**Product Details Portal Source Code:**

***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>

<property name="hibernate.connection.driver\_class">com.mysql.cj.jdbc.Driver</property>

<property name="hibernate.connection.password">Rajadilip@2320</property>

<property name="hibernate.connection.url">jdbc:mysql://localhost:3306/practice</property>

<property name="hibernate.connection.username">root</property>

<property name="hibernate.dialect">org.hibernate.dialect.MySQL8Dialect</property>

<property name="hibernate.hbm2ddl.auto">update</property>

<mapping class="com.pd.entity.Product"/>

</session-factory>

</hibernate-configuration>

***Index.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>

<h1>Welcome to product app</h1>

<a href="addProduct.jsp">Add Product</a> <br><br>

<a href="ProductController">Display Products</a>

</body>

</html>

***addProduct.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>

<h1>Add Products</h1>

<form action="ProductController" method="post">

<label>Enter product name</label>

<input type="text" name="pname"> <br> <br>

<label>Enter product price</label>

<input type="number" name="price"> <br> <br>

<input type="submit" name="Store Product">

<input type="reset" name="Reset">

</form>

<a href="index.jsp">Back</a>

</body>

</html>

***displayProduct.jsp***

<%@page import="java.util.Iterator"%>

<%@page import="com.pd.entity.Product"%>

<%@page import="java.util.List"%>

<%@page import="org.hibernate.Session"%>

<%@ 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>

<h1>Display Products</h1>

<table border = 1>

<tr>

<th> PID </th>

<th> PNAME </th>

<th> PRICE </th>

</tr>

<%

Object obj = session.getAttribute("product");

List<Product> listofProduct = (List<Product>)obj;

Iterator<Product> li = listofProduct.iterator();

while(li.hasNext()){

Product p = li.next();

%>

<tr>

<td> <%=p.getPid() %> </td>

<td> <%=p.getPname() %> </td>

<td> <%=p.getPrice() %> </td>

</tr>

<%

}

%>

</table>

<a href="index.jsp">Back</a>

</body>

</html>

***Product.java***

package com.pd.entity;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue;

import javax.persistence.GenerationType;

import javax.persistence.Id;

@Entity

public class Product {

@Id

@GeneratedValue(strategy = GenerationType.IDENTITY)

private int pid;

private String pname;

private float price;

public Product() {

super();

// TODO Auto-generated constructor stub

}

public Product(int pid, String pname, float price) {

super();

this.pid = pid;

this.pname = pname;

this.price = price;

}

public int getPid() {

return pid;

}

public void setPid(int pid) {

this.pid = pid;

}

public String getPname() {

return pname;

}

public void setPname(String pname) {

this.pname = pname;

}

public float getPrice() {

return price;

}

public void setPrice(float price) {

this.price = price;

}

@Override

public String toString() {

return "Product [pid=" + pid + ", pname=" + pname + ", price=" + price + "]";

}

}

***ProductResource.java***

package com.pd.resource;

import org.hibernate.SessionFactory;

import org.hibernate.cfg.Configuration;

public class ProductResource {

static SessionFactory sf;

static {

Configuration con = new Configuration();

con.configure("hibernate.cfg.xml");

sf = con.buildSessionFactory();

}

public static SessionFactory getSessionFactory() {

try {

return sf;

}catch(Exception e) {

System.out.println(e);

return null;

}

}

}

***ProductDAO.java***

package com.pd.dao;

import java.util.List;

import javax.persistence.TypedQuery;

import org.hibernate.Session;

import org.hibernate.SessionFactory;

import org.hibernate.Transaction;

import com.pd.entity.Product;

import com.pd.resource.ProductResource;

public class ProductDAO {

public int storeProduct(Product p) {

try {

SessionFactory sf = ProductResource.getSessionFactory();

Session session = sf.openSession();

Transaction tt = session.getTransaction();

tt.begin();

session.save(p);

tt.commit();

return 1;

}catch(Exception e) {

System.out.println(e);

return 0;

}

}

public List<Product> retriveAllProducts(){

try {

SessionFactory sf = ProductResource.getSessionFactory();

Session session = sf.openSession();

TypedQuery tq = session.createQuery("from Product");

List<Product> listofProduct = tq.getResultList();

return listofProduct;

}catch(Exception e) {

return null;

}

}

}

***ProductService.java***

package com.pd.service;

import java.util.List;

import com.pd.dao.ProductDAO;

import com.pd.entity.Product;

public class ProductService {

ProductDAO pd = new ProductDAO();

public String storeProduct(Product p) {

if(pd.storeProduct(p)>0) {

return "Product stored Successfully";

}

else {

return "Product not stored";

}

}

public List<Product> retriveAllProduct(){

return pd.retriveAllProducts();

}

}

***ProductController.java (Servlet)***

package com.pd.controller;

import java.io.IOException;

import java.io.PrintWriter;

import java.util.List;

import javax.servlet.RequestDispatcher;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import javax.servlet.http.HttpSession;

import com.pd.entity.Product;

import com.pd.service.ProductService;

@WebServlet("/ProductController")

public class ProductController extends HttpServlet {

private static final long serialVersionUID = 1L;

public ProductController() {

super();

// TODO Auto-generated constructor stub

}

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

ProductService ps = new ProductService();

List<Product> listofProduct = ps.retriveAllProduct();

HttpSession hs = request.getSession();

hs.setAttribute("product", listofProduct);

response.sendRedirect("displayProduct.jsp");

response.setContentType("text/html");

}

protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

PrintWriter out = response.getWriter();

String pname = request.getParameter("pname");

float price = Float.parseFloat(request.getParameter("price"));

Product p = new Product();

p.setPname(pname);

p.setPrice(price);

ProductService ps = new ProductService();

String result = ps.storeProduct(p);

out.println(result);

RequestDispatcher rs = request.getRequestDispatcher("addProduct.jsp");

rs.include(request, response);

response.setContentType("text/html");

}

}