

Basic HTML tags



Beginning Web Site Design

Stanford University Continuing Studies CS 03

<http://www.stanford.edu/group/csp/cs03/>

What is HTML?

- HTML, otherwise known as HyperText Markup Language, is the language used to create Web pages
- Using HTML, you can create a Web page with text, graphics, sound, and video

HTML: HyperText Markup Language

- HTML documents are simply text documents with a specific form
 - Documents comprised of **content** and **markup tags**
 - Content: actual information being conveyed
 - The markup tags tell the Web browser **how to display** the page
 - An HTML file must have an **htm** or **html** file extension
 - An HTML file can be created using a **simple text editor**

HTML Tags

- HTML tags are used to mark-up HTML elements
 - Surrounded by angle brackets `<` and `>`
 - HTML tags normally come in pairs, like `<tagname>` (start tag) and `</tagname>` (end tag)
 - The text between the start and end tags is the element content
 - Not case-sensitive
 - Follow the latest web standards:
 - Use lowercase tags

Structural Tags



`<HTML>`

These tags enclose the entire Web page document.

`</HTML>`

`<HEAD>`

These tags enclose the Head part of the document

`</HEAD>`

`<TITLE>`

These tags enclose the title of the document. This text appears in the title bar in the browser and on the bookmark list if someone bookmarks your web page.

`</TITLE>`

HTML Document Structure

- Entire document enclosed within `<html>` and `</html>` tags
- Two subparts:
 - Head
 - Enclosed within `<head>` and `</head>`
 - Within the head, more tags can be used to specify title of the page, meta-information, etc.
 - Body
 - Enclosed within `<body>` and `</body>`
 - Within the body, content is to be displayed
 - Other tags can be embedded in the body

Sample Structure of a Web Site



```
<HTML>
```

```
  <HEAD>
```

```
    <TITLE> John Q. Public's Web Page </TITLE>
```

```
  </HEAD>
```

```
  <BODY>
```

```
    This is John Public's Webpage!
```

```
  </BODY>
```

```
</HTML>
```

Comments and Doctype

Comments and doctype

HTML has a mechanism for embedding comments that are not displayed when the page is rendered in a browser.

Eg.: `<!-- This is comment text -->`

Besides tags, text content, and entities, an HTML document must contain a doctype declaration as the first line. For

Eg.:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <title>My first HTML document</title>
</head>
<body>
  <p>Hello world! </p>
</body>
</html>
```

Current version of HTML is 5 and it makes use of the following declaration: `<!DOCTYPE html>`



Empty Tags

Empty tags vs Container tags

Some elements which does not requires **closing tags**, are known as **Empty Tags** or **Elements**.

For Eg: ``

`
` beginning of new line. **BR** stands for **BR**eaK.

`<hr />` puts a line across the page. **HR** stands for **H**orizontal **R**ule.

The elements which requires **opening** and **closing tags**, are known as **Container Tags** or **Elements**.

For Eg: `<h1> This is a heading </h1>`

`<p> This is a paragraph </p>`



HTML attributes and values

HTML Attributes and Values

HTML elements can have attributes which provides additional information about an element. Always specified in the opening tag and should contained value.

For Eg.:

``

Diagram illustrating the structure of an HTML attribute-value pair:

- `href` is an attribute of `a`
- `http://en.wikipedia.org/wiki/Linus_Linux` is the Value for `href`
- `rel` is also an attribute of `a`
- `external` is the Value for `rel`

```
<!DOCTYPE html>
<html>
<head>
<title>Align Attribute Example</title>
</head>
<body>
<p align="left">This is left aligned</p>
<p align="center">This is center aligned</p>
<p align="right">This is right aligned</p>
</body>
</html>
```

This is left aligned

This is center aligned

This is right aligned



<head> elements

<head> Elements

Meta tags

The <meta> tag provides metadata about the HTML document.

Meta elements are typically used to specify page description, keywords, author of the document, last modified, and other metadata.

Some examples –

Example 1 - Define keywords for search engines:

```
<meta name="keywords, description " content="HTML, CSS, XML, XHTML, JavaScript">
```

Example 3 - Define the author of a page:

