## Adding a New Product in the Database

**Product Class:**

package com.simplilearn.entity; import javax.persistence.Entity; import javax.persistence.Id;

@Entity

@Table(name="eproduct\_10032022") public class Product {

@Id

private int productId;

private String productName;

public Product(int productId, String productName) { super();

this.productId = productId; this.productName = productName;

}

public Product() {

super();

}

public int getProductId() { return productId;

}

public void setProductId(int productId) { this.productId = productId;

}

public String getProductName() { return productName;

}

public void setProductName(String productName) { this.productName = productName;

"]";

}

@Override

public String toString() {

return "Product [productId=" + productId + ", productName=" + productName +

}

}

# Servlet Code for Product Insert

package com.simplilearn.servlet; import java.io.IOException; import java.util.HashMap;

import java.util.Map;

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.Transaction; import com.simplilearn.entity.Product;

import com.simplilearn.util.HibernateUtility;

/\*\*

\* Servlet implementation class ProductInsert

\*/ @WebServlet("/productInsert")

public class ProductInsert extends HttpServlet { private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public ProductInsert() { super();

// TODO Auto-generated constructor stub

}

response)

/\*\*

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

\*/

protected void doGet(HttpServletRequest request, HttpServle tResponse

response) throws ServletException, IOException {

// TODO Auto-generated method stub response.getWriter().append("Served at:

").append(request.getContextPath());

}

response)

/\*\*

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

\*/

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

Map<String, String> dbMessages = new HashMap<String, String>();

Session session = HibernateUtility.getSession();

Transaction tx = session.beginTransaction();

Product p1 = new Product(Integer.parseInt(request.getParameter("productId")), request.getParameter("productName"));

session.save(p1); tx.commit();

dbMessages.put("success", "Product inserted");

request.setAttribute("dbMessages", dbMessages); request.getRequestDispatcher("productform.jsp").forward(request,response);

}

}

# Servlet Code for Product Validation:

package com.simplilearn.servlet; import java.io.IOException; import java.io.PrintWriter;

import java.util.HashMap; import java.util.List; import java.util.Map;

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 org.hibernate.Session;

import org.hibernate.SessionFactory; import org.hibernate.Transaction; import com.simplilearn.entity.Product;

import com.simplilearn.util.HibernateUtility;

/\*\*

\* Servlet implementation class ProductValidation

\*/ @WebServlet("/productValidation")

public class ProductValidation extends HttpServlet { private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public ProductValidation() { 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 {

PrintWriter pw = response.getWriter();

pw.println("<html><body>");

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

// STEP 1: Gets SessionFactory Object

SessionFactory sf = HibernateUtility.buildSessionFactory();

// STEP 2: Open Sesson

Session session = sf.openSession();

Transaction tx = session.beginTransaction(); Product ep = new Product(); ep.setProductName(name);

session.save(ep);

tx.commit();

pw.println("<h3 style=color:green'> Product is Added successfully !

</h3>");

session.close();

}

}

## Hibernate.java:

package com.simplilearn.util; import org.hibernate.Session;

import org.hibernate.SessionFactory; import org.hibernate.cfg.Configuration; import com.simplilearn.entity.Product;

public class HibernateUtility

{

static SessionFactory sessionFactory;

public static SessionFactory buildSessionFactory() {

if (sessionFactory == null) {

Configuration cfg = new Configuration(); cfg.configure("hibernate.cfg.xml"); cfg.addAnnotatedClass(Product.class);

sessionFactory = cfg.buildSessionFactory();

}

return sessionFactory;

}

public static Session getSession() {

// TODO Auto-generated method stub return null;

}

}

## Code For hibernate.cfg:

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

<!DOCTYPE hibernate-configuration SYSTEM ["h](http://www.hibernate.org/dtd/hibernate-configuration-3.0.dtd)t[tp://www.hibernate.org/dtd/hibernate-configuration-3.0.dtd](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/ecommerce</property>

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

<property name="hibernate.connection.password">Simplilearn</prope rty>

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

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

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

</session-factory>

</hibernate-configuration>

## index.html:

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

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

<nav>

</nav>

</body>

</html>

<a href=*"add-product"*>Add Product</a>||

<a href=*"read-product"*> Read Product</a>

## Pom.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>

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

<modelVersion>4.0.0</modelVersion>

<groupId>MPhasis\_Feb\_Hibernate</groupId>

<artifactId>MPhasis\_Feb\_Hibernate</artifactId>

<version>0.0.1-SNAPSHOT</version>

<packaging>war</packaging>

<dependencies>

<!-- https://mvnrepository.com/artifact/javax.servlet/javax.servlet-api -->

<dependency>

<groupId>javax.servlet</groupId>

<artifactId>javax.servlet-api</artifactId>

<version>4.0.1</version>

<scope>provided</scope>

</dependency>

<!-- https://mvnrepository.com/artifact/mysql/mysql-connector-java -->

<dependency>

<groupId>mysql</groupId>

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

<version>8.0.28</version>

</dependency>

<!-- https://mvnrepository.com/artifact/org.hibernate/hibernate-core -->

<dependency>

<groupId>org.hibernate</groupId>

<artifactId>hibernate-core</artifactId>

<version>5.6.5.Final</version>

</dependency>

</dependencies>

<build>

<sourceDirectory>src</sourceDirectory>

<plugins>

<plugin>

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

<version>3.8.0</version>

<configuration>

<source>1.8</source>

<target>1.8</target>

</configuration>

</plugin>

<plugin>

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

<version>3.2.1</version>

<configuration>

<warSourceDirectory>WebContent</warSourceDirectory>

</configuration>

</plugin>

</plugins>

</build>

</project>