



JSP Part 2



Objectives

- Understanding Standard Actions in JSP
- Introduction to Custom Tag, and The Need
- Creating Custom Tags



Standard Actions



Standard Actions

- Standard Actions are used to perform some specific task.
- All JSP standard actions follow a standard format:
 - `<prefix:suffix>`
- `suffix` is the actual name of the tag.



<jsp:useBean>



<jsp:useBean>

- Used to instantiate a Java Bean.
- Important Attributes:
 - `id`
 - `class`
 - `type`
 - `scope`



<jsp:useBean>

- E.g.

```
<jsp:useBean id="d1"  
    class="java.util.Date"  
    scope="session"/>
```



<jsp:setProperty>

- Used to set properties of the bean.
- Syntax:

```
<jsp:setProperty name="<beanName>"  
.....<Property-Details>...../>
```




<jsp:setProperty>

- **Property Details:**

- `property="*"`
- `property="<property>"`
- `property="<property>" param="<param>"`
- `property="<property>" value="<value>"`



<jsp:getProperty>

- Used to retrieve properties of the bean.
- Syntax:

```
<jsp:getProperty name="<beanName>"  
    property="<property>" />
```



Other Actions

- `<jsp:forward>`
- `<jsp:include>`
- `<jsp:param>`



Other Actions

- `<jsp:forward>`
 - Used to forward the request to another page.
 - E.g.
`<jsp:forward page="next.jsp"/>`



Other Actions

- `<jsp:include>`
 - Used to include the resources in the existing JSP.
 - E.g.
`<jsp:include page="next.jsp"/>`



Other Actions

- `<jsp:param>`
 - Used in conjunction with either `<forward>` or `<include>`, to supply additional parameters.
 - E.g.
`<jsp:param name=".." value=".." />`



Custom Tags



Custom Tags

- Sometimes, as per the application's requirement, it is necessary to create user defined tags.
- Such tags are called as custom tags.



Custom Tags

- Need
 - `<jsp:useBean>` is capable of working upon only Value Objects.
 - To handle the processing, still developer is required to write a Java code inside scriptlets.



Custom Tags

- Benefits:
 - Custom tags can be used to reduce the no of scriptlets in JSP.
 - Reusability
 - Can be used to handle bean processing.



Custom Tags

- To create custom tags, developer has to provide the implementation of the tag using a Java class that is known as a Tag Handler Class.



Custom Tags

- The tag handler class is to be created using a Tag API that belongs to a package `javax.servlet.jsp.tagext`.
- It mainly includes the following:
 - Tag
 - TagSupport



Custom Tags

- Once the tag implementation class is defined, it is to be mapped with the name of the tag which can be accomplished by creating a TLD file.
- It is a mapping file that contains entries in the XML format.