

# Java Servlet

Eclipse Helios/GlashFish/SQLite

## HTML Report

### System Requirements:

Download Eclipse Helios

<http://www.eclipse.org/helios/>

Download GlassFish Server 3.1

<http://glassfish.java.net/downloads/3.1-final.html>

Download SQLite

<http://www.sqlite.org/download.html>

Download SQLiteJDBC jar file

<http://code.google.com/p/sqlite-jdbc/>

### Introduction:

Build a connection to SQLite database located on C Drive using a Java Servlet class and a database connector class. Once connection is established, grab data from SQLite and fill HTML report based on JavaServer Pages Application, serviced by GlassFish Web Server; user is diverted to login page if session is invalid.

**Disclaimer:** Information contained in the following is presented as is. This tutorial assumes you have basic programming knowledge. All tutorials are based on an Eclipse/Eclipse-based software. Should you need to familiarize yourself with a certain Eclipse environment, prior to continuing this tutorial, please stop now and see our Tutorials page...

### Write Java Servlet class to build HTML Report

At this point we assume Eclipse Helios, SQLite database and JDBC jar file, GlassFish Web Server are downloaded/installed and a Java Servlet class has been created. You are going to use a database connector class with Java Servlet to grab data from SQLite database and fill HTML page. Copy and paste below code to your environment for each code samples.

## SearchUserDataServlet.java

```
/**
```

```
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```

```
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```
*
*
* @AppName: login
* Program: SearchUserDataServlet.java
* Created from Copy: 2010.09.05.11.01.AM
*
* Modified: 2012.04.07.5.36.AM
* Added SQLite connection
*/
package com.dokoll.solutions.inc.development.Servlets;

/**
 * @author Dököll Solutions, Inc.
 * @version 2010.09.05.11.01.AM
 *
 */

import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.sql.*;
import java.util.*;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import com.dokoll.solutions.inc.development.Utils.DBConnector;

/**
 * Servlet implementation class for Servlet: SearchUserDataServlet
 *
 */

public class SearchUserDataServlet extends HttpServlet{

    private static final long serialVersionUID = 1L;

    public void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException{

        response.setContentType("text/html");
        PrintWriter out = response.getWriter();

        System.out.println("SQLite Connecting...");
        Connection conn = null;

        int count = 0;
        // Enter Try Catch
        try {

            //bring in connection from DBConnector class
            conn = DBConnector.getConnection();
```

```

        System.out.println("Connected to the database...");
        //set up array
        ArrayList myArrayList=null;
        ArrayList myUserList =new ArrayList ();
        //set up query string (as a PreparedStatement)
        PreparedStatement pst = conn.prepareStatement("Select
AllegationCode,Office, InvCode, DateOpen, Age from USERDETAILS where InvCode = ?
AND Office =? AND InvCode NOT NULL ");

        //fill variables with request
        String Office = request.getParameter("Office");
        String InvCode = request.getParameter("InvCode");

        //...
        pst.setString(1,Office);
        pst.setString(2,InvCode);

        System.out.println("Office Recorded..." + Office);
        System.out.println("Records Returned...");
        //run Query string
        ResultSet rs = pst.executeQuery();

        //loop through results
        while (rs.next ()) {

            //load array with results
            myArrayList = new ArrayList ();
            //...
            myArrayList.add(rs.getString ("AllegationCode"));
            myArrayList.add(rs.getString ("Office"));
            myArrayList.add(rs.getString ("Age"));
            myArrayList.add(rs.getString ("DateOpen"));

            myUserList.add(myArrayList);

            count++;

        }

        request.setAttribute ("userData",myUserList);
        System.out.println("Records " + count);

