**Project objective:**

Create a Spring MVC web application that will retrieve users based on their user ID. The retrieved user data will then be edited in a form and updated in the database. The entire database processing has to be done using Hibernate. Front pages will be made in JSP.

**Problem statement:**

As a part of developing an ecommerce web application, the admin backend requires a module that can retrieve users based on their user ID and update their information as required.

**Source Code**

index.jsp

<html>

<body>

<h2>Enter ID</h2>

<form action=*"list"*>

Enter ID: <input type=*"text"* name=*"id"* />

<input type = *"submit"* value = *"Search"*/>

</form>

</body>

</html>

edit.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>

<form action=*"edit"*>

Enter ID: <input type=*"text"* name=*"id"* />

Enter Product Name: <input type=*"text"* name=*"name"* />

Enter Price: <input type=*"text"* name=*"price"* />

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

</form>

</body>

</html>

EProductEntity

package com.org;

import java.math.BigDecimal;

import javax.persistence.Column;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue;

import javax.persistence.GenerationType;

import javax.persistence.Id;

import javax.persistence.Table;

@Entity

@Table(name="Products")

public class EProductEntity {

@Id

@GeneratedValue(strategy = GenerationType.AUTO)

@Column(name="ID")

private int id;

private String name;

private BigDecimal price;

public long 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 BigDecimal getPrice() {

return price;

}

public void setPrice(BigDecimal price) {

this.price = price;

}

}

ProductService

package com.org;

import java.math.BigDecimal;

import java.util.List;

public interface ProductService {

public List<EProductEntity> searchById(int pid);

public List<EProductEntity> updateDetails(int id, String name, BigDecimal price);

}

ProductServiceImpl

package com.org;

import java.math.BigDecimal;

import java.util.List;

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

import org.springframework.stereotype.Service;

import org.springframework.transaction.annotation.Transactional;

@Service

@Transactional

public class ProductServiceImpl implements ProductService {

@Autowired

private EProductDAO eproductDAO;

public List<EProductEntity> searchById(int pid) {

return eproductDAO.searchById(pid);

}

public List<EProductEntity> updateDetails(int id, String name, BigDecimal price) {

return eproductDAO.updateDetails(id,name,price);

}

}

EProductDAO

package com.org;

import java.math.BigDecimal;

import java.util.List;

import org.hibernate.SessionFactory;

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

import org.springframework.stereotype.Repository;

@Repository

public class EProductDAO {

@Autowired

private SessionFactory sessionFactory;

public List<EProductEntity> searchById(int pid) {

return this.sessionFactory.getCurrentSession().createQuery("from EProductEntity where ID="+pid).list();

}

public List<EProductEntity> updateDetails(int id,String name, BigDecimal price) {

EProductEntity e=new EProductEntity();

e.setName(name);

e.setPrice(price);

sessionFactory.getCurrentSession().update(e, id);

return this.sessionFactory.getCurrentSession().createQuery("from EProductEntity where ID="+id).list();

}

}

MainController

package com.org;

import java.math.BigDecimal;

import java.util.List;

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

import org.springframework.stereotype.Controller;

import org.springframework.ui.ModelMap;

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

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

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

@Controller

public class MainController {

@Autowired

ProductService eproductService;

@RequestMapping(value = "/list",method = RequestMethod.GET)

public String listProduct(@RequestParam("id") int pid, ModelMap map)

{

map.addAttribute("eproduct", new EProductEntity());

map.addAttribute("list",eproductService.searchById(pid));

return "list";

}

@RequestMapping(value = "/edit",method = RequestMethod.GET)

public String updatedList(@RequestParam("id") int id, @RequestParam("name") String n, @RequestParam("price") BigDecimal p, ModelMap map)

{

map.addAttribute("eproduct", new EProductEntity());

map.addAttribute("list",eproductService.updateDetails(id,n,p));

return "list";

}

}

hibernate.cfg.xml

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

<!DOCTYPE hibernate-configuration PUBLIC

"-//Hibernate/Hibernate Configuration DTD 3.0//EN"

"http://www.hibernate.org/dtd/hibernate-configuration-3.0.dtd">

<hibernate-configuration>

<session-factory>

<mapping class=*"com.org.EProductEntity"*/>

</session-factory>

</hibernate-configuration>

jdbc.properties

jdbc.driverClassName=com.mysql.jdbc.Driver

jdbc.dialect=org.hibernate.dialect.MySQLDialect

jdbc.databaseurl=jdbc:mysql://127.0.0.1:3306/test

jdbc.username=root

jdbc.password=password

main-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:p=*"http://www.springframework.org/schema/p"*

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

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

xmlns:tx=*"http://www.springframework.org/schema/tx"*

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*

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

*http://www.springframework.org/schema/mvc/spring-mvc-3.0.xsd*

*http://www.springframework.org/schema/tx*

*http://www.springframework.org/schema/tx/spring-tx-3.0.xsd"* >

<context:annotation-config />

<context:component-scan

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

<bean id=*"jspViewResolver"*

class=*"org.springframework.web.servlet.view.InternalResourceViewResolver"*>

<property name=*"viewClass"*

value=*"org.springframework.web.servlet.view.JstlView"*></property>

<property name=*"prefix"* value=*"/view/"*></property>

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

</bean>

<bean id=*"propertyConfigurer"*

class=*"org.springframework.beans.factory.config.PropertyPlaceholderConfigurer"*

p:location=*"/WEB-INF/jdbc.properties"*>

</bean>

<bean id=*"dataSource"*

class=*"org.apache.commons.dbcp.BasicDataSource"*

destroy-method=*"close"* p:driverClassName=*"${jdbc.driverClassName}"*

p:url=*"${jdbc.databaseurl}"* p:username=*"${jdbc.username}"*

p:password=*"${jdbc.password}"*>

</bean>

<bean id=*"sessionFactory"*

class=*"org.springframework.orm.hibernate3.LocalSessionFactoryBean"*>

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

<property name=*"configLocation"*>

<value>classpath:hibernate.cfg.xml</value>

</property>

<property name=*"configurationClass"*>

<value>org.hibernate.cfg.AnnotationConfiguration</value>

</property>

<property name=*"hibernateProperties"*>

<props>

<prop key=*"hibernate.dialect"*>${jdbc.dialect}</prop>

<prop key=*"hibernate.show\_sql"*>true</prop>

</props>

</property>

</bean>

<bean id=*"eproductDAO"* class=*"com.org.EProductDAO"*></bean>

<bean id=*"eproductService"* class=*"com.org.ProductServiceImpl"*></bean>

<tx:annotation-driven />

<bean id=*"transactionManager"*

class=*"org.springframework.orm.hibernate3.HibernateTransactionManager"*>

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

</bean>

</beans>

web.xml

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

<web-app>

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

<welcome-file-list>

<welcome-file>index.jsp</welcome-file>

</welcome-file-list>

<servlet>

<servlet-name>main</servlet-name>

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

</servlet>

<servlet-mapping>

<servlet-name>main</servlet-name>

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

</servlet-mapping>

<context-param>

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

<param-value>/WEB-INF/main-servlet.xml</param-value>

</context-param>

<listener>

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

</listener>

</web-app>

list.jsp

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

pageEncoding=*"ISO-8859-1"* isELIgnored=*"false"* %>

<%@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>

<h1>List</h1>

<table class=*"data"*>

<tr>

<th>Id</th><th>Name</th><th>Price</th>

</tr>

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

<tr>

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

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

<td>${product.price}</td>

</tr>

</c:forEach>

</table>

<br><a href=*"edit.jsp"*>Click here to edit values</a>

</body>

</html>