**Adding a New Product in the Database**

DESCRIPTION

Project objective:

Create a servlet-based web application that shows a form to add new products. A MySQL database will be created to store product data. The form data will be validated, and a row will be added to the database. All database processing will be done using Hibernate.

Background of the problem statement:

As a part of developing an e-commerce web application, you have to create a database table for storing product information. A form is needed to add new products. The form submission is validated, and a new record is created in the product table.

You must use the following:

● Eclipse as the IDE

● Apache Tomcat as the web server

● JSP pages for the front end

● Servlets for backend processing

● Hibernate to store data into the database

Following requirements should be met:

● Show an add product form in JSP

● Handle the form submission in a servlet. Validate it for any missing information

● Add the product information into the database using Hibernate

● Set up Hibernate configuration files using XML for the product table

● A class has to be created to store product data. This class will be linked to Hibernate via an hbm.xml file

● The servlet will put the form data into the product class and then pass the product class into Hibernate to add into the database

● The step-by-step process involved in completing this task should be documented.

**SOURCE CODE**

**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>

<form action=read-product" method="get" >

<label for="id">id:</label><br> <input type="text" id="id"

name="id"><br>

<label for="name">Name:</label><br> <input type="text" id="name"

name="name"><br>

<label for="location">Price:</label><br> <input type="text" id="location"

name="location"><br>

<br> <input type="submit" value="Submit"

onclick="addproduct\_onclick()">

</form>

<p style="text-align: center">

<a href="index2.html">Back to Home Page</a>

</p>

</body>

</html>

**Index.html**:-

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

<h1> Add Product</h1>

<form method="get" action=aaa">

<fieldset>

<legend>Add Product form</legend>

Product Name: <input type="text" name="name" id="name" /><br/><br/>

Product Price: <input type="text" name="price" id = "price" /> <br/><br/>

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

</fieldset>

</form>

</body>

</html>

**Index2.html**:-

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

<h1>Welcome to Hibernate CRUD application</h1>

<h2>Welcome to eCommerce Website</h2>

<h2>Add Product</h2>

<a href="aaa">List Products</a> <br>

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

</body>

</html>

**Web.xml**:-

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

<!DOCTYPE hibernate-configuration SYSTEM

"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.url">jdbc:mysql://localhost:3306/mphasis\_practice</property>

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

<property name="hibernate.connection.password">1234</property>

<!-- Optional properties -->

<property name="hibernate.show\_sql">true</property>

<property name="hibernate.format\_sql">true</property>

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

</session-factory>

</hibernate-configuration>

**Web2.xml**:-

<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 https://maven.apache.org/xsd/maven-4.0.0.xsd">

<modelVersion>4.0.0</modelVersion>

<groupId>Hibernate\_27012022</groupId>

<artifactId>Hibernate\_27012022</artifactId>

<version>0.0.1-SNAPSHOT</version>

<packaging>war</packaging>

<build>

<plugins>

<plugin>

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

<version>3.8.1</version>

<configuration>

<release>17</release>

</configuration>

</plugin>

<plugin>

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

<version>3.2.3</version>

</plugin>

</plugins>

</build>

<dependencies>

<dependency>

<groupId>org.hibernate</groupId>

<artifactId>hibernate-core</artifactId>

<version>5.6.5.Final</version>

</dependency>

<dependency>

<groupId>mysql</groupId>

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

<version>8.0.28</version>

</dependency>

</dependencies>

</project>