

## RETRIEVING DATA SERVLET:

```
package project;

import java.io.IOException;
import java.io.InputStream;
import java.io.PrintWriter;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;

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 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 java.sql.PreparedStatement;
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 com.ecommerce.DBConnection;
import java.io.FileInputStream;
import java.util.Properties;
import java.lang.NullPointerException;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

@WebServlet("/RetriveData")
public class RetrievingData extends HttpServlet {
    private static final long serialVersionUID = 1L;

    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);
```

```

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

        String id = request.getParameter("id");
        String query = "SELECT * FROM product WHERE id =
?";

        PreparedStatement stmt =
conn.getConnection().prepareStatement(query);
        stmt.setInt(1, Integer.parseInt(id));
        ResultSet rs = stmt.executeQuery();

        if (rs.next()) {
            String name = rs.getString("name");

            double price = rs.getDouble("price");

            out.println("<h1>Product Details</h1>");
            out.println("<p><strong>Product ID:</strong> "
+ id + "</p>");
            out.println("<p><strong>Name:</strong> " + name
+ "</p>");
            out.println("<p><strong>Price:</strong> $" +
price + "</p>");
        } else {
            out.println("<p>Product not found.</p>");
        }

        rs.close();
        stmt.close();
        conn.closeConnection();

        out.println("</body></html>");
    } catch (SQLException e) {
        e.printStackTrace();
    }
}

```

#### DBUTIL (CONNECTION CLASS) :

```

package project;

import java.sql.*;

//This is a helper class that loads the JDBC driver and
//establishes the connection to the DB Server database

public class DBUtil {
    Connection connection = null;

    public DBUtil(String dbURL, String user, String pwd) {

```

```

        try {

            // STEP 1 LOAD THE JDBC DRIVER

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

            // STEP 2 GET THE CONNECTION TO THE DATABASE

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

        } catch (ClassNotFoundException | SQLException e) {

            System.out.println(e);

        }

    }

    public Connection getConnection() {

        return this.connection;

    }

    public void closeConnection() throws SQLException {

        if (this.connection != null)

            this.connection.close();

    }

}

```

#### CONFIG PROPERTIES FILE:

```

url=jdbc:mysql://127.0.0.1:3306/ecommerce
userid=root
password=@Classicaldancer23

```

#### INDEX HTML PAGE:

```

<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Product Details</title>
</head>

```

```

<body>
<h1>Product Details</h1>
  <form action="RetriveData" method="GET">
    <label for="id">Product ID:</label>
    <input type="text" id="id" name="id" required>
    <button type="submit">Submit</button>
  </form>
</body>
</html>

```

## WORKBECH OUTPUT:

The screenshot displays the MySQL Workbench interface. The left sidebar contains the 'MANAGEMENT' and 'PERFORMANCE' tabs. The main window shows a query editor with the following SQL code:

```

31 insert into product(name,price) values("MAC LAPTOP",60000);
32 insert into product(name,price) values("LENOVO LAPTOP",50000);
33 insert into product(name,price) values("HP LAPTOP",35000);
34 insert into product(name,price) values("DELL",100000);
35
36 select * from product;
37
38
39
40
41
42

```

The 'Result Grid' tab is active, showing the output of the query. The table has 5 rows and 3 columns: id, name, and price.

id	name	price
1	ASUS LAPTOP	40000.00
2	MAC LAPTOP	60000.00
3	LENOVO LAPTOP	50000.00
4	HP LAPTOP	35000.00
5	DELL	100000.00

The 'Output' tab is also visible, showing the execution log with the following entries:

#	Time	Action	Message	Duration / Fetch
10	17:34:09	insert into product(name,price) values("ASUS LAPTOP",40000)	1 row(s) affected	0.000 sec
11	17:34:09	insert into product(name,price) values("MAC LAPTOP",60000)	1 row(s) affected	0.000 sec
12	17:34:09	insert into product(name,price) values("LENOVO LAPTOP",50000)	1 row(s) affected	0.000 sec
13	17:34:09	insert into product(name,price) values("HP LAPTOP",35000)	1 row(s) affected	0.000 sec
14	17:34:09	insert into product(name,price) values("DELL",100000)	1 row(s) affected	0.000 sec
15	17:34:26	select * from product LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec