

HTML 4.0 AND 4.01 - More of a Good Thing!

by © June Kaminski, MSN PhD(c)

Rising to the Occasion

Each HTML version represents improvements and increased capabilities within the coding language. Version 4.0 offered new goodies to web designers: ways to insert style sheets, scripting, frames, embedded objects, improved support for right to left and mixed direction text, richer tables and enhanced forms. It also afforded better accessibility for people with disabilities. Version 4.01 is a revision of 4.0 that corrects noted errors and improved the results of the coding.

HTML 4.0 introduced the first true international compatibility - documents may be written in every language and be transported easily to local and global destinations. The ISO/IEC: 10646 standard has been adopted, the world's most inclusive standard that deals with issues of the representation of international characters, the text direction, punctuation, and other world language issues. The two key factors of greater access and international standard robustness make HTML 4.0 and 4.01 a superior code for designers to use.

HTML 4 developments inspired by concerns for accessibility include:

- Better distinction between document structure and presentation, thus encouraging the use of style sheets instead of HTML presentation elements and attributes.
- Better forms, including the addition of access keys, the ability to group form controls semantically, the ability to group SELECT options semantically, and active labels.
- The ability to markup a text description of an included object (with the OBJECT element).
- A new client-side image map mechanism (the MAP element) that allows authors to integrate image and text links.
- The requirement that alternate text accompany images included with the IMG element and image maps included with the AREA element.
- Support for the title and lang attributes on all elements.
- Support for the ABBR and ACRONYM elements.
- A wider range of target media (tty, braille, etc.) for use with style sheets.
- Better tables, including captions, column groups, and mechanisms to facilitate non-visual rendering.
- Long descriptions of tables, images, frames, etc.

([W3 Consortium](#))

Making it Sing and Shine

HTML 4.0 offers a standard process for embedding generic media objects and application into the document. The "OBJECT" element provides a mechanism for including images, video, sound, objects and other applications into a webpage.

This version of HTML introduces a unique approach to web design - to separate structure and presentation which reduces the cost of serving a wide range of platforms and media, and facilitates document revisions.

To include images, authors may use the OBJECT element or the IMG element.

To include applets, authors should use the OBJECT element as the APPLET element is deprecated.

To include one HTML document in another, authors may use either the new IFRAME element or

the OBJECT element. In both cases, the embedded document remains independent of the main document. Visual user agents may present the embedded document in a distinct window within the main document.

Are you Stylin'?

One of the biggest improvements in HTML 4.0 is the ease of using style sheets to control the presentation of web pages: fonts, alignment, color, etc. The code can be written to cover either individual or group elements. This advance in HTML coding allows greater freedom with element rendering, an aspect of design that developers have struggled with.

Style sheets make it easy to specify the amount of white space between text lines, the amount lines are indented, the colors used for the text and the backgrounds, the font size and style, and a host of other details. For example, the following short CSS style sheet (stored in the file "special.css"), sets the text color of a paragraph to blue and surrounds it with a solid green border:

```
P.special {  
color : blue;  
border: solid green;  
}
```

The style sheet is then linked to the source HTML document by using the LINK element. You can learn more about creating style sheets on the [W3C](#) web site.

Setting a Fancy Table

Version 4.01 has provided some interesting advances in table making. For one thing, tables can now be divided into three parts, the table head, body, and foot (THEAD, TBODY, TFOOT). A simple alteration, but one that can increase the versatility of a table a hundred fold. For instance, now the body of a table can scroll the body section of a table while the header and footer remain stationary. Or headers and footers can easily be repeated on tables located on different web pages, in the case of long tables.

As well, column and row attributes are more dynamic with version 4.01, (e.g. COLGROUP and COL elements). This makes table development much less stressful, since columns can be rendered incrementally instead of row by row in a horizontal fashion. As well, table cells can contain either table head (TH) or table data (TD) content.

All in all, HTML version 4.0 and especially version 4.01 have offered much more control and ease in coding for the purist designer. If you are not already using it, isn't it time? In the next installment of this five part series, I will introduce the even more advanced XHTML and DHTML. All of these languages offer fairly user friendly and effective ways to truly weave your web sites, from scratch from the bottom up!