

# **JDBC Connections, Statements, and Result Sets**

//Creating an HTML page index.html

```
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>JDBC Statements and Resultsets</title>
</head>
<body>
<a href="list">Product Info</a><br>

</body>
</html>
```

Creating a DBConnection class to initiate a JDBC connection in code

```
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();
    }
}

```

//Creating a config.properties file to storeJDBC credentials

```

url=jdbc:mysql://localhost:3306/ecommerce
userid=root
password=SqlPr@9306

```

//Creating a 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;
public class ProductDetails extends HttpServlet {
    private static final long serialVersionUID = 1L;
    public ProductDetails() {
        super();
    }
}

```

```

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

```

```

    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_I
NSENSITIVE, ResultSet.CONCUR_READ_ONLY);
        stmt.executeUpdate("insert into eproduct (name,
price, date_added) values ('New Product', 17800.00, now())");
        ResultSet rst = stmt.executeQuery("select * from
eproduct");

        while (rst.next()) {
            out.println(rst.getInt("ID") + ", " +
rst.getString("name") + "<Br>");
        }

        stmt.close();

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

    } catch (ClassNotFoundException e) {
        e.printStackTrace();
    } catch (SQLException e) {
        e.printStackTrace();
    }
}

protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException,
IOException {
    // TODO Auto-generated method stub
    doGet(request, response);
}
}

```

//Configuring 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 Statements and Resultsets</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>
```