

“Web Standards”

SMAD 404

Advanced Multimedia

Web Standards

- **“The web was designed to separate structure from presentation”**
 - What does this mean?
- **HTML was never designed to handle:**
 - Font styles
 - Complex layout
- **Common HTML 1.0 tags**
 - **<H1>** largest header
 - **** emphasized text
 - **** strongly emphasized text

Web Standards

- **HTML 1.0 Rationale**
 - The user could change a browser setting and make `<H1>` bigger or smaller
- **“Logical Structure”**
(Publishers break textbook manuscripts into pieces).
 - Break the text into pieces
 - Name the pieces
 - Apply styles to the pieces
 - The style rules for a piece can change and be applied to all the pieces with the same name

Web Standards

Book Publishing: Use of Styles

- **Style Rule A**

<H1>
Font face = Impact
Color = blue
Size = 24

<Example>
Font face = Tahoma
Color = green
Size = 18
Style = Italic

<Figure>
Font face = Times New Roman
Color = red
Size = 18

<MainText>
Font face = Times New Roman
Color = black
Size = 18

- **Style Rule B**

<H1>
Font face = Verdana
Color = red
Size = 24

<Example>
Font face = Impact
Color = bluegreen
Size = 18

<Figure>
Font face = Arial
Color = green
Size = 16

<MainText>
Font face = Arial
Color = black
Size = 16

<H1> The Image Tag

<Example> **

<MainText> This is the basic tag that tells the browser to place an image into the web page. There are a number of attributes that can be applied as shown below (**<Figure>** **Figure 3-6**). The src attribute is required and tells the browser which graphic to use.

<H1> The Image Tag

<Example> **

<MainText> This is the basic tag that tells the browser to place an image into the web page. There are a number of attributes that can be applied as shown below (**<Figure>** **Figure 3-6**). The src attribute is required and tells the browser which graphic to use.

Web Standards

HTML 1.0: The complete list

A - anchor
ADDRESS - formatting tag, often shown in italics
B - formatting tag, bold
BASE - optional head element, sets base URL for related documents
BLOCKQUOTE - formatting tag, to indicate portions of text included from other documents
BODY - required, see above
BR - line break
CITE - formatting tag, to indicate text is a citation from another source
CODE - formatting tag, to indicate text is program source code
DD - list tag, definition
DIR - list tag, directory
DL - list tag, definition list
DT - list tag, definition term
EM - formatting tag, to indicate text is to be emphasized
H1 - structural heading, top (largest) level
H2 - structural heading
H3 - structural heading
H4 - structural heading
H5 - structural heading
H6 - structural heading, bottom (smallest) level
HEAD - required, see above
HR - horizontal rule
HTML - required, see above
I - formatting tag, italics
IMG - image anchor
ISINDEX - optional head element, indicates document is a searchable index
KBD - formatting tag, indicates expected user in source code
LI - list tag, list item
LINK - indicates relationship between documents, varies from browser to browser
MENU - list tag, compacted
META - optional head element, information for client software such as last revision date
NEXTID - optional head element used by automated markup systems to keep track of anchors
OL - list tag, ordered list
P - paragraph break
PRE - formatting tag, indicates text should be preformatted (monospaced, preserve whitespace)
SAMP - formatting tag, used to mark text output from a computer program
STRONG - formatting tag, strongly emphasize text
TITLE - required, see above
TT - formatting tag, typewriter text, show text in fixed font
UL - list tag, unnumbered list
VAR - formatting tag, indicated a variable in program source code

Web Standards

- **1994: Netscape Founded**
 - The most used browser
 - Began inventing their own HTML tags without first openly discussing them with the Web community
 - They were called “Netscape Extensions”
 - Some of the tags invented:
 - **BODY ATTRIBUTES: BGCOLOR, TEXT COLOR**
 - **FONT: FACE, COLOR, SIZE**

Web Standards

- **Late 1994: World Wide Web Consortium (W3C) Forms**
 - Interested in developing standards for HTML
 - “You're not supposed to be able to do things like that in HTML”
 - Such things as text color, background texture, font size and font face are outside the scope of HTML where the intent was only to specify how a document would be organized or structured.
 - Reluctantly agreed to add these to the HTML standard

Web Standards

- **1995: Microsoft Comes out with Explorer**
 - Developed their own tags
 - Added ActiveX
- **Interoperability Not Possible**
 - Web developers would have to make pages work with different tags for Netscape and IE.
- **What if you want to change all instances of `` to ``**
 - Web developers would have to search for all of those and make changes to each

Web Standards

- **World Wide Web Consortium**
 - Later adopted:
 - Tables
 - Frames (Netscape implemented it in their browser. W3c added it as part of the HTML standard)
- **1996: W3C Forms “Editorial Review Board”**
 - Attempt to standardize HTML, so that Netscape didn't have one group of tags and IE another.
 - Brought the browser manufacturers together, mainly Netscape and Microsoft.
 - Wanted to remove “presentational elements”
 - Immediately agreed to get rid of some proprietary tags such as <blink> (Netscape) and <marquee> (IE).

Web Standards

- **1996: HTML 4 & CSS-1 Adopted by W3C**
- <http://streaming.smad.jmu.edu/smad404/lessons/html40.pdf>
 - Tag Deprecation
 - An attempt to get rid of “presentational tags”
 - Browsers will still handle most of these tags, but someday won’t because they are no longer part of the HTML standard.
 - Some Deprecated Tags
 - BODY Elements:
 - BACKGROUND
 - BGCOLOR
 - TEXT
 - LINK, VLINK, ALINK
 -
 - (Not deprecated, but discouraged in favor of CSS)
 - <I> (Not deprecated, but discouraged in favor of CSS)
 - <TT> (Not deprecated, but discouraged in favor of CSS)
 - <U>
 - <STRIKE>
 - <BLOCKQUOTE>
 - Table Properties such as
 - ALIGN=LEFT|CENTER|RIGHT
- *** NOTE: The <TABLE> tag is not deprecated. They want you to specify widths and alignment using CSS

Web Standards

- **HTML 4 & CSS**
 - An attempt to separate structure from presentation
 - Cascading Style Sheets (CSS) can replace the deprecated tags
 - Attempt to use Layers `<DIV>` instead of tables for layout
 - Attempt to eliminate the use of “spacer images” to provide spacing on a page. (i.e. `spacer.gif` in Dreamweaver)
 - HTML documents can contain only “structural” identifiers and presentational (style) rules can be stored separately

Web Standards

- **HTML 4 & CSS**

- **Allows better “accessibility.” (PDAs and devices for the disabled can render a category of text differently).**
 - **EXAMPLE: If a piece of text is labeled as <H1>, on a computer’s browser it might render very large. A separate style sheet could be created for a PDA to make it render smaller on the PDA.**
 - **Not all browsers fully implement CSS**
 - **Netscape and IE previous to 4.0 did not support CSS**
 - **1998: CSS-2 Adopted**
 - **Netscape 4.7 is “glitchy”**
 - **Mozilla and Safari do a very good job**
 - **IE 6 & Netscape Navigator 6 do a decent job**
- CONCLUSION: Enough browser’s support it to use it today!!!**

Web Standards

- **Web Standards**

- A grassroots coalition fighting for standards that ensure simple, affordable access to web technologies for all.
 - <http://www.webstandards.org/>
- Promotes the adoption of CSS and “standards compliance.”
- Promotes CSS, XML/XHTML and other web languages
- A “Web Standards” site conforms to these standards to create pages that are:
 - Faster loading
 - Easier to change
 - More accessible
 - Better cataloged by search engines
 - More compatible across browsers