

HTML: The Basics

- HTML = **H**yper**T**ext **M**arkup **L**anguage
- HTML is not a **programming** language. It's a **markup** language.
- First conceived by Tim Berners-Lee in 1990.
- Designed as a language to describe **structure**, not **presentation**.

- Meant to describe sections of a page such as H1, H2, H3, H4, LI, OL
- The **browser** and the **user** were supposed to decide how the page should look (presentation).

Steps

- 1). Acquire content (text, images, link information, audio, video)
 - 2). Write HTML in a **plain ASCII text editor** (Text Wrangler, Text Edit, Notepad, Wordpad)
 - 3). Check in Browser
- * Upload if you want to develop online.

Elements

Consist of a start tag, some content, and an end tag.

"Tags"

Tags are labels you use to mark up the beginning and end of an element. Tags act like **containers**.

They begin with a less-than sign "<" and end with a greater-than sign ">".
(Left angle bracket and right angle bracket)

Single-sided versus two-sided tags.

`
` (Sometimes called "**an empty element.**")

`<p>`Content goes here.`</p>` (These end with the forward slash before the letter).

The Setup Tags

```
<!DOCTYPE html>
<html lang="en-US">

  <head>
    <title></title>
  </head>

  <body>

  </body>
</html>
```

The HTML `lang` attribute is used to identify the language of text content on the web. This information helps search engines return language specific results, and it is also used by screen readers that switch language profiles to provide the correct accent and pronunciation.

It could be: `<html lang="it">`

Should tags be typed in uppercase or lowercase?

Can be anything, but use lowercase.

Tag Examples

All text between the opening tag `` and the closing tag `` is emphasized in the browser. ("em" is short for "emphasis".)

Example 1:

```
<em>Emphasized text.</em>
```

View in Browser

Example 2:

```
<h1>This is a heading</h1>    <h2>This is a subheading</h2>
```

View in Browser.

More Examples:

SINGLE SIDED-TAGS

`
` (In XHTML, single-sided tags required a slash at the end, i.e... `
`
`<hr>`

DOUBLE-SIDED TAGS

`<p></p>` The most used tags.

`` (Results in **bold** in most browsers)

`` (Results in *italics* in most browsers)

Spaces in HTML

CREATING SPACES: ` `

DOCTYPE (For HTML 5)

```
<!DOCTYPE html>
```

Nesting Tags

```
<em><strong>Text goes here</strong></em>
```

- NOTE: `<i>` and `` work work as well, but avoid them.

Still More Examples:

UNORDERED LIST

```
<ul>
  <li>Apples</li>
  <li>Pears</li>
  <li>Bananas</li>
</ul>
```

ORDERED LIST

```
<ol>
  <li>Apples</li>
  <li>Pears</li>
  <li>Bananas</li>
</ol>
```

NESTED LIST

```
<ol>
  <li>Apples</li>
  <ul>
    <li>Macintosh</li>
    <li>Granny Smith</li>
    <li>Golden Delicious</li>
  </ul>
  <li>Pears</li>
  <li>Bananas</li>
</ol>
```

LINKS – ABSOLUTE PATH (Usually to pages outside your own site)

```
<a href="http://smad.jmu.edu">Here is a link to the SMAD website</a>
```

LINKS – RELATIVE PATH (Used for links to pages, images or files on your own site)

```
<a href="about.html">Link to my about page</a>. (Put the period after the link).
```

```
<a href="subfolder/page2.html">Link to another pages in a subfolder>.
```

```
<a href="../about.html">Link to a page one folder up in the structure</a>.
```

```
<a href="../../about.html">Link to a page two folders up in the structure</a>.
```

INTERNAL LINKS (Linking to a specific part of the SAME page)

```
<a href="#heading1">Link to heading 1</a>
```

```
<h1 id="heading1">Heading 1</h1>
```

INTERNAL LINKS (Linking to a specific part of the ANOTHER page)

```
<a href="http://www.other.com/#heading1">Link to heading 1</a>
```

```
<h1 id="heading1">Heading 1</h1> (This exists in the other page).
```

EMAIL LINKS

```
<a href="mailto:bob@bob.com">Send Bob an Email</a>.
```

OPENING LINKS IN NEW WINDOW

```
<a href="http://www.cnn.com" target="_blank">CNN website</a>.
```

IMAGES (Always use relative paths)

- Acquire two images online and put it inside an "images" folder.

```

```

----- **ATTRIBUTES** -----

Additional parts to a tag that provides more information.

EXAMPLES: ``

HTML5 no longer requires quotes, unless using any of the following values...

- double and single quote marks (" and ')
- spaces ()
- equal sign (=)
- greater-than sign (>)

Use quotes to avoid problems.

Acceptable: `<p class=blahblah>`

Not Acceptable: `<p class="blah blah">`

They appear after the opening tag and include a **NAME** and **VALUE**

ALT ATTRIBUTE

```

```

HEIGHT/WIDTH ATTRIBUTES

```

```

HEIGHT/WIDTH USING "STYLE" (Inline CSS) ATTRIBUTE

```

```

* SRC is a "required attribute," but it' still an attribute.

MULTIPLE ATTRIBUTES CAN GO IN ANY ORDER

```

```

- NOTE: Do not change size of image by changing attributes. Crop or scale the image first, then use the actual dimensions.

DEPRECATED TAG ATTRIBUTES

```
<font size="+2">Bigger font here</font>
```

```
<font color="green">Green font here</font>
```

```
<font face="Helvetica">Helvetica font here</font>
```

Multiple attributes

```
<font size="+2" color="green" face="Helvetica">Bigger font here</font>
```

ABBREVIATIONS AND ACRONYMS

```
<p><abbr title="Professor">Prof</abbr> Steve Anderson. </p>
```

```
<p><acronym title="National Basketball Association">NBA</acronym> National Basketball Association. </p>
```

(Hover over words in browser to see the full titles).

TABLES

```
<table>
  <tr>
    <td>Top left cell</td>
    <td>Top right cell</td>
  </tr>
  <tr>
    <td>Bottom left cell</td>
    <td>Bottom right cell</td>
  </tr>
</table>
```

Example:

Top left cell	Top right cell
Bottom left cell	Bottom right cell

- NOTE: Often the first row is labeled <TH> and will be styled differently.

----- COLSPAN

```
<table>
  <tr>
    <td colspan="2">Top cell</td>
  </tr>
  <tr>
    <td>Bottom left cell</td>
    <td>Bottom right cell</td>
  </tr>
</table>
```

Example:

Top cell	
Bottom left cell	Bottom right cell

----- ROWSPAN

```
<table>
  <tr>
    <td rowspan="2">Left cell</td>
    <td>Top right cell</td>
  </tr>
  <tr>
    <td>Bottom right cell</td>
  </tr>
</table>
```

Example:

Left cell	Top right cell
	Bottom right cell

----- **TABLE ATTRIBUTES**

<table border="1">

align="right" (left, center or right)
valign="top" (top, middle or bottom)
width="120px" (can be percent as well)

Can you make these tables?

1	2
3	4
5	
6	

1	2	3
4	5	6
	7	8

Top cell	
Bottom left cell	Bottom right cell

----- **NESTED TABLES**

(show example)