

today

topics:

- introduction to HTML

reading:

- today: see on-line tutorials at:
<http://www.w3.org/MarkUp/Guide/>
<http://www.w3.org/MarkUp/Guide/Advanced.html>
<http://www.w3.org/MarkUp/Guide/Style.html>
- note that we're skipping Ince ch 4 !!
- for next time: look at Ince ch 5

basic HTML

- opening *tag*: `<html>`
- closing *tag*: `</html>`
- header:
`<head>... </head>`
- body:
`<body>... </body>`
- title (goes inside the header):
`<title>My first HTML document</title>`
- “heading” text:
`<h1>An important heading</h1>`
`<h2>A slightly less important heading</h2>`
- paragraphs:
`<p>This is the first paragraph.</p>`
`<p>This is the second paragraph.</p>`
- line breaks:
This is the first line.`<br>`
This is the second line.
- emphasis:
This is a really `<em>`interesting`</em>` topic!
- italics:
This is a really `<i>`interesting`</i>` topic!

- bold:

This is a `<b>boldly interesting</b>` topic!

- images:

``

- links:

This a link to `<a href="http://www.google.com">google</a>`.

This a link to `<a href="http://www.google.com" target=_blank>google</a>` that opens up another window.

- lists:

- un-ordered list:

```
<ul>
  <li>the first list item</li>
  <li>the second list item</li>
  <li>the third list item</li>
</ul>
```

- ordered list:

```
<ol>
  <li>the first list item</li>
  <li>the second list item</li>
  <li>the third list item</li>
</ol>
```

- definition list:

```
<dl>
  <dt>the first list item</dt>
  <dd>the definition of the first item...</dd>
  <dt>the second list item</dt>
  <dd>the definition of the second item...</dd>
  <dt>the third list item</dt>
  <dd>the definition of the third item...</dd>
</dl>
```

- notes:

- end of list item tags (e.g., `</li>` and `</dt>` and `</dd>`) are optional
 - lists can be *nested*, which means you can put one list inside another list:

my shopping list

```
<ul>
  <li>bread
  <li>apples
  <li>ice cream
    <ul>
      <li>vanilla
```

```

        <li>chocolate
        <li>mango
    </ul>
    <li>peanut butter
</ul>

```

special characters

- forcing spaces: ` `;
- accents and other special characters (there are many more — see the “advanced” tutorial, listed above):

symbol	code
copyright	<code>&copy;</code>
registered trademark	<code>&reg;</code>
trademark	<code>&#8482;</code>
less than	<code>&lt;</code>
greater than	<code>&gt;</code>
ampersand	<code>&amp;</code>
long dash	<code>&#8212;</code>
double quotes	<code>&quot;</code>
é	<code>&eacute;</code>
è	<code>&egrave;</code>
ö	<code>&ouml;</code>
ñ	<code>&ntilde;</code>

tables

- begin a table with `<table>`
- end a table with `</table>`
- begin each row with `<tr>` and end each row with `</tr>`
- begin each column with `<td>` and end each column with `</td>`
- options:
 - borders
 - *cellpadding* (padding within a cell)
 - *cellspacing* (spacing between cells)
 - width and height (in pixels)
- tricks:
 - empty cells — use ` `;
 - *spanning* multiple rows or columns
- coloring cells:


```
<td bgcolor="red">ASDF</td>
```
- aligning cell content:
 - horizontally: left, center, right
 - vertically: top, middle, bottom

style sheets

- text color and background color:

```
<style type="text/css">
  body { color: black; background: white; }
</style>
```

- linking to a separate style sheet (in another file):

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

and the “style file” looks like this:

```
/* style.css - a simple style sheet */
body {
  color: black; background: white;
}
```

- margins, left and right indents:

```
body { margin-left: 10%; margin-right: 10%; }
h1 { margin-left: -8%;}
h2,h3,h4,h5,h6 { margin-left: -4%; }
p { text-indent: 2em; margin-top: 0; margin-bottom: 0; }
```

- white space above and below:

```
h2 { margin-top: 8em; margin-bottom: 3em; }
```

- fonts:

– styles:

```
em { font-style: italic; font-weight: bold; }
strong { text-transform: uppercase; font-weight: bold; }
```

– text-transform can be: uppercase, lowercase

– font families: Verdana, Garamond, "Times New Roman", sans-serif, e.g. `body { font-family: Verdana, sans-serif; }`

- divisions:

– borders

– colors

– name the divisions using “class”

– example:

in the style file:

```
div.box { border: solid; border-width: thin; width: 100% }
```

in the html file:

```
<div class="box">
The content within this DIV element will be enclosed
in a box with a thin line around it.
</div>
```

- link colors:

```
:link { color: rgb(0, 0, 153) } /* for unvisited links */
:visited { color: rgb(153, 0, 153) } /* for visited links */
a:active { color: rgb(255, 0, 102) } /* when link is clicked */
a:hover { color: rgb(0, 96, 255) } /* when mouse is over link */
```

- colors:

- there are some “named” colors (black, silver, gray, white, maroon, red, purple, magenta, green, lime, olive, yellow, navy, blue, teal, aqua, ...)
- all colors have a six-digit hexadecimal definition: 2 digits each for Red, Green and Blue $\rightarrow RGB$ color table
- “browser safe” or “web safe” colors accommodate older systems that only show up to 256 colors (at one time), so each RGB can only be one of the following: 00, 33, 66, 99, *CC*, *FF* (in hex)

- no style sheet?

- body tag:

```
<body bgcolor="white" background="texture.jpeg" text="black"
link="navy" vlink="maroon" alink="red">
```

where “link” for unvisited links, “vlink” for visited links, “alink” for the color when you click on the link (before you release the mouse)

- font tag:

```
<font face="sans-serif" color="red" size="5">
...
</font>
```