**SOURCE CODE**

**Main Controller.java**

**package com.controller;**

**import java.io.IOException;**

**import java.io.PrintWriter;**

**import java.math.BigDecimal;**

**import java.text.ParseException;**

**import java.text.SimpleDateFormat;**

**import java.util.Date;**

**import javax.servlet.ServletException;**

**import javax.servlet.http.HttpServletRequest;**

**import javax.servlet.http.HttpServletResponse;**

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

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

**import org.springframework.ui.ModelMap;**

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

**import com.dao.EProductDao;**

**import com.entity.EProductEntity;**

**import org.apache.log4j.Logger;**

**@Controller**

**public class MainController {**

**@Autowired**

**EProductDao dao;**

**private Logger logger = Logger.getLogger(MainController.class);**

**@GetMapping("/productid")**

**public String getProduct(HttpServletRequest request,ModelMap map, HttpServletResponse response) {**

**long id=Long.parseLong(request.getParameter("id"));**

**if(id>0)**

**{**

**EProductEntity entity=dao.getProductById(id);**

**logger.info("This Is An Info Log Entry ......!");**

**logger.info(entity);**

**map.addAttribute("obj",entity);**

**return "details";**

**}**

**else**

**{**

**try {**

**try {**

**request.getRequestDispatcher("/index.jsp").include(request, response);**

**response.setContentType("text/html");**

**PrintWriter out = response.getWriter();**

**out.println("Oops!!Invalid Credentials:)");**

**} catch (ServletException e) {**

**e.printStackTrace();**

**}**

**} catch (IOException e) {**

**e.printStackTrace();**

**}**

**}**

**return null;**

**}**

**@GetMapping("/update")**

**public String updateProduct(HttpServletRequest request,ModelMap map) {**

**long id=Long.parseLong(request.getParameter("id"));**

**String name=request.getParameter("name");**

**BigDecimal price = new BigDecimal(request.getParameter("price"));**

**{**

**EProductEntity entity= new EProductEntity();**

**entity.setId(id);**

**entity.setName(name);**

**entity.setPrice(price);**

**dao.updateProduct(entity);**

**map.addAttribute("obj",entity);**

**return "details";**

**}**

**}**

**}**

**EProductDao.java**

**package com.dao;**

**import java.sql.ResultSet;**

**import java.sql.SQLException;**

**import java.util.List;**

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

**import org.springframework.dao.DataAccessException;**

**import org.springframework.jdbc.core.JdbcTemplate;**

**import org.springframework.jdbc.core.ResultSetExtractor;**

**import org.springframework.jdbc.core.RowMapper;**

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

**import com.entity.EProductEntity;**

**public class EProductDao {**

**@Autowired**

**JdbcTemplate jdbcTemplate;**

**public List<EProductEntity> getAllProducts() {**

**return jdbcTemplate.query("select \* from eproduct", new RowMapper<EProductEntity>() {**

**public EProductEntity mapRow(ResultSet rs, int rowNum) throws SQLException {**

**EProductEntity obj = new EProductEntity();**

**obj.setId(rs.getLong(1));**

**obj.setName(rs.getString(2));**

**obj.setPrice(rs.getBigDecimal(3));**

**return obj;**

**}**

**});**

**}**

**public EProductEntity getProductById(long id) {**

**return jdbcTemplate.query("select \* from eproduct where id=" + id, new ResultSetExtractor<EProductEntity>() {**

**public EProductEntity extractData(ResultSet rs) throws SQLException, DataAccessException {**

**if (rs.next()) {**

**EProductEntity obj = new EProductEntity();**

**obj.setId(rs.getLong(1));**

**obj.setName(rs.getString(2));**

**obj.setPrice(rs.getBigDecimal(3));**

**return obj;**

**}**

**return null;**

**}**

**});**

**}**

**public void updateProduct(EProductEntity obj) {**

**if (obj.getId() > 0) {**

**String sql = "update eproduct set name=?,price=? where id=?";**

**jdbcTemplate.update(sql, obj.getName(), obj.getPrice(),obj.getId());**

**} else {**

**String sql = "insert into eproduct (name,price) values (?,?)";**

**jdbcTemplate.update(sql, obj.getName(), obj.getPrice());**

