JSP Introduction Quiz

1. What is the main value of Java Server Pages?

JavaServer Pages (JSP) are a technology for developing web pages that support dynamic content, allowing developers to insert java code in HTML pages

2. How are JSP pages related to servlets?

The container takes JSP, translates it into a servlet class source file then compiles that into a Java servlet classs. The container loads the servlet class, instantiates and initializes it, makes a separate thread for each request, and calls the servlet’s service() method.

3. How are JSP pages related to HTML?

Jsp is html with a little java mixed in

4. Give an example of a JSP scriptlet and show how it will look in the JSP servlet .

**JSP scriptlet**

<html><body>

<% int count = 0; %>

The page count is now:

<%= ++count %>

</body></html>

**How it will look in the JSP servlet**

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

int count = 0;

out.write("The page count is now:");

out.print(++count);

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

5. Give an example of a JSP declaration and show how it will look in the JSP servlet.

**JSP declaration**

<% int count = 0; %>

**How it will look in the JSP servlet**

int count = 0;

6. Give an example of a JSP comment and show how it will look in the JSP servlet.

<%-- JSP comment --%>

Just like Java comments in a Java source file, they’re stripped out of the translated page

7. Give an example of a JSP expression and show how it will look in the JSP servlet.

**JSP expressions**

<%= ++count %>

**How it will look in the JSP servlet**

out.print(++count);

8. Give an example of a JSP directive and show how it will look in the JSP servlet.

JSP directive

<%@ page import=”java.util.\*” %>

**How it will look in the JSP servlet**

import java.util.\*

9. Explain how an EL expression is evaluated.

${something}  
Container evaluates this as follows  
• checks page scope for an attribute named "something",  
→ if found use it.  
• otherwise check request scope for an attribute named "something",  
→ if found use it.  
• otherwise check session scope for an attribute named "something",  
→ if found use it.  
• otherwise check application scope for an attribute named "something",  
→ if found use it.  
• otherwise ignore the expression.

10. Explain how servlet attributes are involved in EL expressions.

${applicationScope.mail}

Is the same as

<%= application.getAttribute(“mail”) %>

11. Explain how servlets and JSPs use request dispatch to interact.

The servlet controller talked to the model (Java class with business logic) then set an attribute in the request scope before forwarding to the JSP view.

The JSP had to get the attribute from the request scope and use it to render a response to send back to the client.

**Servlet code**

request.setAttribute("name", name);

RequestDispatcher view = request.getRequestDispatcher("result.jsp");

view.forward(request, response);

**JSP code**

<html><body>

Hello <%= request.getAttribute("name") %>

</body></html>