```
<meta name="author" content="Hege Refsnes">
```

Example 4 - Refresh document every 30 seconds:

```
<meta http-equiv="refresh" content="30">
```



<head> elements contd..

<head> Elements (Cont.)

Title Tag

The <title> tag is required in all HTML documents and it defines the title of the document.

The <title> element: Defines a title in the browser toolbar.

Provides a title for the page when it is added to favorites.

Displays a title for the page in search-engine results.

Eg.:



<head> elements contd..

<head> Elements (Cont.)

Link Tag

The <link> tag defines a link between a document and an external resource.

In HTML, the <link> tag has no end tag.

Some Imp. Attributes –

- charset, - To know browser, which character encoding is used.
- href, - hyperlink.
- rel, - Relation between linked document.
- target, - It specifies where to open the linked document.

Example –

```
<head>  
<link rel="stylesheet" type="text/css" href="theme.css">  
</head>
```



We'll Study...



- HTML Basics (http://www.w3schools.com/html/html_intro.asp):
 - HTML Elements
 - HTML Headings
 - HTML Paragraphs
 - HTML Formatting
 - HTML Styles
 - HTML Images
 - HTML Tables
 - HTML Lists
 - HTML Forms
 - HTML Colors

Elements of Body section

Elements for the BODY section

Block-level elements

The BODY of a document consists of multiple block elements. If plain text is found inside the body, it is assumed to be inside a paragraph P. See the syntax rules for an explanation of the syntax used in the overview.

Headings

H1 - Level 1 header
H2 - Level 2 header
H3 - Level 3 header
H4 - Level 4 header
H5 - Level 5 header
H6 - Level 6 header

Text containers

P - Paragraph
PRE - Preformatted text
BLOCKQUOTE - Large quotation
ADDRESS - Address information

Text Level Elements

Logical Markups
Physical Markups
Special Markups

Lists

UL - Unordered list
OL - Ordered list
DIR - Directory list
MENU - Menu item list
LI - List item
DL - Definition list
DT - Definition term
DD - Definition

Others

DIV - Logical division
CENTER - Centered division
FORM - Input form
HR - Horizontal rule
TABLE - Tables



Nested Tags

- Whenever you have HTML tags within other HTML tags, you must close the nearest tag first
- Example:

`<H1> <I> The Nation </I> </H1>`

Elements of Body section Contd..

Elements for the BODY section

Headings

There are 6 types of heading tags.

Eg.:-

```
<html>
<body>
<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
<h4>This is heading 4</h4>
<h5>This is heading 5</h5>
<h6>This is heading 6</h6>
<p><b>Tip:</b> Use h1 to h6 elements only for headings.
Do not use them just to make text bold or big. Use other tags
for that.</p>
</body>
</html>
```

This is heading 1

This is heading 2

This is heading 3

This is heading 4

This is heading 5

This is heading 6

Tip: Use h1 to h6 elements only for headings. Do not use them just to make text bold or big. Use other tags for that.



Elements of Body section Contd..

Elements for the BODY section (Cont.)

<p> - Paragraph Tag and <pre> - Preformatted Tag

<p> Tag - Another way to structure your text in paragraph forms.

<Pre> Tag - is used to apply structural exactness.

Eg.:

```
<html>
<body>
<p>This is a paragraph of text.</p>
<p>This is a second paragraph of text.</p>
<pre>This is preformatted text with    exact space,
line and breaks.</pre>
</body>
</html>
```

This is a paragraph of text.

This is a second paragraph of text.

This is preformatted text with exact space,
line and breaks.



Elements of Body section Contd..

Elements for the BODY section (Cont.)

<blockquote> Tag and <address> Tag

Blockquote Tag - Indicates that the enclosed text is an extended quotation.

Address Tag - Address Information of the Author/Owner.

Eg.:

```
<html>
<body>
<blockquote cite="http://http://peoplestrategists.com/">
  <p>This is a quotation taken from the People Strategists.</p>
</blockquote>