**}**

**}**

**}**

**Eproduct.Entity**

**package com.entity;**

**import java.math.BigDecimal;**

**public class EProductEntity {**

**private long id;**

**private String name;**

**private BigDecimal price;**

**public EProductEntity() {**

**}**

**public EProductEntity(String name, BigDecimal price) {**

**super();**

**this.name = name;**

**this.price = price;**

**}**

**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 BigDecimal getPrice() {**

**return price;**

**}**

**public void setPrice(BigDecimal price) {**

**this.price = price;**

**}**

**@Override**

**public String toString() {**

**return "EProductEntity [id=" + id + ", name=" + name + ", price=" + price + "]";**

**}**

**}**

**Details.jsp**

**<%@ 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>**

**<body>**

**<h3>Products Details Page</h3>**

**<c:set var=*"product"* value=*"*${obj }*"*></c:set>**

**Id: ${product.id } <br>**

**Name: ${product.name } <br>**

**Price: ${product.price } <br><br>**

**<a href=*"update.jsp"*>Click here to update a product</a> <br><br>**

**<a href=*"index.jsp"*>Click here go to home page</a>**

**</body>**

**</html>**

**//web.xml**

**<web-app>**

**<display-name>Archetype Created Web Application</display-name>**

**<servlet>**

**<servlet-name>test</servlet-name>**

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

**</servlet>**

**<servlet-mapping>**

**<servlet-name>test</servlet-name>**

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

**</servlet-mapping>**

**<context-param>**

**<param-name>contextConfigLocation</param-name>**

**<param-value>/WEB-INF/test-servlet.xml</param-value>**

**</context-param>**

**<listener>**

**<listener-class>org.springframework.web.context.ContextLoaderListener</listener-class>**

**</listener>**

</web-app>

//**update.jsp**

**<%@ 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>Enter details:</h2>**

**<form action=*"update"*>**

**<input type=*"number"* name=*"id"* placeholder=*"Enter product id"*><br>**

**<input type=*"text"* name=*"name"* placeholder=*"Enter product name"*><br>**

**<input type=*"number"* name=*"price"* placeholder=*"Enter product price"*><br>**

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

**</form>**

**</body>**

**</html>**

**//test-servlet.xml**

**<?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"***

**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"*>**

**<context:annotation-config></context:annotation-config>**

**<!-- jsp output -->**

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

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

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

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

**</bean>**

**<!-- database -->**

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

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

**<property name=*"url"* value=*"jdbc:mysql://localhost:3306/ecommerce1"*></property>**

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

**<property name=*"password"* value=*"Harsha@16201"*></property>**

**</bean>**

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

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

**</bean>**

**<bean id=*"dao"* class=*"com.dao.EProductDao"*></bean>**

**</beans>**

**//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 http://maven.apache.org/xsd/maven-4.0.0.xsd">**

**<modelVersion>4.0.0</modelVersion>**

**<groupId>com.PracticeProjects</groupId>**

**<artifactId>ProductUpdate</artifactId>**

**<version>0.0.1-SNAPSHOT</version>**

**<packaging>war</packaging>**

**<name>ProductUpdate Maven Webapp</name>**

**<!-- FIXME change it to the project's website -->**

**<url>http://www.example.com</url>**

**<properties>**

**<project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>**

**<maven.compiler.source>1.7</maven.compiler.source>**

**<maven.compiler.target>1.7</maven.compiler.target>**

**</properties>**

**<dependencies>**

**<dependency>**

**<groupId>junit</groupId>**

**<artifactId>junit</artifactId>**

**<version>4.11</version>**

**<scope>test</scope>**

**</dependency>**

**<!