

Practical No. 5

Objective: Making a Login Application using Servlet and verify the credentials using a table in the MySQL database.

Theory: A Java servlet is a Java program that extends the capabilities of a server. Although servlets can respond to any types of requests, they most commonly implement applications hosted on Web servers. Such Web servlets are the Java counterpart to other dynamic Web content technologies such as PHP and ASP.NET.

Source Code:

index.html

```
<!DOCTYPE html>
<html>
<head>
<title>TODO supply a title</title>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>
<body>
<form action="Loginvalidate" method="POST">
    UserName:<input type="text" name="Name" value="" /><br>
    Password:<input type="Password" name="Password" value="" /><br>
    <input type="submit" value="OK" />
</form>
</body>
</html>
```

Loginvalidate.java

```
package Login; import
java.io.IOException; import
java.io.PrintWriter; import
java.sql.Connection; import
java.sql.DriverManager; import
java.sql.PreparedStatement; import
java.sql.ResultSet; import
java.sql.SQLException; import
java.sql.Statement; import
javax.servlet.RequestDispatcher; import
javax.servlet.ServletException; import
javax.servlet.http.HttpServlet; import
javax.servlet.http.HttpServletRequest; import
javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
```

```
public class Loginvalidate extends HttpServlet {
    protected void processRequest(HttpServletRequest request,
        HttpServletResponse response) throws ServletException,
        IOException { response.setContentType("text/
        html;charset=UTF-8"); try (PrintWriter out =
        response.getWriter()) { out.println("<!DOCTYPE html>");
        out.println("<html>"); out.println("<head>");
```

```

        out.println("<title>Servlet Loginvalidate</title>");
        out.println("</head>");           out.println("<body>");
            out.println("<h1>Servlet Loginvalidate at " + request.getContextPath() + "</h1>");
        out.println("</body>");
        out.println("</html>");
    }
}

@Override
protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException { processRequest(request, response);
}

@Override
protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
    String str1 = request.getParameter("Name");
    String str2 = request.getParameter("Password");
    String JDBC_DRIVER_1 = "com.mysql.jdbc.Driver"; String
DB_URL = "jdbc:mysql://localhost:3306/user";
    String USER = "root";
    String PASS = "sana";
    Connection conn = null;

    try{
        Class.forName(JDBC_DRIVER_1);           conn =
DriverManager.getConnection(DB_URL, USER, PASS);
    }
    catch(ClassNotFoundException | SQLException e)
    {System.out.println(e);}

    PreparedStatement ps = null;
    try{
        System.out.println("Connecting to a selected Database");
        System.out.println("Connected database successfully...");
        System.out.println("Creating a statement...");
        String sql =("select * from LOGIN where USERNAME=? AND PASS=?");
        ps = conn.prepareStatement(sql);           ps.setString(1, str1);           ps.setString(2, str2);
        ResultSet rs = ps.executeQuery();
        if(rs.next()==true){
            HttpSession sess = request.getSession(); sess.setAttribute("User",
str1);           response.sendRedirect("welcome.jsp");
        }
    else{
        PrintWriter pw=response.getWriter();
        pw.println("<h2> Invalid User </h2>");
        //response.sendRedirect("index.html");
    }
}

```

```

        RequestDispatcher rd = request.getRequestDispatcher("index.html");
        rd.include(request, response);
    }
    /*if(str1.equals("Admin") && str2.equals("Admin"))
    {
        response.sendRedirect("welcome.html");
    }
else
{
    PrintWriter pw=response.getWriter();
    pw.println("<h2> Invalid User </h2>");
    //response.sendRedirect("index.html");
    RequestDispatcher rd = request.getRequestDispatcher("index.html");
    rd.include(request, response);
}*/
ps.close();
conn.close();

} catch (SQLException e){
    System.out.println(e);
}
}

public String
return

```

```

@Override
getServletInfo() {
"Short description";
}

welcome.jsp
<%--
Document      : welcome
Created on : Jan 31, 2018, 8:48:20 AM
Author       : DELL
--%>

<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8"> <title>JSP
Page</title>

```

```

</head>
<body>
<form action="logout">
WELCOME...

<%= (String)session.getAttribute("User") %> <br/>
<input type="submit" value="Logout" />
</form>
</body>
</html>

```

```

UserLogin.java package Login; import
java.io.IOException; import
java.io.PrintWriter; import
javax.servlet.ServletException; import
javax.servlet.http.HttpServlet; import
javax.servlet.http.HttpServletRequest; import
javax.servlet.http.HttpServletResponse;

public class UserLogin extends HttpServlet {

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

    @Override
    protected void doGet(HttpServletRequest      request,
HttpServletResponse response)      throws ServletException, IOException {
        String str1 = request.getParameter("Name");

        String str2 = request.getParameter("Email");
        PrintWriter pw = response.getWriter();
        pw.println("<h1> Welcome </h1>");           pw.println("<h2>
Username:</h2>" + str1);           pw.println("<h2> Email
:</h2>" + str2);
    }

    @Override
    protected void doPost(HttpServletRequest      request,
HttpServletResponse response)      throws ServletException, IOException {
        PrintWriter pw = response.getWriter();
        pw.println("<h1> Welcome </h1>");           pw.println("<h2>

```

```

Username:</h2>"+ str1);           pw.println("<h2> Email
:</h2>"+str2);
        //processRequest(request, response);
    }

@Override
getServletInfo() {      public  String
                        return

```

"Short description";

}

}

Logout.java package

Login;

```

import java.io.IOException; import
java.io.PrintWriter; import
javax.servlet.ServletException; import
javax.servlet.http.HttpServlet; import
javax.servlet.http.HttpServletRequest; import
javax.servlet.http.HttpServletResponse; import
javax.servlet.http.HttpSession; public class
logout extends HttpServlet {
    protected void processRequest(HttpServletRequest request,
HttpServletResponse response) throws ServletException,
IOException { response.setContentType("text/
html;charset=UTF-8"); try (PrintWriter out =
response.getWriter()) { out.println("<!DOCTYPE html>");
out.println("<html>"); out.println("<head>"); out.println("<title>Servlet logout</title>"); out.println("</head>"); out.println("<body>"); out.println("<h1>Servlet logout at " + request.getContextPath() + "</h1>"); out.println("</body>"); out.println("</html>"); }
}
}

@Override
protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
HttpSession sess = request.getSession();
sess.removeAttribute("User"); sess.invalidate(); PrintWriter
pw=response.getWriter();
pw.println("<h2> You are successfully logged out </h2><br/>"); pw.println("<h2> Click Here to <a href=index.html>Login</a> </h2>"); }
}

@Override

```

```
protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
processRequest(request, response);
}
@Override
public String getServletInfo() {
return "Short description";
}
}
```

Output:



User Name: user
Password: ****
OK



[Click Here to Login](#)

Result: The given program has been compiled and executed successfully.