java.sun.com/xml/ns/javaee http://java.sun.com/xml/ns/javaee/web-app\_3\_0.xsd"

id="WebApp\_ID" version="3.0">

<display-name>SpringMVC-Example</display-name>

<servlet>

<servlet-name>spring</servlet-name>

<servlet-class>org.springframework.web.servlet.DispatcherServlet</servlet-class>

<load-on-startup>1</load-on-startup>

</servlet>

<servlet-mapping>

<servlet-name>spring</servlet-name>

<url-pattern>/</url-pattern>

</servlet-mapping>

</web-app>

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"

pageEncoding="ISO-8859-1"%>

<!DOCTYPE html>

<html>

<head>

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

<title>Railway Registration Form</title>

</head>

<body>

<a href="reservation/bookingForm">Click here for reservation.</a>

</body>

</html>

<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>

<groupId>com.textfield.controller</groupId>

<artifactId>SpringMVC</artifactId>

<version>0.0.1-SNAPSHOT</version>

<packaging>war</packaging>

<dependencies>

<dependency>

<groupId>junit</groupId>

<artifactId>junit</artifactId>

<version>3.8.1</version>

<scope>test</scope>

</dependency>

<dependency>

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

<artifactId>tomcat-jasper</artifactId>

<version>9.0.12</version></dependency>

<dependency>

<groupId>org.springframework</groupId>

<artifactId>spring-webmvc</artifactId>

<version>5.1.1.RELEASE</version>

</dependency>

<!-- https://mvnrepository.com/artifact/javax.servlet/javax.servlet-api -->

<dependency>

<groupId>javax.servlet</groupId>

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

<version>4.0.0</version>

<scope>provided</scope>

</dependency>

<!-- https://mvnrepository.com/artifact/javax.servlet/jstl -->

<dependency>

<groupId>javax.servlet</groupId>

<artifactId>jstl</artifactId>

<version>1.2</version>

</dependency>

</dependencies>

<build>

<plugins>

<plugin>

<artifactId>maven-compiler-plugin</artifactId>

<version>3.8.1</version>

<configuration>

<source>1.8</source>

<target>1.8</target>

</configuration>

</plugin>

<plugin>

<artifactId>maven-war-plugin</artifactId>

<version>3.2.3</version>

</plugin>

</plugins>

</build>

</project>

--------------------------------------------------

2)

package com.validation;

import javax.validation.constraints.Max;

import javax.validation.constraints.Min;

import com.validation.customvalidation.Password;

public class Employee {

private String name;

@Password

private String password;

@Min(value=18,message="must be equal or greater than 18")

@Max(value=45,message="must be equal or less than 45")

private int age;

public String getName() {

return name;

}

public String getPassword() {

return password;

}

public int getAge() {

return age;

}

public void setName(String name) {

this.name = name;

}

public void setPassword(String password) {

this.password = password;

}

public void setAge(int age) {

this.age = age;

}

}

package com.validation;

import org.springframework.ui.Model;

@Controller

public class EmployeeController {

@RequestMapping("/hello")

public String showForm(Model theModel) {

theModel.addAttribute("emp",new Employee());

return "viewpage";

}

@RequestMapp

}

package com.validation.customvalidation;

import java.lang.annotation.ElementType;

import java.lang.annotation.Retention;

import java.lang.annotation.RetentionPolicy;

import java.lang.annotation.Target;

import javax.validation.Constraint;

import javax.validation.Payload;

@Constraint(validatedBy=PasswordConstraintValidator.class)

@Target({ElementType.METHOD,ElementType.FIELD})

@Retention(RetentionPolicy.RUNTIME)

public @interface Password {

public String message() default "must contain jtp";

public Class<?>[] groups() default{};

public Class<? extends Payload>[] payload() default {};

}

package com.validation.customvalidation;

import javax.validation.ConstraintValidator;

import javax.validation.ConstraintValidatorContext;

public class PasswordConstraintValidator implements ConstraintValidator<Password,String> {

public boolean isValid(String s,ConstraintValidator cvc) {

boolean result=s.contains("jtp");

return result;

}

}

<%@ page language="java" contentType="text/html; charset=UTF-8"

pageEncoding="UTF-8"%><%@ taglib prefix="form" uri="http://www.springframework.org/tags/form" %>

