



**Maharishi Markandeshwar Engineering College**

## [ Dynamic Web Project ]

[ Technology Used : Servlet ]

Description : A servlet for Sign Up, Login, and Change Password.

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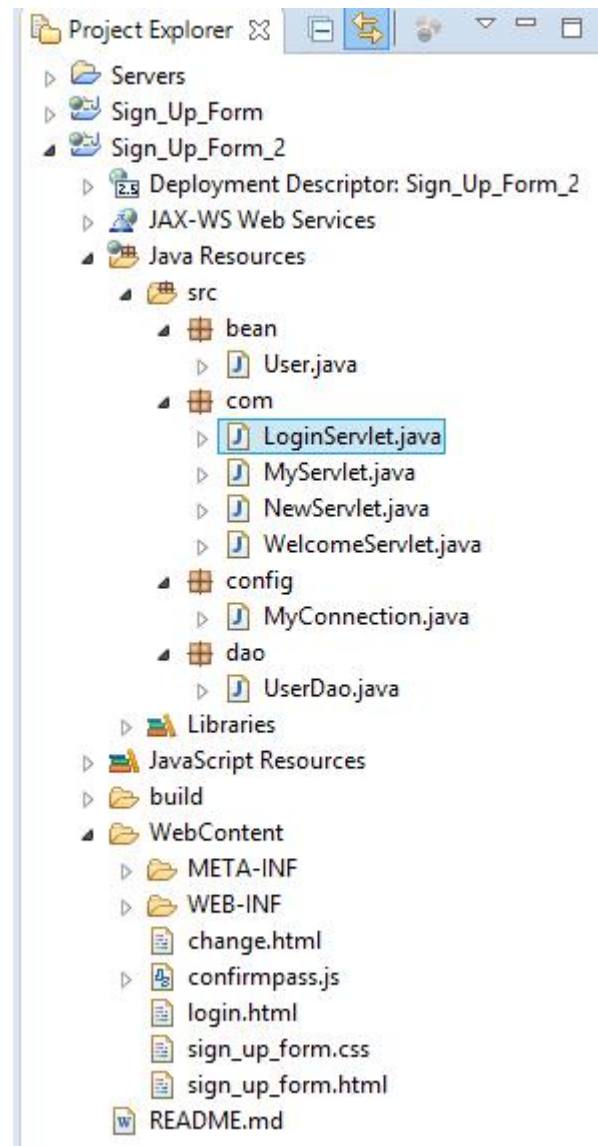
**Department of Computer Science & Engineering**

[5<sup>th</sup> Semester]

## Aim :

Write a dynamic web project using Servlet which takes input in Sign Up page, when user get Logged in using same username and password, can able to Change Password. Use Database System to store the data.

## Project Description :



IDE Used : Eclipse

Technology Used : Servlet

Database Used : MySQL

## Descriptions:

Packages: bean, com, config, dao

- bean has User pojo/bean class

- com has 4 servlets as :

    LoginServlet

    MyServlet

    NewServlet

    WelcomeServlet

- config has MyConnection class to connect Servlet to MySQL database.

-dao has UserDao which has 3 methods for addUser, validateUser and changePassword.

## WebContent :

It has 3 HTML pages [sign\\_up\\_form.html](#), [login.html](#), and [change.html](#). 1 CSS page [sign\\_up\\_form.css](#) and 1 JavaScript page [confirmpass.js](#)

#### Codes for User.java

```
package bean;

public class User {
    private String username;
    private String password;
    private String newpassword;
    public String getNewpassword() {
        return newpassword;
    }
    public void setNewpassword(String newpassword) {
        this.newpassword = newpassword;
    }
    public String getUsername() {
        return username;
    }
    public void setUsername(String username) {
        this.username = username;
    }
    public String getPassword() {
        return password;
    }
    public void setPassword(String password) {
        this.password = password;
    }
}
```

#### Codes for LoginServlet.java

```
package com;

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import dao.UserDao;
```

```

public class LoginServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;

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

        String username=request.getParameter("uname");

        String password=request.getParameter("pswd");

        UserDao l=new UserDao();

        PrintWriter pw=response.getWriter();

        if(l.validateUser(username, password))
        {

            RequestDispatcher
dis=request.getRequestDispatcher("WelcomeServlet");

            dis.forward(request, response);

        }
        else
        {

            pw.println("<html><body>");

            pw.println("<h1>Wrong Id AND/OR Password</h1></body></html>");

            RequestDispatcher dis=request.getRequestDispatcher("login.html");

            dis.include(request, response);

        }

    }

}

