

Elements in HTML 4.0

Obsolete Elements
Deprecated Elements
New Elements

Overview

Version 4.0 of the Hypertext Markup Language (HTML) has a number of major improvements over previous versions. This version includes the capacity to use Cascading Style Sheets (CSS) for precise formatting. The World Wide Web Consortium (W3C) recommends that developers move formatting information out of HTML text and use CSS whenever possible. Other features are improvements to tables and forms, making them more flexible and more easily controlled. There are also new printing and multimedia features.

HTML 4.0 makes frames an official part of the specification, approving the <FRAME>, <FRAMESET>, and <IFRAME> elements. The HTML specification never defined them until version 4.0.

Characters previously not available in HTML have been included, making it a truly international language. HTML 4.0 addresses these limitations by using the Universal Character Set (UCS), equivalent to Unicode 2.0. This standard uses a 16-bit set with more than 65,000 characters.

The remainder of this document details specific elements updated in HTML 4.0. Three elements are obsolete, ten elements are deprecated (no longer supported), and more than fifteen elements have been added.

Obsolete Elements

The three tags removed from the HTML specification are <XMP>, <PLAINTEXT>, and <LISTING>. These tags are to be replaced with <PRE> in all instances. Some browsers may continue to support these tags.

Deprecated Elements

These tags and attributes have been replaced by updated HTML constructs. The W3C recommendation strongly urges that deprecated tags are not used, as they will become obsolete.

<APPLET>...</APPLET>

This tag allowed a Java applet to run. It should be replaced by the <OBJECT>...</OBJECT> tag.

<ISINDEX>...</ISINDEX>

This tag allowed a form to contain a basic string search. It should be replaced by the <INPUT> form element.

<DIR>...</DIR>

This tag was used to describe a directory list, which is identical to an unordered list. It should be replaced by a ... list tag.

<MENU>...</MENU>

This tag was used to define a single-column menu list, which is identical to an unordered list. It should be replaced by a ... list tag.

<CENTER>...</CENTER>

This tag was used to center either text or graphics. It should be replaced by a <DIV> tag, and the align attribute should be set to "center."

...

This tag was used to specify font face, size, and colors. Style sheets should be used for character formatting rather than HTML code.

<BASEFONT>...</BASEFONT>

This tag was used to set a base font size as a reference point for making the font larger or smaller. Style sheets should be used to set and reference relative font sizes.

<STRIKE>...</STRIKE> or <S>...

These tags were used to create strikethrough characters. Style sheets should be used for all such character formatting.

<U>...</U>

These tags were used to underline characters. Style sheets should be used to create underlined text.

New Elements

The following is a brief description of new tags.

<ABBR>...</ABBR>

This tag identifies the abbreviated form of a term or phrase. Both a start tag and an end tag are required.

<ACRONYM>...</ACRONYM>

This tag identifies an acronym in a phrase of text. <ACRONYM> is similar in behavior to and <CODE>. Both a start tag and an end tag are required. Here is an example:

This document is about <ACRONYM>HTML</ACRONYM>, which stands for Hypertext Markup Language. Version 4.0 should be used to create documents for the <ACRONYM>WWW</ACRONYM>.

<BUTTON>...</BUTTON>

This tag is used to create push buttons on forms that are similar to push buttons in most Windows applications. In its behavior, the <BUTTON> tag is like the "submit" and "reset" <INPUT> elements. The

representation of a <BUTTON> has a 3-dimensional look, with beveled edges, and it appears to be depressed when a user clicks on it. Both a start tag and an end tag for <BUTTON> are required by HTML 4.0. Here is an example:

```
<FORM action="http://hansenmedia.com/prog/newuser" method="post">
Would you prefer to read these documents in German or English?
<P>
<INPUT type="radio" name="preference" value="Yes"> Yes<BR>
<INPUT type="radio" name="preference" value="No"> No<BR>
<P>
<BUTTON name="submit" value="submit" type="submit"> Send</BUTTON>
<BUTTON name="reset" type="reset"> Reset</BUTTON>
</FORM>
</COLGROUP>...</COLGROUP>
```

This tag allows tables to be formatted with groups of columns that share width and alignment properties, which are set by one or more of the new <COL> elements. If a <COLGROUP> is not specified and defined, HTML 4.0 formats a table with a single column group that contains all the columns. Both a start tag and an end tag are required by HTML 4.0 for <COLGROUP>.

