

## JavaServer Pages Questions: Part 2

What does TLD stand for?

What are the three steps for creating and using a custom tag?

Where must the tag handler class reside?

Show the relationships between the Tag, BodyTag, and IterationTag interfaces.

What two classes do we subclass (one or the other) when writing a tag handler normally?

Name the two most important methods in the Tag interface for writing a tag handler.

What is the return type of the method *doStartTag*?

What are the names of the two possible return values of the method *doStartTag*?

What is the root element of a tag library descriptor document?

What is the purpose of the *uri* element in a tag library descriptor document?

Give a concrete example of a complete *tag* element in a TLD document.

Explain the JSP directive that allows a JavaServer page to use a custom tag.

What modifications to a custom tag implementation are needed to allow an attribute in the tag?

Give a concrete example of an *attribute* element that lies inside a *tag* element in a TLD document.

Why might it be necessary to reset the default values in the *doEndTag* method of a tag handler?

How do we specify that an attribute for a custom tag is optional or not?

Where does a *rtexprvalue* element go and what is its purpose?

Describe the TryCatchFinally interface (its methods) and explain its purpose.

Explain how a `JspWriter` is obtained in a tag handler class.

Explain the constants `EVAL_PAGE` and `SKIP_PAGE`, including where they are defined and where they are used.

Explain the constants `EVAL_BODY_INCLUDE` and `SKIP_BODY`, including where they are defined and where they are used.

Describe the `IterationTag` interface.

When is the `doAfterBody` method executed? Be specific.

Explain the `bodyContent` variable, including where it is defined and what type it has.

Describe the `BodyTag` interface, ignoring deprecated members.

What interfaces does `TagSupport` implement?

What interfaces does `BodyTagSupport` implement?

What are the consequences that result when the `doStartTag` method returns the value `EVAL_BODY_BUFFERED`?

How can the body of a custom tag be retrieved as a `String` object?

What is the basic syntax of EL expressions and what is their purpose?

Where can EL expressions be used in a `JavaServer` page?

Describe the EL literals.

Give the alternative syntax for the `<`, `>=`, and `&` operators and explain why this alternative syntax can be useful.

Describe the variables in EL.

Name the eleven implicit objects in EL.

Which of the eleven implicit objects are bound to `Map` objects?

Describe the objects bound to `param`, `header`, `cookie`, and `initParam`.

Describe the objects bound to `paramValues` and `headerValues`.

Suppose a `JavaServer` page is fetched with two parameters *a* and *b*. Show how these parameters can be obtained in the page using EL.

What does division by zero produce in EL?

What does remainder by zero produce in EL?

Give two examples where coercion can produce an error in EL.

Describe the two ways the parameter *count* can be accessed in EL.

Describe the limitations of the dot (.) operator in EL.

Explain the differences between the dot (.) operator and the bracket ([]) operator in EL.

Describe how functions can be defined in EL.

Give a concrete example of a *function* element.