**Adding a New Product in the Database with Hibernate**

**Source Code:**

Java Code:

//AddProduct

package com.hib;

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;

import com.hib.HibernateUtil;

import com.hib.Product;

@WebServlet("/save")

public class AddProduct extends HttpServlet {

@Override

protected void doGet(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {

// TODO Auto-generated method stub

PrintWriter out=resp.getWriter();

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

String price=req.getParameter("price");

String company=req.getParameter("Company");

Product product=new Product(name,new BigDecimal(price),company);

SessionFactory factory=HibernateUtil.getSessionFactory();

Session session=factory.openSession();

Transaction tx= session.beginTransaction();

//System.out.print("Session Started");

session.save(product);

tx.commit();

session.close();

out.print("Data Added Successfully");

}

@Override

protected void doPost(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {

// TODO Auto-generated method stub

doGet(req, resp);

}

}

//Hibernate Util.java

package com.hib;

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) {

// TODO: handle exception

e.printStackTrace();

System.out.print("Error message"+e.getMessage());

}

}

public static SessionFactory getSessionFactory() {

return sessionFactory;

}

}

//Product.java

package com.hib;

import java.math.BigDecimal;

import javax.persistence.Entity;

@Entity

public class Product {

private int id;

private String name;

private BigDecimal price;

private String Company;

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 BigDecimal getPrice() {

return price;

}

public void setPrice(BigDecimal price) {

this.price = price;

}

public String getCompany() {

return Company;

}

public void setCompany(String company) {

Company = company;

}

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

super();

this.id = id;

this.name = name;

this.price = price;

Company = company;

}

public Product() {

super();

// TODO Auto-generated constructor stub

}

public Product(String name, BigDecimal price, String company) {

super();

this.name = name;

this.price = price;

Company = company;

}

@Override

public String toString() {

return "Product [id=" + id + ", name=" + name + ", price=" + price + ", Company=" + Company + "]";

}

}

//Hibernate configuration xml files

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

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

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

<property name="connection.password">Shivavalli@1</property>

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

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

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

<mapping resource="product.hbm.xml"/>

</session-factory>

</hibernate-configuration>

//product.hbm.xml

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

<!DOCTYPE hibernate-mapping PUBLIC

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

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

<hibernate-mapping package="com.hib">

<class name="Product" table="product">

<id name="id" type="int" column="ID">

<generator class="increment"></generator>

</id>

<property name="name" type="string"></property>

<property name="price" type="big\_decimal"></property>

<property name="Company" type="string"></property>

</class>

</hibernate-mapping>

//**JSP Files:**

<%@ 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>Hibernate Jsp Add Product</h1>

<h2>Create Record</h2>

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

Product Name <input type="text" name="name" placeholder="Enter the Product Name"><br><br>

Product Price <input type="text" name="price" placeholder="Enter the Product Price"><br><br>

Product Company Name <input type="text" name="Company" placeholder="Enter the Product Company"><br><br>

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

</form>

</body>

</html>