```

### Codes for MyServlet.java

```
package com;

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 bean.User;
import dao.UserDao;

public class MyServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;

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

        String uname=request.getParameter("uname");

        String psw=request.getParameter("pswd");

        UserDao udao=new UserDao();

        User u=new User();

        u.setUsername(uname);

        u.setPassword(psw);

        String result=udao.addUser(u);

        PrintWriter pw=response.getWriter();

        pw.println("<html><body>");

        pw.println("<h1>Success</h1><hr>");
    }
}
```

```

        pw.println("<h3>Hey, <strong><u><i>" + uname + "</i></u></strong> your  

account is successfully created. ");

        pw.println("You are now free to use. :) </h3>");

        pw.println("<br><br>If you want to login now <b><a  

href='login.html'>Login Here</a></b><br>");

        pw.println("</body>");

        pw.println("<footer>" + result + "<footer></html>");

    }

}

```

#### Codes for NewServlet.java

```

package com;

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import bean.User;
import dao.UserDao;

public class NewServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;

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

```

```

String uname=request.getParameter("uname");

String psw=request.getParameter("pswd");

String npsw=request.getParameter("npswd");


UserDao cdao=new UserDao();

User c=new User();

c.setUsername(uname);

c.setPassword(psw);

c.setNewpassword(npsw);


boolean result= cdao.changeUser(c);

PrintWriter pw=response.getWriter();

pw.println("<html><body>");

pw.println("<h1>Success</h1><hr>");

if(result){

    pw.println("<h3>Hey,  <strong><u><i>"+uname+"</i></u></strong>  your
password has been successfully changed. ");

    pw.println("From now use your new password. :) </h3>");

    pw.println("<br><br>If          you          want          to          <b><a
href='login.html'>Login</a><b><br>");

    pw.println("</body>");

    pw.println("<footer>"+result+"<footer></html>");

}

else {

    pw.println("<h3>Hey,  <strong><u><i>"+uname+"</i></u></strong>
your password is not changed. ");

    pw.println("</h3>");

```

```

pw.println("<br><br>If you want to <b><a href='login.html'>Login</a><b><br>");

pw.println("</body>");

pw.println("<footer>" + result + "<footer></html>");

RequestDispatcher dis=request.getRequestDispatcher("change.html");

dis.include(request, response);

    }

}

}

```

#### Codes for WelcomeServlet.java

```

package com;

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;

/**
 * Servlet implementation class WelcomeServlet
 */
public class WelcomeServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;

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

```



```

        PrintWriter out=response.getWriter();

        out.println("<html><body>");

        out.println("<h1>Welcome                               User!-->
"+request.getParameter("uname")+"</h1>");

        out.println("If you want to <a href='change.html'>Change Password</a>");

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

    }

}

```

#### Codes for MyConnection.java

```

package config;

import java.sql.Connection;
import java.sql.DriverManager;

public class MyConnection {

    static Connection con;

    static

    {

        try {

            Class.forName("com.mysql.jdbc.Driver");

            con=DriverManager.getConnection("jdbc:mysql://localhost:3306/test","root","1234");

        } catch(Exception e){

            e.printStackTrace();

        }

    }

}

```

```

        public static Connection getConnection(){

            return con;

        }

    }

```

#### Codes for UserDao.java

```

package dao;

import java.sql.Connection;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import bean.User;
import config.MyConnection;

public class UserDao {

    Connection con=MyConnection.getConnection();

    public String addUser(User u)
    {

        try {

            PreparedStatement ps=

                con.prepareStatement("insert into newuser values(?,?)");

            ps.setString(1, u.getUsername());

            ps.setString(2, u.getPassword());

            ps.executeUpdate();

            return "User Added";

        } catch(SQLException e){

```

```

        e.printStackTrace();

        return "User Not Added "+e;
    }

}

public boolean changeUser(User c)
{
    boolean ret=false;

    try {
        if(validateUser(c.getUsername(), c.getPassword()))
        {
            PreparedStatement ps=
                con.prepareStatement("update newuser set password=?
where username=? and password=?");

            ps.setString(2, c.getUsername());
            ps.setString(3, c.getPassword());
            ps.setString(1, c.getNewpassword());
            ps.executeUpdate();

            ret = true;
        }

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

        return ret;
    }
}

```

```

        return ret;
    }

    public boolean validateUser(String username, String password)
    {
        try {
            PreparedStatement ps=
                con.prepareStatement("select * from newuser where username=?
and password=?");

            ps.setString(1, username);
            ps.setString(2, password);
            ResultSet rs=ps.executeQuery();
            if(rs.next())
                return true;
            else
                return false;
        } catch (SQLException e) {
            // TODO Auto-generated catch block
            e.printStackTrace();
            return false;
        }
    }
}

