

## Phase – 2 Practice Project: Assisted Practice

### 15. Demonstrate how to create, select, and drop a database in JDBC.

#### • Code

##### index.html

```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>JDBC Database Operations</title>
</head>
<body>
<a href="dboperations">Database Operations</a><br>
</body>
</html>
```

##### DBConnection.java

```
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

```
url=jdbc:mysql://localhost:3306/ecommerce
userid=root
password=master
```

## DBOperations.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 DBOperations
 */
public class DBOperations extends HttpServlet {
    private static final long serialVersionUID = 1L;
    /**
     * @see HttpServlet#HttpServlet()
     */
    public DBOperations() {
        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();
            stmt.executeUpdate("create database
mydatabase");

            out.println("Created database: mydatabase<br>");
            stmt.executeUpdate("use mydatabase");
            out.println("Selected database:
mydatabase<br>");

            stmt.executeUpdate("drop database mydatabase");
            stmt.close();
            out.println("Dropped database: mydatabase<br>");
        }
    }
}
```

```

        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="https://jakarta.ee/xml/ns/jakartaee"
xsi:schemaLocation="https://jakarta.ee/xml/ns/jakartaee
https://jakarta.ee/xml/ns/jakartaee/web-app_6_0.xsd" id="WebApp_ID"
version="6.0">
    <display-name>JDBCSetup</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>DBOperations</display-name>
        <servlet-name>DBOperations</servlet-name>
        <servlet-class>DBOperations</servlet-class>
    </servlet>
    <servlet-mapping>
        <servlet-name>DBOperations</servlet-name>
        <url-pattern>/DBOperations</url-pattern>
    </servlet-mapping>
</web-app>

```

## Output:

