# **Product Parts Class (ProductParts.java)**

**package** com;

**public** **class** ProductParts {

**private** String hdd;

**private** String cpu;

**private** String ram;

**public** ProductParts() {

}

**public** ProductParts(String hdd, String cpu, String ram) {

**this**.hdd = hdd;

**this**.cpu = cpu;

**this**.ram = ram;

}

**public** String getHdd() {

**return** hdd;

}

**public** **void** setHdd(String hdd) {

**this**.hdd = hdd;

}

**public** String getCpu() {

**return** cpu;

}

**public** **void** setCpu(String cpu) {

**this**.cpu = cpu;

}

**public** String getRam() {

**return** ram;

}

**public** **void** setRam(String ram) {

**this**.ram = ram;

}

}

# **E – Product Class (EProduct.java)**

package com;

import java.math.BigDecimal;

import java.util.Date;

public class EProduct {

private long ID;

private String name;

private BigDecimal price;

private Date dateAdded;

private ProductParts parts;

public EProduct() {

}

public EProduct(String name, BigDecimal price, ProductParts parts) {

this.name = name;

this.price = price;

this.parts = parts;

}

public long getID() {

return ID;

}

public void setID(long iD) {

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;

}

public Date getDateAdded() {

return dateAdded;

}

public void setDateAdded(Date dateAdded) {

this.dateAdded = dateAdded;

}

public ProductParts getParts() {

return parts;

}

public void setParts(ProductParts parts) {

this.parts = parts;

}

}

# **Index.jsp file**

<%@ 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="save" method="post">

Name: &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;

&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;

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

Price: &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;

&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;

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

Hard Disk Details: <input type="text" name="hdd"><br><br>

CPU: &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;

&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;

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

RAM: &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;

&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;

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

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

</form>

</body>

</html>

# **Save Servlet (SaveServlet.java)**

package com;

import java.io.IOException;

import java.io.PrintWriter;

import java.math.BigDecimal;

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 org.hibernate.Session;

import org.hibernate.SessionFactory;

import org.hibernate.Transaction;

@WebServlet("/save")

public class SaveServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

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

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

String price = request.getParameter("pprice");

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

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

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

ProductParts parts = new ProductParts(hdd, cpu, ram);

EProduct product = new EProduct(name, new BigDecimal(price), parts);

response.setContentType("text/html");

SessionFactory factory= HibernateUtil.getSessionFactory();

Session session= factory.openSession();

Transaction t = session.beginTransaction();

session.save(product);

t.commit();

response.sendRedirect("jstlSql.jsp");

}

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

// TODO Auto-generated method stub

doGet(request, response);

}

}

# **Show Details Code (jstlSql.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"*%>

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

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

<sql:setDataSource var=*"db"* driver=*"com.mysql.cj.jdbc.Driver"*

url=*"jdbc:mysql://localhost:3306/component"* user=*"root"* password=*"abdul@mysql1"* />

<sql:query var=*"rs"* dataSource=*"*${db }*"*>

select \* from eproduct;

</sql:query>

<table>

<tr> <th>ID</th> <th>Name</th> <th>Price</th> <th>Date</th> </tr>

<c:forEach var=*"product"* items=*"*${rs.rows }*"*>

<tr>

<td> <c:out value=*"*${product.id }*"*></c:out> </td>

<td> <c:out value=*"*${product.name }*"*></c:out> </td>

<td> <c:out value=*"*${product.Price }*"*></c:out> </td>

<td> <c:out value=*"*${product.date\_Added }*"*></c:out> </td>

</tr>

</c:forEach>

</table>

</body>

</html>

# **Hibernate Utility Class (HibernateUtil.java)**

**package com;**

**import org.hibernate.SessionFactory;**

**import org.hibernate.boot.Metadata;**

**import org.hibernate.boot.MetadataSources;**

**import org.hibernate.boot.registry.StandardServiceRegistry;**

**import org.hibernate.boot.registry.StandardServiceRegistryBuilder;**

**public class HibernateUtil {**

**private static SessionFactory sessionFactory;**

**static {**

**try {**

**StandardServiceRegistry registry= new StandardServiceRegistryBuilder().**

**configure("hibernate.cfg.xml").build();**

**Metadata metadata= new MetadataSources(registry).getMetadataBuilder().build();**

**sessionFactory= metadata.getSessionFactoryBuilder().build();**

**} catch (Exception e) {**

**e.printStackTrace();**

**}**

**}**

**public static SessionFactory getSessionFactory() {**

**return sessionFactory;**

**}**

**}**