        //fill HTML/JSP page with reports data
        String nextJSP = "/UserSearchResults.jsp";
        RequestDispatcher dispatcher =
getServletContext ().getRequestDispatcher(nextJSP);
        dispatcher.forward(request,response);
        //close resultSet and connection
        rs.close ();
        conn.close ();
        System.out.println("Connected stopped...");
    } catch (Exception e) {
        e.printStackTrace ();
    }
}
}

```

## Build a search form to retrieve data for the report

Let's perform the step of searching for data to fill in a new HTML form. Copy and Paste code below, run it in your browser

# SearchComplaints.jsp

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<%@page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>

    <%@ page import="java.text.*,java.util.*" session="true"%>

    <%@page import="java.sql.Date.*"%>

<html>
<head>

<%

String name = request.getParameter( "UserID" );
session.setAttribute( "theName", name );
%>

<%

if (session.getAttribute("theName" ) == null) {
response.sendRedirect("Login.jsp");
return;
}

%>

<title>Search User Complaints</title>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
</head>

<body bgcolor="#deefef">
<b>Logged in As:</b> <%= session.getAttribute( "theName" ) %>
<form method="post" name="frm" action="SearchUserDataServlet">

<table border="0" width="330" align="left" bgcolor="lightgrey">
<tr><td colspan=2 style="font-size:12pt;color:#00000;" align="left">
<h3><font color="red">User Complaints - <b><a href="SearchUserByAge.jsp">Search By
Age Range</a></b></font></h3></td></tr>

<tr><td align="right">Office</td>

<td><input type="text" name="Office" id="Office">
</td></tr>
```

```

<tr><td align="right"> UserID</td>
<td><input type="text" name="InvCode" id="InvCode">
</td></tr>

<tr><td align="right"> </td>
<td><input type="submit" name="submit" value="Run Report"></td></tr>

</table>

</form>

<table border="0" width="420" align="right" bgcolor="#deefef">
<tr><td colspan=2 style="font-size:12pt;color:#00000;" align="left">
<font color="blue"><b>TIP:</b> Results for this report will be rendered in HTML
format</font></td></tr>
<tr><td><font color="blue">We suggest consulting our report manual before you
begin</font></td>
<tr><td><font color="blue">Click "Run report" button only once for faster
results</font></td>
<tr><td><b></b><font color="blue"><font color="blue">Visit our Frequently Asked
Questions page for added support</font></font></td>
<tr><td><b></b><font color="blue"><font color="blue">Send us a email for technical
assistance: <a href="UserComments.jsp">Technical Support</font></font></td>

</table>
<br><br><br><br><br><br><br><br>
<HR>

<table align="center" cellpadding="10" cellspacing="1" width="98%" bgcolor="white"
border="0" height="570">
<tr>
<td align="right" bgcolor="#bac6c7" width="23%">Complaints By
Users</td>
<td bgcolor="#bac6c7" colspan="3" width="200">
<center><font size="-1"> <a
href="SearchComplaints.jsp" target="colours">Search User
Complaints</a></font></center>
</td>
<td bgcolor="#bac6c7" align="right" width="23%">Complaints By Age</td>
<td bgcolor="#bac6c7">
<center><font size="-1"> <a
href="SearchUserByAge.jsp" target="colours">Search User By
Age</a></font></center>
</td>
</tr>
</table></body></html>

```

## Load this data to HTML report

Our last critical step is to load the retrieved data to an HTML report. Copy and Paste code below, run it in your browser

# UserSearchResults.jsp

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<%@page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
    <%@ page import="java.text.*,java.util.*" session="true"%>

    <%@page import="java.sql.Date.*"%>
<html>
<head>
<%

String name = request.getParameter( "UserID" );

session.setAttribute( "theName", name );
%>

<%

if (session.getAttribute("theName" ) == null) {
response.sendRedirect("Login.jsp");
return;
}

%>
<title>User Search Results</title>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
</head>
<body>

<b>Logged in As:</b> <%= session.getAttribute( "theName" ) %>
<br>
<table align=center border="0" width="820">
<tr>
<th><h2 align=left> Dököll Solutions, Inc.<br> Complaint Report</h2></th>
<th><h2 align=right>Users for Better Software<br><script type="text/javascript">
    var d=new Date()
    var weekday=new Array("Sunday", "Monday", "Tuesday", "Wednesday", "Thursday",
        "Friday", "Saturday")
    var monthname=new
Array("January", "February", "March", "April", "May", "June", "July", "August",
        "September", "October", "November", "December")
    document.write(weekday[d.getDay()] + " ")
    document.write(d.getDate() + ", ")
    document.write(monthname[d.getMonth()] + ", ")
    document.write(d.getFullYear())
</script></h2></th>
</tr>