Here is an example of a table with one wide column and check box at the right side of each row.

```
<TABLE>
<COLGROUP span="8" width="20">
<COLGROUP span="1" width="0*">
<THEAD>
<TR>...
</TABLE>
<FIELDSET>...<//FIELDSET>
```

This tag allows related form fields to be grouped, providing a way for information to be classified. When a group of form elements are enclosed in <FIELDSET> tags the browser groups the elements together. Both a start tag and an end tag are required by HTML 4.0.

Here is an example of code with both the <FIELDSET> and <LEGEND> tags.

```
<HTML>
<HEAD>
<TITLE>Size of Research Report you would like</TITLE>
<BODY>
Please select an option below indicating the length of the report you are
requesting.
<FORM action="..." method="post">
    <FIELDSET>
        <LEGEND align="top">Length of Report</LEGEND>
        Number of pages in the report:
        <SELECT NAME="Pages" SIZE="5">
        <OPTION VALUE="2 pages">2
        <OPTION VALUE="3 pages">3
        <OPTION VALUE="5 pages">5
        <OPTION VALUE="8 pages">8</SELECT>
        Number of words per page:
```

... and <INS>...</INS>

These tags are used to identify portions of a document that have been edited since the previous version. ... marks text that has been deleted. <INS>...</INS> is used to mark text that has been inserted. Both a start tag and an end tag are required by HTML 4.0 for and <INS>...

Here is an example:

```
This is the new and improved online tutorial on HTML. <INS>You have three options. You may begin the test, practice, or exit.</INS> <DEL>You have two options. You may begin the test or exit.</DEL>
```

<LABEL>...</LABEL>

This tag is used to specify the label text for a form field, and to identify parameters of form elements. Both a start tag and an end tag are required by HTML 4.0.

<LEGEND>...</LEGEND>

This tag is used in conjunction with <FIELDSET> to attach a label to a form grouping. Both a start tag and an end tag are required by HTML 4.0. See the <FIELDSET> example for usage.

<NOFRAMES>...</NOFRAMES>

This tag is used to specify alternate text if the browser is not able to display frames. Both a start tag and an end tag are required by HTML 4.0.

Here is an example:

```
<NOFRAMES>This text is displayed by browsers unable to render frames.</NOFRAMES>
```

<NOSCRIPT>...</NOSCRIPT>

This new tag is used to specify alternate text if the browser is not able to execute JavaScript. No text is rendered by the browser if JavaScript is supported. It should be placed within the HEAD tags. Both a start tag and an end tag are required by HTML 4.0.

Here is an example:

```
<NOSCRIPT>This text is displayed by browsers unable to process
JavaScript.
```

<OBJECT>...</OBJECT>

This tag embeds an object on a page. The object could be an image, a document, a control, or an applet. Both a start tag and an end tag are required by HTML 4.0.

<OPTGROUP>...</OPTGROUP>

This tag groups menu options together in a SELECT, which is particularly useful for form accessibility. Both a start tag and an end tag are required by HTML 4.0.

<PARAM>...</PARAM>

This tag is used to pass additional parameters to a Java applet. A start tag is required, but an end tag is optional in HTML 4.0.

...

This tag is used to define a text container and apply style information to it, according to the conventions of Cascading Style Sheets (CSS). Both a start tag and an end tag are required by HTML 4.0.

Here is an example:

This text is displayed in red.

<Q>...</Q>

This tag functions in a way similar to the <BLOCKQUOTE> tag, but applies to short quoted sections that do not require paragraph breaks. Both a start tag and an end tag are required by HTML 4.0.