<!DOCTYPE html>

<html>

<head>

<style>

.error{color:red}

</style>

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

<title>Insert title here</title>

</head>

<body>

<form:form action="helloagain" modelAttribute="emp">

Username: <form:input path="name"/><br><br>

Password(\*):<form:password path="pass"/>

<form:errors path="pass" cssClass="error">

</form:errors><br><br>

<input type="submit" value="submit">

</form:form>

</body>

</html>

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"

pageEncoding="ISO-8859-1"%>

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

Username: ${emp.name }<br><br>

Password: ${emp.pass }

</body>

</html>

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"

pageEncoding="ISO-8859-1"%>

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

<a href="hello">Click here</a>

</body>

</html>

<?xml version="1.0" encoding="UTF-8"?>

<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xmlns="http://java.sun.com/xml/ns/javaee"

xsi:schemaLocation="http://java.sun.com/xml/ns/javaee http://java.sun.com/xml/ns/javaee/web-app\_3\_0.xsd"

id="WebApp\_ID" version="3.0">

<display-name>SpringMVC-Example</display-name>

<servlet>

<servlet-name>spring</servlet-name>

<servlet-class>org.springframework.web.servlet.DispatcherServlet</servlet-class>

<load-on-startup>1</load-on-startup>

</servlet>

<servlet-mapping>

<servlet-name>spring</servlet-name>

<url-pattern>/</url-pattern>

</servlet-mapping>

</web-app>

<?xml version="1.0" encoding="UTF-8"?>

<beans xmlns="http://www.springframework.org/schema/beans"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xmlns:context="http://www.springframework.org/schema/context"

xmlns:mvc="http://www.springframework.org/schema/mvc"

xsi:schemaLocation="http://www.springframework.org/schema/beans http://www.springframework.org/schema/beans/spring-beans.xsd

http://www.springframework.org/schema/context http://www.springframework.org/schema/context/spring-context.xsd

http://www.springframework.org/schema/mvc

http://www.springframework.org/schema/mvc/spring-mvc.xsd">

<context:component-scan base-package="com.springValidation">

</context:component-scan>

<mvc:annotation-driven/>

<bean id="viewResolver" class="org.springframework.web.servlet.view.InternalResourceViewResolver">

<property name="prefix" value="/WEB-INF/jsp/"></property>

<property name="suffix" value=".jsp"></property>

</bean>

</beans>

-----------------------------------

3)

package com.CRUD.beans;

public class Emp {

private int id;

private String name;

private float salary;

private String designation;

public int getId() {

return id;

}

public String getName() {

return name;

}

public float getSalary() {

return salary;

}

public String getDesignation() {

return designation;

}

public void setId(int id) {

this.id = id;

}

public void setName(String name) {

this.name = name;

}

public void setSalary(float salary) {

this.salary = salary;

}

public void setDesignation(String designation) {

this.designation = designation;

}

}

package com.CRUD.controllers;

import java.util.List;

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

import org.springframework.ui.Model;

import org.springframework.web.bind.annotation.ModelAttribute;

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

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

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

import com.CRUD.beans.Emp;

import com.CRUDdao.EmpDao;

public class EmpController {

@Autowired

EmpDao dao;

@RequestMapping("/empform")

public String showform(Model m) {

m.addAttribute("command",new Emp());

return "empform";

}

@RequestMapping(value="/save",method=RequestMethod.POST)

public String save(@ModelAttribute("emp") Emp emp) {

dao.save(emp);

return "redirect:/viewemp";

}

@RequestMapping("/viewemp")

public String viewemp(Model m) {

List<Emp> list=dao.getEmployees();

m.addAttribute("list",list);

return "viewemp";

}

@RequestMapping(value="/editemp/{id}")

public String edit(@PathVariable int id,Model m) {

Emp emp=dao.getEmpById(id);

m.addAttribute("command",emp);

return "empeditform";

}

@RequestMapping(value="/editsave",method=RequestMethod.POST)

public String editsave(@ModelAttribute("emp")Emp emp) {

dao.update(emp);

return "redirect:/viewemp";

}

@RequestMapping(value="/deleteemp/{id}",method=RequestMethod.GET)

public String delete(@PathVariable int id) {

dao.delete(id);

return "redirect:/viewemp";

}

}

package com.CRUDdao;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.util.List;

import org.springframework.jdbc.core.BeanPropertyRowMapper;

import org.springframework.jdbc.core.JdbcTemplate;

import org.springframework.jdbc.core.RowMapper;

import com.CRUD.beans.Emp;

public class EmpDao {

JdbcTemplate template;

public void setTemplate(JdbcTemplate template) {

this.template=template;

}

public int save(Emp p) {

String sql="insert into Emp99(name,salary,designation) values('"+p.getName()+"',"+p.getSalary()+",'"

+p.getDesignation()+"')";

return template.update(sql);

