**Insertion, Updation, and Deletion of Database Records**

**MySQL**

**CREATE DATABASE ecommerce**

**USE ecommerce**

**CREATE TABLE eproduct (ID bigint primary key auto\_increment, name varchar(100), price decimal(10,2), date\_added timestamp default now())**

**INSERT INTO eproduct(name, ‘HP Laptop ABC’, 12000)**

**INSERT INTO eproduct(name, ‘Acer Laptop ABC’, 14000)**

**INSERT INTO eproduct(name, ‘Lenovo Laptop ABC’, 12000)**

**SELECT \* from eproduct**

**HTML page**

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>JDBC Insert, Update, Delete</title>

</head>

<body>

<a href="list">Product Info</a><br>

</body>

</html>

**DBConnection class**

**package** com.ecommerce;

**import** java.sql.Connection;

**import** java.sql.DriverManager;

**import** java.sql.SQLException;

**public** **class** DBConnection {

**private** Connection connection;

**public** DBConnection(String dbURL, String user, String pwd) **throws** ClassNotFoundException, SQLException{

Class.*forName*("com.mysql.jdbc.Driver");

**this**.connection = DriverManager.*getConnection*(dbURL, user, pwd);

}

**public** Connection getConnection(){

**return** **this**.connection;

}

**public** **void** closeConnection() **throws** SQLException {

**if** (**this**.connection != **null**)

**this**.connection.close();

}

}

**config.properties file**

url=jdbc:mysql://localhost:3306/ecommerce

userid=root

password=ashiq321

**ProductDetails servlet**

**import** java.io.IOException;

**import** java.io.InputStream;

**import** java.io.PrintWriter;

**import** java.math.BigDecimal;

**import** java.sql.CallableStatement;

**import** java.sql.ResultSet;

**import** java.sql.SQLException;

**import** java.sql.Statement;

**import** java.util.Properties;

**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** com.ecommerce.DBConnection;

/\*\*

\* Servlet implementation class ProductDetails

\*/

@WebServlet("/ProductDetails")

**public** **class** ProductDetails **extends** HttpServlet {

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

/\*\*

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

\*/

**public** ProductDetails() {

**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

**try** {

PrintWriter out = response.getWriter();

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

InputStream in = getServletContext().getResourceAsStream("/WEB-INF/config.properties");

Properties props = **new** Properties();

props.load(in);

DBConnection conn = **new** DBConnection(props.getProperty("url"), props.getProperty("userid"), props.getProperty("password"));

Statement stmt = conn.getConnection().createStatement(ResultSet.***TYPE\_SCROLL\_INSENSITIVE***, ResultSet.***CONCUR\_READ\_ONLY***);

stmt.executeUpdate("insert into eproduct (name, price, date\_added) values ('New Product', 17800.00, now())");

out.println("Executed an insert operation<br>");

stmt.executeUpdate("update eproduct set price=2000 where name = 'New Product'");

out.println("Executed an update operation<br>");

stmt.executeUpdate("delete from eproduct where name = 'New Product'");

out.println("Executed a delete operation<br>");

stmt.close();

conn.closeConnection();

out.println("</body></html>");

conn.closeConnection();

} **catch** (ClassNotFoundException e) {

e.printStackTrace();

} **catch** (SQLException e) {

e.printStackTrace();

}

}

/\*\*

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

\*/

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

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

doGet(request, response);

}

}

**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>JDBC Insert, Update, Delete</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>ProductDetails</servlet-name>

<servlet-class>ProductDetails</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>ProductDetails</servlet-name>

<url-pattern>/list</url-pattern>

</servlet-mapping>

</web-app>