```

## Codes for *sign\_up\_form.html*

```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Sign Up Here</title>
<script type="text/javascript"
src="confirmpass.js"></script>
<link rel="stylesheet" type="text/css"
href="sign_up_form.css">
</head>
<body>
<form action="MyServlet" method="post">
  <div class="headcontainer">
    <h1><b>Sign Up</b></h1>
  </div>
  <div class="container">

    <label><b>Choose your username </b></label>
    <input type="text" placeholder="Enter Username Here:
e.g. starboy" name="uname" required="required" >

    <label><b>Create a Password </b></label>
    <input type="password" placeholder="Enter Your
Password Here: " name="pswd" required="required"
id="password">

    <label><b>Confirm Password </b></label>
    <input type="password" placeholder="Confirm Your
Password Here: " name="pswd" required="required"
id="confirm_password">

    <button type="submit"
onClick="validatePassword()">Sign Up</button>
    <input type="checkbox" checked="checked">I'm an Indian
  </div>

  <div class="container"
style="background-color:#CCCCCC">
    <button type="button" class="cancelbtn">Cancel</button>
    <span class="pswd"><a href="#">Need Help!</a></span>
  </div>
</form>
</body>
</html>
```

## Codes for *sign\_up\_form.css*

```
@CHARSET "ISO-8859-1";
/*form border*/
form{
    border: 3px solid #CCCCCC;
}
/* full-width inputs*/
input[type=text], input[type=password]{
    width: 100%;
    padding: 12px 20px;
    margin: 8px 0;
    display: inline-block;
    border: 1px solid #1B1B1B;
    box-sizing: border-box;
}
/*style for buttons*/
button{
    background-color: #1B1B1B;
    color: white;
    padding: 14px 20px;
    margin: 8px 0;
    border: none;
    cursor: pointer;
    width: 100%
}
/*hover effect for button*/
button:hover{
    opacity: 0.8;
}
/*extra style for cancel button*/
.cancelbtn{
    width: auto;
    padding: 10px 18px;
    background-color: #1B1B1B;
}
/*title style*/
.headcontainer{
    text-align: center;
    margin: 24px 0 12px 0;
    text-shadow: 3px 3px 2px #1B11FF;
}
/*padding to containers*/
.container{
    padding: 16px;
}
/*style for "Extra link"*/
span.psw{
    float: right;
```

```
padding-top: 16px;
}
```

#### Codes for *login.html*

```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Login Here</title>
<link rel="stylesheet" type="text/css"
href="sign_up_form.css">
</head>
<body>
<form action="LoginServlet" method="post">
  <div class="headcontainer">
    <h1><b>Login</b></h1>
  </div>
  <div class="container">

    <label><b>Enter your username </b></label>
    <input type="text" placeholder="Enter Username Here:
e.g. starboy" name="uname" required="required" >

    <label><b>Enter your Password </b></label>
    <input type="password" placeholder="Enter Your
Password Here: " name="pswd" required="required">

    <button type="submit">Login</button>
    <input type="checkbox" checked="checked">Remember me.
  </div>

  <div class="container"
style="background-color:#CCCCCC">
    <button type="button" class="cancelbtn">Cancel</button>
    <span class="pswd"><a href="sign_up_form.html">Sign Up
Here!</a></span>
  </div>
</form>
</body>
</html>
```

#### Codes for *change.html*

```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Change Password</title>
```

```

<link rel="stylesheet" type="text/css"
href="sign_up_form.css">
</head>
<body>
<form action="NewServlet" method="post">
    <div class="headcontainer">
        <h1><b>Change Password</b></h1>
    </div>
    <div class="container">

        <label><b>Enter your username </b></label>
        <input type="text" placeholder="Enter Username Here:
e.g. starboy" name="uname" required="required" >

        <label><b>Enter your old Password </b></label>
        <input type="password" placeholder="Enter Your Old
Password Here: " name="pswd" required="required"
id="password">

        <label><b>Enter your new Password </b></label>
        <input type="password" placeholder="Enter Your new
Password Here: " name="npswd" required="required"
id="confirm_password">

        <button type="submit">Change Now</button>
    </div>

    <div class="container"
style="background-color:#CCCCCC">
        <button type="button" class="cancelbtn">Cancel</button>
        <span class="pswd"><a href="#">Back To Login!</a></span>
    </div>
</form>
</body>
</html>

```

#### Codes for *confirmpass.js*

```

var password = document.getElementById("password")
var confirm_password =
document.getElementById("confirm_password");

function validatePassword(){
    if(password.value != confirm_password.value) {
        confirm_password.setCustomValidity("Passwords Don't
Match");
    } else {
        confirm_password.setCustomValidity('');
    }
}

```