}

public int update(Emp p) {

String sql="update into Emp99(name,salary,designation) values('"+p.getName()+"',"+p.getSalary()+",'"

+p.getDesignation()+"')";

return template.update(sql);

}

public int delete(int id) {

String sql="delete from Emp99 where id="+id+"";

return template.update(sql);

}

public Emp getEmpById(int id) {

String sql="select \* from Emp99 where id=?";

return template.queryForObject(sql,new Object[] {id},new BeanPropertyRowMapper<Emp>(Emp.class));

}

public List<Emp> getEmployees(){

return template.query("select \* from Emp99",new RowMapper<Emp>(){

public Emp mapRow(ResultSet rs,int row)throws SQLException{

Emp e=new Emp();

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

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

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

e.setDesignation(rs.getString(4));

return e;

}

});

}

}

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"

pageEncoding="ISO-8859-1"%>

<%@ taglib uri="http://www.springframework.org/tags/form" prefix="form"%>

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

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

<h1>Edit Employee</h1>

<form:form method="POST" action="/SpringMVCCrud/editsave">

<table>

<tr>

<td></td>

<td><form:hidden path="id"/></td>

</tr>

<tr>

<td>Name:</td>

<td><form:input path="name"/></td>

</tr>

<tr>

<td>Salary :</td>

<td><form:input path="salary"/></td>

</tr>

<tr>

<td>Designation :</td>

<td><form:input path="designation"/></td>

</tr>

<tr>

<td> </td>

<td><input type="submit" value="Edit Save"/></td>

</tr>

</table>

</form:form>

</body>

</html>

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"

pageEncoding="ISO-8859-1"%>

<%@ taglib uri="http://www.springframework.org/tags/form" prefix="form"%>

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

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

<h1>Add New Employee</h1>

<form:form method="post" action="save">

<table>

<tr>

<td>Name :</td>

<td><form:input path="name"/></td>

</tr>

<tr>

<td>Salary :</td>

<td><form:input path="salary"/></td>

</tr>

<tr>

<td>Designation :</td>

<td><form:input path="designation"/></td>

</tr>

<tr>

<td> </td>

<td><input type="submit" value="Save"/></td>

</tr>

</table>

</form:form>

</body>

</html>

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"

pageEncoding="ISO-8859-1"%>

<%@ taglib uri="http://www.springframework.org/tags/form" prefix="form"%>

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

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

<h1>Employees List</h1>

<table border="2" width="70%" cellpadding="2">

<tr><th>Id</th><th>Name</th><th>Salary</th><th>Designation</th><th>Edit</th><th>Delete</th></tr>

<c:forEach var="emp" items="${list }">

<tr>

<td>${emp.id }</td>

<td>${emp.name }</td>

<td>${emp.salary }</td>

<td>${emp.designation }</td>

<td><a href="editemp/${emp.id}">Edit</a></td>

<td><a href="deleteemp/${emp.id}">Delete</a></td>

</c:forEach>

</table>

<br>

<a href="empform">Add New Employee</a>

</body>

</html>

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"

pageEncoding="ISO-8859-1"%>

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

<h2>Welcome to Employee's Portal</h2><br>

<a href="empform">Add Employee</a>

<a href="viewemp">View Employee</a>

</body>

</html>

<?xml version="1.0" encoding="UTF-8"?>

<beans xsi:schemaLocation="http://www.springframework.org/schema/beans http://www.springframework.org/schema/beans/spring-beans-3.0.xsd http://www.springframework.org/schema/context http://www.springframework.org/schema/context/spring-context-3.0.xsd" xmlns:context="http://www.springframework.org/schema/context" xmlns:p="http://www.springframework.org/schema/p" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.springframework.org/schema/beans">

<context:component-scan base-package="com.CRUD.controllers"/>

<bean class="org.springframework.web.servlet.view.InternalResourceViewResolver">

<property value="/WEB-INF/jsp/" name="prefix"/>

<property value=".jsp" name="suffix"/>

</bean>

<bean class="org.springframework.jdbc.datasource.DriverManagerDataSource" id="ds">

<property value="com.mysql.cj.jdbc.Driver" name="driverClassName"/>

<property value="jdbc:mysql://localhost:3306/springDB" name="url"/>

<property value="root" name="username"/>

<property value="ankit54321" name="password"/>

</bean>

<bean class="org.springframework.jdbc.core.JdbcTemplate" id="jt">

<property name="dataSource" ref="ds"/>

</bean>

<bean class="com.CRUDdao.EmpDao" id="dao">

<property name="template" ref="jt"/>

</bean>

</beans>