**Prepare Servlet application login using session tracking and database connectivity.**

**First\_page.java**

1. import java.io.IOException;
2. import java.io.PrintWriter;
3. import java.sql.Connection;
4. import java.sql.Date;
5. import java.sql.DriverManager;
6. import java.sql.ResultSet;
7. import java.sql.Statement;
8. import javax.servlet.ServletException;
9. import javax.servlet.http.HttpServlet;
10. import javax.servlet.http.HttpServletRequest;
11. import javax.servlet.http.HttpServletResponse;
12. import javax.servlet.http.HttpSession;
13. public class first\_page extends HttpServlet {
14. protected void processRequest(HttpServletRequest request, HttpServletResponse response)
15. throws ServletException, IOException {
16. response.setContentType("text/html;charset=UTF-8");
17. HttpSession session;
18. String struname=request.getParameter("uname");
19. String strpass =request.getParameter("pass");
20. try (PrintWriter out = response.getWriter()) {
21. try
22. {
23. Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
24. Connection cn=DriverManager.getConnection("jdbc:odbc:UserDB");
25. Statement st=cn.createStatement();
26. ResultSet rs=st.executeQuery("select \* from login where username='"+struname+"' and password='"+strpass+"'");
27. out.println("<!DOCTYPE html>");
28. out.println("<html>");
29. out.println("<head>");
30. out.println("<title>User Detail</title>");
31. out.println("</head>");
32. out.println("<body>");
33. out.println("<form method='POST' action='session'>");
34. out.println("<div style=\"margin-top:200px;\"");
35. session=request.getSession(true);
36. if(rs.next())
37. {
38. session=request.getSession(true);
39. if(session.getAttribute("user")==null)
40. {
41. session.setAttribute("user",rs.getString(2));
42. }
43. }
44. if(session.getAttribute("user")!=null)
45. {

48. out.println("<table align='center'>");
49. out.println("<tr><td><font color=\"green\">Log In Success</font></td><td></td></tr>");
50. out.println("<tr> <td> <br>Welcome, "+session.getAttribute("user"));
51. out.println("</tr> </td>");
52. out.println("<tr> <td> </td> <td><input type='submit' name='submit' value='LogOut'>");
53. }
54. else
55. {
56. out.println("<table align='center'>");
57. out.println("<tr><td><font color=\"red\">Sorry, You have entered an invalied user name or password</font></td></tr>");
58. out.println("<tr><td><font color=\"red\"><br>Please Try Again</font></td></tr>");
59. out.println("</table");
60. }
61. out.println("</div>");
62. out.println("</body>");
63. out.println("</html>");
64. }
65. catch(Exception e)
66. {
67. out.println("Error Message for Database : "+e.toString());
68. }
69. }
70. }
71. // <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to edit the code.">
72. /\*\*
73. \* Handles the HTTP <code>GET</code> method.
74. \*
75. \* @param request servlet request
76. \* @param response servlet response
77. \* @throws ServletException if a servlet-specific error occurs
78. \* @throws IOException if an I/O error occurs
79. \*/
80. @Override
81. protected void doGet(HttpServletRequest request, HttpServletResponse response)
82. throws ServletException, IOException {
83. processRequest(request, response);
84. HttpSession session = request.getSession(true);
85. Date creatTime = new Date(session.getCreationTime());

88. }
89. /\*\*
90. \* Handles the HTTP <code>POST</code> method.
91. \*
92. \* @param request servlet request
93. \* @param response servlet response
94. \* @throws ServletException if a servlet-specific error occurs
95. \* @throws IOException if an I/O error occurs
96. \*/
97. @Override
98. protected void doPost(HttpServletRequest request, HttpServletResponse response)
99. throws ServletException, IOException {
100. processRequest(request, response);
101. }
102. /\*\*
103. \* Returns a short description of the servlet.
104. \*
105. \* @return a String containing servlet description
106. \*/
107. @Override
108. public String getServletInfo() {
109. return "Short description";
110. }// </editor-fold>
111. }

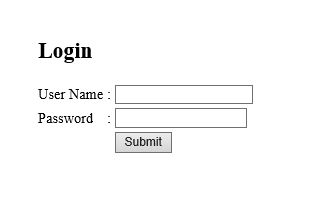
**Session.java**

1. import java.io.IOException;
2. import java.io.PrintWriter;
3. import javax.servlet.ServletException;
4. import javax.servlet.http.HttpServlet;
5. import javax.servlet.http.HttpServletRequest;
6. import javax.servlet.http.HttpServletResponse;
7. import javax.servlet.http.HttpSession;
8. import java.net.\*;
9. public class session extends HttpServlet {
11. protected void processRequest(HttpServletRequest request, HttpServletResponse response)
12. throws ServletException, IOException {
13. response.setContentType("text/html;charset=UTF-8");
14. try (PrintWriter out = response.getWriter()) {
15. HttpSession session;
16. session=request.getSession(true);
17. session.setAttribute("user", null);
18. session.invalidate();
19. out.println("<!DOCTYPE html>");
20. out.println("<html><script type='text/javascript'> windows.location('index.html'); alert('Jekil'); </script>");
21. out.println("<head>");
22. out.println("<title>Servlet session</title>");
23. out.println("</head>");
24. out.println("<body>");
25. out.println("<h1>Servlet session at </h1>");
26. response.sendRedirect("index.html");
27. out.println("</body>");
28. out.println("</html>");
29. }
30. }
31. @Override
32. protected void doGet(HttpServletRequest request, HttpServletResponse response)
33. throws ServletException, IOException {
34. processRequest(request, response);
35. }
37. @Override
38. protected void doPost(HttpServletRequest request, HttpServletResponse response)
39. throws ServletException, IOException {
40. processRequest(request, response);
41. }
43. @Override
44. public String getServletInfo() {
45. return "Short description";
46. }
47. }

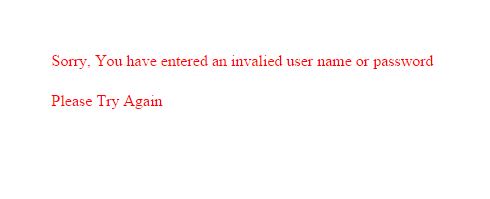
**Index.html**

1. <!DOCTYPE html>
2. <!--
3. To change this license header, choose License Headers in Project Properties.
4. To change this template file, choose Tools | Templates
5. and open the template in the editor.
6. -->
7. <html>
8. <head>
9. <title>User Info</title>
10. <meta charset="UTF-8">
11. <meta name="viewport" content="width=device-width, initial-scale=1.0">
12. </head>
13. <body>
14. <form method="POST" action="first\_page">
15. <div style="margin-top:200px;">
16. <table border="0" align="center">
17. <th colspan="3" align="Left"><h2>Login</h2></th>
18. <tr>
19. <td>User Name</td>
20. <td>:</td>
21. <td><input type="text" name="uname" ></td>
22. </tr>
23. <tr>
24. <td>Password</td>
25. <td>:</td>
26. <td><input type="password" name="pass" ></td>
27. </tr>
28. <tr>
29. <td></td>
30. <td></td>
31. <td><input type="submit" name="submit" value="Submit"></td>
32. </tr>
33. </table>
34. </div>
35. </form>
36. </body>
37. </html>

**OUTPUT**

** **

**Log IN Success Login Screen**

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**Incorrect User name or Password.**