**Github link:-**  https://github.com/santhoshsai4517/Simplilearn\_Phase2\_3.21

**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>Add product</title>

</head>

<body>

<form action=*"AddProductServlet"* method=*"post"*>

<!-- Form fields for product name, description, and price -->

<!-- Add validation if needed -->

<input type=*"text"* name=*"name"* placeholder=*"Product Name"* required /><br />

<textarea name=*"description"* placeholder=*"Product Description"* required></textarea><br />

<input type=*"text"* name=*"price"* placeholder=*"Price"* required /><br />

<input type=*"submit"* value=*"Add Product"* />

</form>

</body>

</html>

**productAdded.jsp**

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

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

<!DOCTYPE html>

<html>

<head>

<meta charset=*"UTF-8"*>

<title>Product Added</title>

</head>

<body>

<h1>Product Added Successfully</h1>

<p>Your product has been added to the database.</p>

<p><a href=*"index.jsp"*>Go back to the Home Page</a></p>

</body>

</html>

**HibernateUtil.java**

**package** com.ecommerce;

**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** **final** SessionFactory ***sessionFactory***;

**static** {

**try** {

StandardServiceRegistry standardRegistry = **new** StandardServiceRegistryBuilder()

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

Metadata metaData = **new** MetadataSources(standardRegistry).getMetadataBuilder().build();

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

} **catch** (Throwable th) {

**throw** **new** ExceptionInInitializerError(th);

}

}

**public** **static** SessionFactory getSessionFactory() {

**return** ***sessionFactory***;

}

}

**Product.java**

**package** com.ecommerce;

**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** Product {

@Id

@GeneratedValue(strategy = GenerationType.***IDENTITY***)

**private** **int** id;

**private** String name;

**private** String description;

**private** BigDecimal price;

// public Product(int id, String name, String description, BigDecimal price) {

// super();

// this.id = id;

// this.name = name;

// this.description = description;

// this.price = price;

// }

**public** **int** 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** String getDescription() {

**return** description;

}

**public** **void** setDescription(String description) {

**this**.description = description;

}

**public** BigDecimal getPrice() {

**return** price;

}

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

**this**.price = price;

}

}

**Product.hbm.xml**

<?xml version=*"1.0"*?>

<!DOCTYPE hibernate-mapping PUBLIC

"-//Hibernate/Hibernate Mapping DTD 3.0//EN"

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

<hibernate-mapping>

<class name=*"com.ecommerce.Product"* table=*"products"*>

<id name=*"id"* column=*"id"*>

<generator class=*"identity"* />

</id>

<property name=*"name"* />

<property name=*"description"* />

<property name=*"price"* />

</class>

</hibernate-mapping>

**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>

<!-- Database connection settings -->

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

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

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

<property name=*"hibernate.connection.password"*></property>

<!-- Specify dialect -->

<property name=*"hibernate.dialect"*>org.hibernate.dialect.MySQLDialect</property>

<!-- Specify mapping files -->

<mapping resource=*"com/ecommerce/Product.hbm.xml"* />

<mapping class=*"com.ecommerce.Product"* />

</session-factory>

</hibernate-configuration>

**AddProductServlet.java**

**import** java.io.IOException;

**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** java.io.IOException;

**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;

**import** com.ecommerce.HibernateUtil;

**import** com.ecommerce.Product;

/\*\*

\* Servlet implementation class AddProductServlet

\*/

@WebServlet("/AddProductServlet")

**public** **class** AddProductServlet **extends** HttpServlet {

**private** **static** **final** **long** ***serialVersionUID*** = 1L;

/\*\*

\* **@see** HttpServlet#HttpServlet()

\*/

**public** AddProductServlet() {

**super**();

// **TODO** Auto-generated constructor stub

}

/\*\*

\* **@see** HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)

\*/

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

// **TODO** Auto-generated method stub

response.getWriter().append("Served at: ").append(request.getContextPath());

}

/\*\*

\* **@see** HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)

\*/

**protected** **void** doPost(HttpServletRequest request, HttpServletResponse response)

**throws** ServletException, IOException {

// Retrieve form data

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

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

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

// Create a Product object

Product product = **new** Product();

product.setName(name);

product.setDescription(description);

product.setPrice(price);

// Save the product using Hibernate

SessionFactory sessionFactory = HibernateUtil.*getSessionFactory*();

Session session = sessionFactory.openSession();

Transaction transaction = session.beginTransaction();

session.save(product);

transaction.commit();

session.close();

// Redirect to a confirmation page or display a message

response.sendRedirect("productAdded.jsp");

}

}

**Web.xml**

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

<web-app xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xmlns=*"http://xmlns.jcp.org/xml/ns/javaee"* xsi:schemaLocation=*"http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-app\_4\_0.xsd"* id=*"WebApp\_ID"* version=*"4.0"*>

<display-name>HibernateLazyCollections</display-name>

<welcome-file-list>

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

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

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

<welcome-file>default.html</welcome-file>

<welcome-file>default.htm</welcome-file>

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

</welcome-file-list>

<servlet>

<servlet-name>AddProductServlet</servlet-name>

<servlet-class>AddProductServlet</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>AddProductServlet</servlet-name>

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

</servlet-mapping>

</web-app>