</table>

<center><a href="javascript:void(0);"
onclick="document.execCommand('SaveAs', true, 'ComplaintsByUser.html');">
<h2><font color="blue">User Complaints</font><br><font
```

```
color="red"></font></h2></a></center>
```

```
<table border="0" cellspacing="0" cellpadding="2" width="800" align="center" style="border:0px solid #000000;">
```

```
<tr style="background-color:efefef;">
```

```
<hr>
```

```
<td><center><b><a class="print_page" href="javascript:window.print();" onclick="javascript:urchinTracker('outgoing/printlink/en');">Allegation</a></b></center></td>
```

```
<td><center><b><a class="print_page" href="javascript:window.print();" onclick="javascript:urchinTracker('outgoing/printlink/en');">Office</a></b></center></td>
```

```
<td><center><b><a class="print_page" href="javascript:window.print();" onclick="javascript:urchinTracker('outgoing/printlink/en');">Age</a></b></center></td>
```

```
<td><center><b><a class="print_page" href="javascript:window.print();" onclick="javascript:urchinTracker('outgoing/printlink/en');">Open</a></b></center></td>
```

```
</tr>
```

```
<%
```

```
int RecordCounts=0;
```

```
int count=0;
```

```
String color = "#F9EBB3";
```

```
if (request.getAttribute("userData") != null)
```

```
{  
    ArrayList myArrayList = (ArrayList) request.getAttribute("userData");  
    Iterator itr = myArrayList.iterator();
```

```
while (itr.hasNext()) {
```

```
    if ((count%2)==0) {  
        color = "#eeffee";
```

```
        System.out.println("Records " + RecordCounts);  
    }
```

```
    else {  
        color = "#F9EBB3";  
    }
```

```
    count++;  
    RecordCounts++;  
    ArrayList userData = (ArrayList) itr.next();  
    %>
```

```
<tr style="background-color:<%=color%>;">
```

```
<td><center><%=userData.get(0) %></center></td>
```

```
<td><center><%=userData.get(1) %></center></td>
```

```
<td><center><%=userData.get(2) %></center></td>
```

```
<td><center><%=userData.get(3) %></center></td>
```

```
</tr>
```

```
<%
```

```
}
```

```

}
%>
<%
if(count!=0) {
%>

<tr>
<td colspan=8 align="center" style="background-color:eeffee"><b><font
color="blue"><br><br>Record(s) Found: </font></b><%= RecordCounts %></td>
</tr>
<%
}
%>

<%
if(count==0) {
%>

<tr>
<td colspan=8 align="center" style="background-color:eeffee"><b><font
color="red">No Record(s) Found</font></b></td>
</tr>
<%
}
%>
</table><br>

<center><i>The information contained in this document is strictly confidential and
may be used only for the purpose of
conducting the business of Dököll Solutions, Inc.</i></center>

</html>

```

### Conclusion:

Our HTML report contains a hidden print feature and an save mechanism. See cheat sheet below for clues. Please stay tuned to additional tutorials on the subject..

**Hint:** This item can be linked to an existing login project, making a connection to SQLite database...

### Cheat sheet:

Save the report using the web page's own Save feature. Click on the name of the report to save **(must have JavaScript enabled)**...

```

<a href="javascript:void(0);"
onclick="document.execCommand('SaveAs',true,'ComplaintsByUser.html');">
<h2><font color="blue">...</...

```

Further, Print this report using the web page's own Print feature. Click on the the column/label area to print...

```

<a class="print_page" href="javascript:window.print();"
onclick="javascript:urchinTracker('outgoing/printlink/en');">...</a>

```

Questions, comments, please post a brief message on our [Contact](#) form on the main site. Thank you for coming...