

JSP Action Tags

JSP action tags

- There are many JSP action tags or elements. Each JSP action tag is used to perform some specific tasks.
- The action tags are used to control the flow between pages and to use Java Bean. The Jsp action tags are given below.

JSP Action Tags	Description
jsp:forward	forwards the request and response to another resource.
jsp:include	includes another resource.
jsp:useBean	creates or locates bean object.
jsp:setProperty	sets the value of property in bean object.
jsp:getProperty	prints the value of property of the bean.
jsp:plugin	embeds another components such as applet.
jsp:param	sets the parameter value. It is used in forward and include mostly.
jsp:fallback	can be used to print the message if plugin is working. It is used in jsp:plugin.

The jsp:useBean, jsp:setProperty and jsp:getProperty tags are used for bean development.

Common Attributes

Id attribute

The id attribute uniquely identifies the Action element, and allows the action to be referenced inside the JSP page

Scope attribute

This attribute identifies the lifecycle of the Action element. scope attribute determines the lifespan of the object associated with the id. The scope attribute has four possible values: **(a) page**, **(b)request**, **(c)session**, and **(d) application**.

<jsp:forward> action tag

- The **forward** action terminates the action of the current page and forwards the request to another resource such as a static page, another JSP page, or a Java Servlet.
- Following is the syntax of the **forward** action –
<jsp:forward page = "Relative URL" />

Example

- Let us reuse the following two files
(a) date.jsp and **(b) main.jsp** as follows –

Following is the content of the **date.jsp** file –

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

Following is the content of the **main.jsp** file –

```
<html>
  <head>
    <title>The include Action Example</title>
  </head>

  <body>
    <center>
      <h2>The include action Example</h2>
      <jsp:forward page = "date.jsp" />
    </center>
  </body>
</html>
```

The <jsp:include> Action

- This action lets you insert files into the page being generated. The syntax looks like this –

<jsp:include page = "relative URL" flush = "true" />

here,

page: The relative URL of the page to be included.

flush: The boolean attribute determines whether the included resource has its buffer flushed before it is included.

Example:

File: index.jsp

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

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

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

File: printdate.jsp

```
<% out.print("Today is:" + java.util.Calendar.getInstance().getTime()); %>
```

OUTPUT:

this is index page

Today is:Tue Sep 02 21:31:09 IST 2014

end section of index page

The <jsp:useBean> Action

- To interact with a [JavaBeans](#) component using the Action tag in a JSP page, we must first declare a bean. The <jsp:useBean> is a way of declaring and initializing the actual bean object. By **bean** we mean JavaBean component object. Syntax of <jsp:useBean> tag.

```
<jsp:useBean id = "beanName" class = "className"  
            scope = "page | request | session | application">
```

Here the **id** attribute specifies the name of the bean. **Scope** attribute specify where the bean is stored. The **class** attribute specify the fully qualified classname.

Jsp:useBean declaration:

<jsp:useBean id="myBean" class="PersonBean" scope="request" />

is equivalent to the following java code,

```
PersonBean myBean = (PersonBean)request.getAttribute("myBean");
if(myBean == null)
{
    myBean = new PersonBean();
    request.setAttribute("myBean", myBean);
}
```

Create Java Bean : Employee.java

```
package com.test.jsp;

public class Employee {
    private String name;
    private String department;

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public String getDepartment() {
        return department;
    }

    public void setDepartment(String department) {
        this.department = department;
    }
}
```

Create JSP Page:

Index.jsp

```
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Java Beans</title>
</head>
<body bgcolor="#008B8B">
    <jsp:useBean id="employee" class="com.test.jsp.Employee" />
    <jsp:setProperty name="employee" property="name" value="Harish" />
    <jsp:setProperty name="employee" property="department" value="HR" />
    <div>
        <h3>Employee Details</h3>
    </div>
    <jsp:getProperty name="employee" property="name" /><br>
    <jsp:getProperty name="employee" property="department" />
</body>
</html>
```

