

## **Stored Procedures with Exceptions**

//Creating a stored procedure add\_product in MySQL

```
DELIMITER $$
CREATE PROCEDURE add_product(IN pname varchar(100), IN
pprice decimal(10,2))
INSERT INTO eproduct (name, price) VALUES (pname, pprice)
$$
DELIMITER ;
```

//Creating an HTML page index.html

```
<html>
<head>
<meta charset="UTF-8">
<title>JDBC Stored Procedures</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();
    }
}

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    }
}

```

//Creating a config.properties file to store JDBC 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"));
        CallableStatement stmt =
conn.getConnection().prepareCall("{call add_product(?, ?)}");
        stmt.setString(1, "new product");
        stmt.setBigDecimal(2, new BigDecimal(1900.50));
        stmt.executeUpdate();

        out.println("Stored procedure has been
executed.<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

```

<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 Stored Procedures</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>

```