--spring context-->**

**<dependency>**

**<groupId>org.springframework</groupId>**

**<artifactId>spring-context</artifactId>**

**<version>5.3.22</version>**

**</dependency>**

**<!--spring core-->**

**<dependency>**

**<groupId>org.springframework</groupId>**

**<artifactId>spring-core</artifactId>**

**<version>5.3.22</version>**

**</dependency>**

**<!--Spring beans-->**

**<dependency>**

**<groupId>org.springframework</groupId>**

**<artifactId>spring-beans</artifactId>**

**<version>5.3.22</version>**

**</dependency>**

**<!--spring web-->**

**<dependency>**

**<groupId>org.springframework</groupId>**

**<artifactId>spring-web</artifactId>**

**<version>5.3.22</version>**

**</dependency>**

**<!--spring webmvc-->**

**<dependency>**

**<groupId>org.springframework</groupId>**

**<artifactId>spring-webmvc</artifactId>**

**<version>5.3.22</version>**

**</dependency>**

**<!-- https://mvnrepository.com/artifact/org.springframework/spring-jdbc -->**

**<dependency>**

**<groupId>org.springframework</groupId>**

**<artifactId>spring-jdbc</artifactId>**

**<version>5.3.22</version>**

**</dependency>**

**<!--mysql connector-->**

**<dependency>**

**<groupId>mysql</groupId>**

**<artifactId>mysql-connector-java</artifactId>**

**<version>8.0.19</version>**

**</dependency>**

**<!--java servlet jstl-->**

**<dependency>**

**<groupId>javax.servlet</groupId>**

**<artifactId>jstl</artifactId>**

**<version>1.2</version>**

**</dependency>**

**<!--java servlet API-->**

**<dependency>**

**<groupId>javax.servlet</groupId>**

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

**<version>4.0.1</version>**

**<scope>provided</scope>**

**</dependency>**

**<!-- https://mvnrepository.com/artifact/log4j/log4j -->**

**<dependency>**

**<groupId>log4j</groupId>**

**<artifactId>log4j</artifactId>**

**<version>1.2.17</version>**

**</dependency>**

**</dependencies>**

**<build>**

**<finalName>ProductUpdate</finalName>**

**<pluginManagement><!-- lock down plugins versions to avoid using Maven defaults (may be moved to parent pom) -->**

**<plugins>**

**<plugin>**

**<artifactId>maven-clean-plugin</artifactId>**

**<version>3.1.0</version>**

**</plugin>**

**<!-- see http://maven.apache.org/ref/current/maven-core/default-bindings.html#Plugin\_bindings\_for\_war\_packaging -->**

**<plugin>**

**<artifactId>maven-resources-plugin</artifactId>**

**<version>3.0.2</version>**

**</plugin>**

**<plugin>**

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

**<version>3.8.0</version>**

**</plugin>**

**<plugin>**

**<artifactId>maven-surefire-plugin</artifactId>**

**<version>2.22.1</version>**

**</plugin>**

**<plugin>**

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

**<version>3.2.2</version>**

**</plugin>**

**<plugin>**

**<artifactId>maven-install-plugin</artifactId>**

**<version>2.5.2</version>**

**</plugin>**

**<plugin>**

**<artifactId>maven-deploy-plugin</artifactId>**

**<version>2.8.2</version>**

**</plugin>**

**</plugins>**

**</pluginManagement>**

**</build>**

**</project>**

**//log4j.xml**

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

**<!DOCTYPE log4j:configuration SYSTEM**

**"http://logging.apache.org/log4j/1.2/apidocs/org/apache/log4j/xml/doc-files/log4j.dtd">**

**<log4j:configuration xmlns:log4j=*"http://jakarta.apache.org/log4j/"*>**

**<appender name=*"Appender1"* class=*"org.apache.log4j.ConsoleAppender"*>**

**<layout class=*"org.apache.log4j.PatternLayout"*>**

**<param name=*"ConversionPattern"* value=*"%-7p %d [%t] %c %x - %m%n"* />**

**</layout>**

**</appender>**

**<appender name=*"Appender2"* class=*"org.apache.log4j.FileAppender"*>**

**<param name=*"File"* value=*"./Product\_Update/logs/springmvc.log"* />**

**<layout class=*"org.apache.log4j.PatternLayout"*>**

**<param name=*"ConversionPattern"* value=*"%-7p %d [%t] %c %x - %m%n"* />**

**</layout>**

**</appender>**

**<root>**

**<level value=*"INFO"* />**

**<appender-ref ref=*"Appender1"* />**

**<appender-ref ref=*"Appender2"* />**

**</root>**

**</log4j:configuration>**