

Phase – 2 Practice Project: Assisted Practice

16. Demonstrate Insertion, Updation, and Deletion of Database Records using JDBC.

• Code

Database Code

```
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, price) VALUES ('HP Laptop ABC', 12000);
INSERT INTO eproduct(name, price) VALUES ('Acer Laptop ABC', 14000);
INSERT INTO eproduct(name, price) VALUES ('Lenovo Laptop ABC', 12000);
```

Index.html

```
<!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.java

```
package com;
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.cj.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
url=jdbc:mysql://localhost:3306/ecommerce
userid=root
password=Arun@123
✓ ProductDetails.java
package com;
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.DBConnection;
/**
 * Servlet implementation class 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://java.sun.com/xml/ns/javaee"
xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd" id="WebApp_ID"
version="2.5">
<display-name>Assisted-Practice-Project 2.16</display-name>
<welcome-file-list>
<welcome-file>index.html</welcome-file>
<welcome-file>index.jsp</welcome-file>
<welcome-file>index.htm</welcome-file>
<welcome-file>default.html</welcome-file>
<welcome-file>default.jsp</welcome-file>
<welcome-file>default.htm</welcome-file>
</welcome-file-list>
<servlet>
<description></description>

```

```
<display-name>ProductDetails</display-name>
<servlet-name>ProductDetails</servlet-name>
<servlet-class>com.ProductDetails</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>ProductDetails</servlet-name>
<url-pattern>/list</url-pattern>
</servlet-mapping>
</web-app>
```

Output

