

LAB 3: JSP, SCRIPTING ELEMENTS



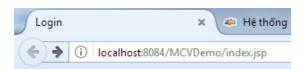
Muc tiêu:

Kết thúc bài thực hành này bạn có khả năng

- ✓ Tạo web application có chức năng login
- ✓ Hiểu cách sử dụng các thành phần cơ bản trong ngôn ngữ JSP
 - o Expression
 - Scriptlet
 - Declaration

PHẦN I

Bài 1: Tạo web app có chức năng đăng nhập, nếu account tồn tại mở trang welcome.jsp ngược lại mở trang fail.jsp (5 điểm)



Login page





Username or password invalid!!!

Click here to try again!

Click register to register new account



Welcome	×	# Hệ thống
(localhost:8084/MCVD	emo/Co	ntroller

welcome, teo

Welcome to MVC

Name	
Search	

View

login.jsp

```
<body>
     <h1>Login page</h1>
     <form action="Controller" method="post" >
         Username <input type="text" name="txtUsername" value=""/> <br/>
         Password <input type="password" name="txtPass" value=""/><br/>
         <input type="submit" value="Login" name="btAction"/>
         <input type="reset" value="Reset"/>
     </form>
 </body>
welcome.jsp
<body>
    <fort color="red"> welcome, ${sessionScope.USER}</font>
    <h1>Welcome to MVC </h1>
    <form action="Controller">
        Name <input type="text" name="txtSearch" value=""><br/>
        <input type="submit" value="Search" name="btAction"/>
    </form>
</body>
fail.jsp
 <body>
    <h1><font color="red">Username or password invalid!!!</font></h1>
    Click <a href="Controller?btAction=tryAgain">here</a> to try again!<br/>
    Click <a href="Controller?btAction=register">register</a> to register new account
 </body>
```



Controller

```
public class Controller extends HttpServlet {
    final private String errorPage = "fail.jsp";
    final private String homePage = "index.jsp";
    final private String welcomePage = "welcome.jsp";
    final private String registerPage = "register.jsp";
    final private String showpage = "show.jsp";
    protected void processRequest (HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        PrintWriter out = response.getWriter();
            String action = request.getParameter("btAction");
            if(action.equals("Login")){
                String username = request.getParameter("txtUsername");
                String password = request.getParameter("txtPass");
                LoginBean login = new LoginBean();
                boolean result = login.checkLogin(username, password);
                String url=errorPage;
                if(result){
                   HttpSession session = request.getSession(true);
                   session.setAttribute("USER", username);
                    url = welcomePage;
                RequestDispatcher rd = request.getRequestDispatcher(url);
                rd.forward(request, response);
            }else if(action.equals("tryAgain")){
                RequestDispatcher rd = request.getRequestDispatcher(homePage);
                rd.forward(request, response);
```

Model

```
public boolean checkLogin(String username, String password) {
    trv{
        Class.forName("com.microsoft.sqlserver.jdbc.SQLServerDriver");
        String url = "jdbc:sqlserver://localhost:1433;databaseName=Sinhvien";
        Connection con = DriverManager.getConnection(url, "sa", "");
        String sql = "select * from Registration where username = ? and password = ? ";
        PreparedStatement stm = con.prepareStatement(sql);
        stm.setString(1, username);
        stm.setString(2, password);
       ResultSet rs = stm.executeQuery();
       boolean result = rs.next();
       rs.close();
        stm.close();
        con.close();
        if(result){
           return true;
    }catch(Exception e) {
       e.printStackTrace();
    return false;
```



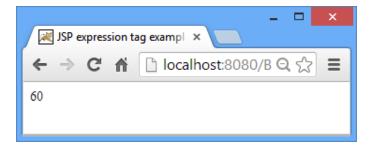
Database



PHẦN II

Bài 1: Tính toán trong JSP và hiển thị ra màn hình bằng Expression (1 điểm)

```
<html>
<head>
    <title>JSP expression tag example</title>
</head>
<body>
    <%
    int a=10;
    int b=20;
    int c=30;
    %>
        <%= a+b+c %>
</body>
</html>
```



Bài 2 Truyền giá trị giữa 2 trang JSP (1 điểm)

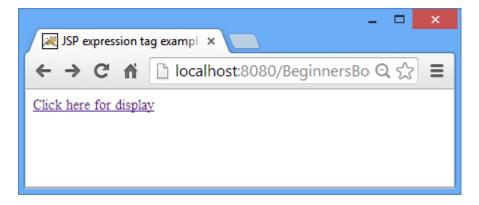
Tạo trang index.jsp như sau:

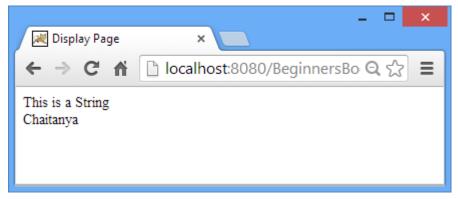


Tạo trang display.jsp như sau:

```
<html>
<head>
<title>Display Page</title>
</head>
<body>
<%="This is a String" %><br>
<%= application.getAttribute("MyName") %>
</body>
</html>
```

Output





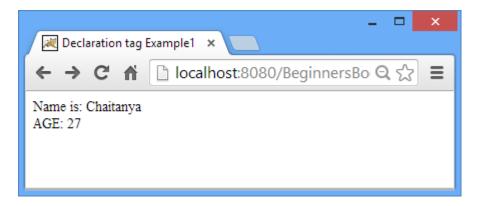
Bài 2: Declaration một biến (1 điểm)

```
<html>
<head>
<title>Declaration tag Example1</title>
</head>
<body>
<%! String name="Chaitanya"; %>
<%! int age=27; %>
<%! "Name is: "+ name %><br>
<%= "AGE: "+ age %>
</body>
```



</html>

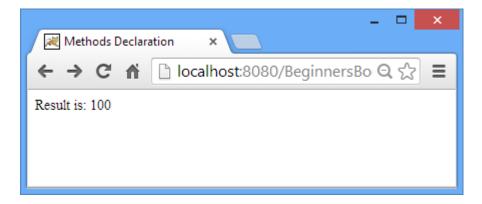
Output



Bài 4: Declaration một phương thức (1 điểm)

```
<html>
<head>
<title>Methods Declaration</title>
</head>
<body>
<%!
  int sum(int num1, int num2, int num3) {
  return num1+num2+num3;
  }
  %>
  <%= "Result is: " + sum(10,40,50) %>
</body>
</html>
```

Output



Bài 5: Scriptlet (1 điểm)



```
<! DOCTYPE HTML PUBLIC "-//W3C//DTD HTML4.0 translation //EN">
< HTML>
<HEAD>
<TITLE> MY JSP PAGE </TITLE>
</HEAD>
<BODY>

<% if (num > 5) { %>
<H3> hi </H3>
<%} else {%>
<h3> num value should not be less than 6 </h3>
<% } %>
</BODY>
</HTML>
```