<address>
Written by
<a href="mailto:info@peoplestrategists.com">People
Strategists</a><br>
Visit us at:<br>
www.peoplestrategists.com<br>
L8, Tower1, Umiya Business Bay,<br>
Outer Ring Road, Bangalore.
</address>
</body>
</html>
```

This is a quotation taken from the People Strategists.

Written by [People Strategists](#).

Visit us at:

www.peoplestrategists.com

L8, Tower1, Umiya Business Bay,
Outer ring road, Bangalore.



Elements of Body section Contd..

Elements for the BODY section (Cont.)

Text Formatting Elements (Physical Markup)

Tag	Description
<code>....</code>	- bold.
<code><i>.....</i></code>	- italic.
<code><u>....</u></code>	- underline.
<code><strike>...</strike></code>	- strikethrough.
<code><sub>....</sub></code>	- subscript.
<code><sup>....</sup></code>	- superscript.
<code><big>....</big></code>	- bigger font (one font size bigger).
<code><small>....</small></code>	- small font (one font size smaller).
<code><tt>....</tt></code>	- typewriter (monospaced).



Horizontal Rule

The <HR> tag puts a graphical line across the page.

Ex:



Horizontal Rule Attributes:

NOSHADE -- A solid line with no shading

WIDTH="xx%/xx" -- Controls the width of the line. You may specify either percentage of the width of a page or actual pixel length

SIZE="xx" -- Controls the height of the line. You need to specify the dimension in pixels.

ALIGN="left/center/right" -- This allows the line to be aligned to the left, right, or center of the page

* modifications (cont.)*

One can combine font modifications:

```
<FONT SIZE="7" FACE="courier" COLOR="red">Big, Courier & Red</FONT>
```

Big, Courier & Red

```
<FONT SIZE="7"><FONT FACE="courier">Big & Courier</FONT> - Just Big</FONT>
```

Big & Courier - Just Big

Text formatting elements

Elements for the BODY section (Cont.)

Text Formatting Elements (Special markup)

Links and Navigation

Anchor Element-

An anchor can be used to create a link to another document (with the href attribute).

Types –

External : `Welcome to PeopleStrategists`

Internal : `contact`

Image Tag-

The syntax for the tag to insert image into the webpage is-

``

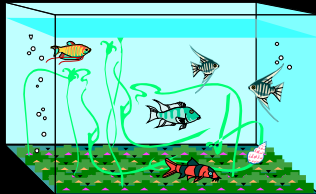
Eg.: ``



Graphics

To have a graphic appear on a webpage, web designers must to put the tag in with the address where the graphic "lives":

```
<IMG SRC="http://www.someplace.com/images/fish.gif">
```



Graphics attributes:

alt="text": insert a description of the graphic for those who are using browsers that cannot process images (e.g., page readers for the blind)

width="xx/xx%": width in pixels/percentage

height="xx/xx%": height in pixels/percentage

border="xx": pixel length of the border surrounding the image.

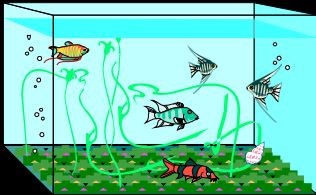
hspace="xx": places a buffer of space horizontally around the image

vspace="xx": places a buffer of space vertically around the image

align="top/middle/bottom/right/left": aligns image in relation to the text (see next 2 slides)

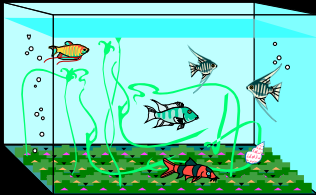
Graphics (cont.)

``All about Fish



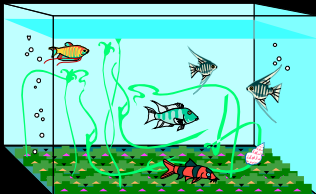
All about Fish

``All about Fish



All about Fish

``All about Fish

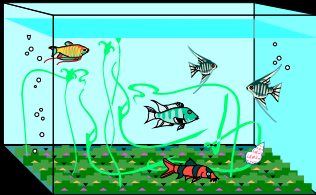


All about Fish

Graphics (cont.)

```

```



```

```

