

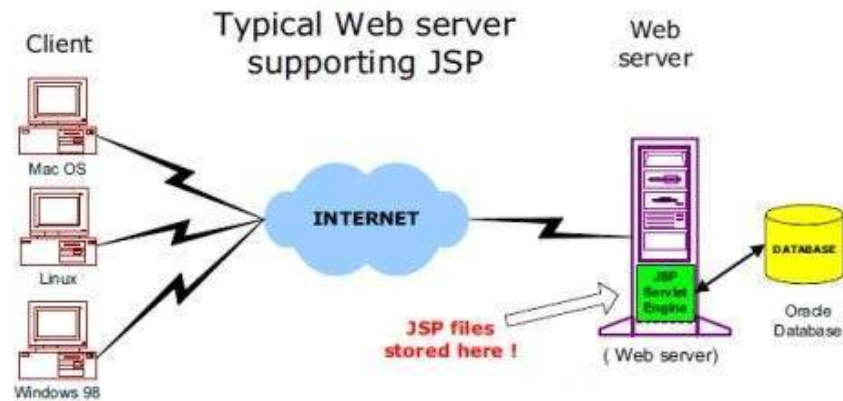
Object Oriented Programming 2 (Part 2)

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<https://github.com/arissetyawan/oop2.git>

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4. Java Server Pages



1. Elements of JSP

1. Scriptlet

`<% code fragment %>`

`<html>`

`<head><title>Hello World</title></head>`

`<body>`

`Hello World!
`

`<%`

`out.println("Your IP address is " + request.getRemoteAddr());`

`%>`

`</body>`

`</html>`

2. Declarations

`<%! declaration; [declaration;]+ ... %>`

`<%! int ix = 0; %>`

`<%! int salary, tax, bonus; %>`

`<%! TehPocci a = new TehPocci(); %>`

3. Expression

`<%= expression %>`

`<html><body>`

`<p>Today's date: <%= (new java.util.Date()).toLocaleString() %></p>`

`</body></html>`

4. Comments

`<%-- This is JSP comment --%>`

`<h2>A Test of Comments</h2>`

`<%-- This comment will not be visible in the page source --%>`

`<!-- This is HTML comment -->`

`<!-- <h2> An HTML comment. Ignored by the browser. </h2> -->`

5. Directives

`<%@ directive attribute="value" %>`

`<%@ page ... %>`

Defines page-dependent attributes, such as scripting language, error page, and buffering requirements.

import	<code><%@ page import="java.util.Date" %>Today is: <%= new Date() %></code>
contentType	<code><%@ page contentType=application/msword %> Today is: <%= new java.util.Date() %></code>
info	<code><%@ page info="composed by mahasiswa tegal" %></code>
buffer	<code><%@ page buffer="16kb" %> <!-- The default size of the buffer is 8Kb. --> Today is: <%= new java.util.Date() %></code>
ErrorPage	<code><%@ page errorPage="my_error_page.jsp" %><%= 99/0 %></code>
isErrorPage	<code><html></code> <code><body></code> <code><%@ page isErrorPage="true" %></code> <code>This is my_error_page.jsp; Sorry an exception occurred!
</code> <code>The exception is: <%= exception %></code> <code></body></code> <code></html></code>

`<%@ include ... %>`

Includes a file during the translation phase.

<jsp:include page="relativeURL | <%= expression %>" />

<h2>**this** is index page</h2>

<jsp:include page="header.jsp" />

<h2>end section of index page</h2>

<p> bla bla content </p>

<jsp:include page="footer.jsp" />

<jsp:include page="relativeURL | <%= expression %>">

<jsp:param name="parametername" value="parametervalue | <%=expression%>" />

</jsp:include>

<%@ taglib ... %>

Declares a tag library, containing custom actions, used in the page.

<%@ taglib uri="uri of the tag library" prefix="prefix of tag library" %>

<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>

1.<html><head>

2.<title>Tag Example</title>

3.</head><body>

4.<c:out value="\${Welcome}"/>

5.</body></html>

6. Actions

<jsp:action_name attribute="value" />

- jsp:include
- jsp:useBean
- jsp:setProperty
- jsp:getProperty
- jsp:forward
- jsp:element
- jsp:plugin
- jsp:attribute
- jsp:body
- jsp:text

7. Implicit Objects
8. Control-Flow Statements
9. JSP Operators
10. JSP Literals (Integer, String, etc)

Further: www.javatpoint.com

5. Java Database Connectivity

- <https://www.tutorialspoint.com/jdbc/>

6. Enterprise Java Bean

- https://www.tutorialspoint.com/jsp/jsp_java_beans.htm
- <https://www.javatpoint.com/jsp-useBean-action>

7. Design Pattern & Model View Controller

- see <https://github.com/arissetyawan/oop2.git>

8. Rest Web Services

```
List<Product> products = someProductService.list();
String json = new Gson().toJson(products);

response.setContentType("application/json");
response.setCharacterEncoding("UTF-8");
response.getWriter().write(json);
```

9. XML

- https://www.tutorialspoint.com/jsp/jsp_xml_data.htm

10. Servlet Programming

- <https://www.tutorialspoint.com/servlets/servlets-first-example.htm>

11. Remote Model Invocation

- https://www.tutorialspoint.com/java_rmi

12. Penilaian Akhir Project