

HTML 1

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Notes from Jennifer Niederst: Web Design in a Nutshell
and Stefan Muenz: SelfHTML, <http://en.selfhtml.org>

Based on a tutorial by Prof. Daniel Sauter

HTML

Hypertext Markup Language

Sub-family of XML (Extensible Markup Language)

Originally designed to meet the challenges of large-scale electronic publishing

Increasingly important role in the exchange of a wide variety of data

Uses “tags” to mark-up data (container and standalone tags)

HTML vs. XML

XML:

```
<note>  
<to>Peter</to>  
<from>Ronnie</from>  
<heading>Reminder</heading>  
<body>Don't forget about class today!</body>  
</note>
```

HTML:

```
<html>  
<head>  
<title>The Title goes here</title>  
</head>  
<body>  
<h1>And this is a Headline</h1>  
</body>  
</html>
```

Tags

Container tags (nearly all tags in HTML) :

```
<title>DMA homepage</title>
```

```
<a href="http://dma.ucla.edu">DMA homepage</a>
```

```
<table width="200">
```

```
<tr>
```

```
<td>Introduction to HTML</td>
```

```
</tr>
```

```
</table>
```

```
<h1>My Headline</h1>
```

Standalone tags:

```
<br> [ break ]
```

```
<hr> [ horizontal row ]
```

```
<meta> [ meta information about HTML document ]
```

HTML Structure

The basic HTML document consists of a head, and a body.

head: e.g. title of the page, meta data, JavaScript, CSS definitions

body: all content for the page.

```
<html>
  <head>
    <title>The title of the page</title>
  </head>
  <body>
    <h1>Hello World!</h1>
  </body>
</html>
```

Publishing to the web

Login at the D|MA:

smb://file/username (Mac) [type your Login and password]

X-Drive (PC)

From outside D|MA [only SFTP allowed]:

use SFTP software (Windows SSH/SFTP Client, MacSFTP, FUGU, etc.

Visit <http://support.design.ucla.edu> to download)

host: ftp.design.ucla.edu

user: username

password: pwd

Browse to myClasses/S06-161A/web/projects/

Create folder with your name (format: firstname)

Save your HTML file with .htm or .html ending

Browsers

The main browsers are very 'forgiving' while rendering the HTML code. It is possible that the content is rendered 'correctly', even if there are errors in the HTML code.

This is, however, one of the main causes for different outputs on different browsers.

The Opera browser is known to conform to the W3C HTML standard and therefore a good test reference.

As a rule of thumb, one should constantly test the HTML pages on different browsers (IE, Mozilla, Netscape, Opera, Firefox, etc.) and systems (PC, Mac).

Statistics

(Source: www.w3schools.com/browsers, Sept 2005)

Web browsers

IE 6: 69.7% | IE 5: 5.8%

Firefox: 18% | Mozilla: 2.3% | Netscape 7: 0.4%

Opera 7/8: 1.1%

Screen Resolution

800 x 600 px: 25%

1024 x 768 px: 55%

higher: 14%

Operating System

Windows XP 69.2% | 2000 15.8% | 98 3.2% | NT 0.5%

Linux: 3.3%

Mac: 3.1%

Text Formatting with HTML

Text can be formatted with HTML Tags. The superior technique, however, is to use Cascading Style Sheets (CSS).

```
<h1>Largest Headline</h1>
<h2>Headline 2</h2>
<h6>Headline 6</h6>
<p>Paragraph is defined with the Paragraph Tag</p>
<p>forced line breaks can be inserted <br> with br =
break </p>
<p><font face="Courier, Verdana" size="-1">This Text
is formatted with HTML Tags</font></p>
<p><span style="font-family:Courier,Verdana; fontsize:
12pt">This is CSS formatted text.</span></p>
```

Hyperlinks

absolute:

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

relative:

```
<a href="projects/waldo/index.html">link</a>  
<a href="../../../web/exercises.html">link</a>
```

Note: Servers are case-sensitive. Even if hyperlinks are successfully tested locally (e.g. with Dreamweaver), there will be errors when accessed via the WWW.

The ending .html or .htm is required to be rendered correctly by the browser as an HTML document (be consistent!)

Exercise

Create a basic HTML document using a simple text editor (PC: Notepad, Mac: Textedit). The page should include:

- The definition that the page is an HTML page

- A head

- A body

Add the text: D|MA 161A course website

Save the document as helloworld.html on the desktop.

Start a browser (Mozilla, Internet Explorer, Safari etc.) and open your html file.

Exercise

Login to your D|MA account

(X-Drive on the PC, Mac: smb://file/yourname)

Copy file into myClasses/web/projects/yourname

Go back to browser and type into the locationbar:

<http://classes.design.ucla.edu/Spring06/projects/firstname/helloworld.html>

You should see the HTML document you created.

Add in the helloworld.html document a hyperlink to the class website (optional relative or absolute).

Tables

Often used to structure and lay out html pages (besides CSS positioning)

Intended to be used for tabular data

```
<table width="300">  
<tr>  
<td height="200">&nbsp;</td>  
<td height="200">&nbsp;</td>  
</tr>  
</table>
```

Links

Links are created in HTML using the 'Anchor' Tag.

```
<a href="http://www.google.com">google<br>
<a href="http://news.google.com">google news<br>
<a href="mailto:vice_president@whitehouse.gov">mail to
Dick</a><br>
<a href="helloworld.html">to the page helloworld.html
</a><br>
<a href="#allthewaydown">Anchor to go all the way down
</a><br>
<a href="documents/direction.html">into the subfolder
documents, and there the page directions.html</a>
<a href="../../exercises.html">up two levels to the
exercises.html page</a>
```

Background color

```
<html>
<head>
<title>colortables</title>
</head>
<body text="#333333" bgcolor="#EEEEEE">
<h1>161A</h1>
<table border="1" bgcolor="#FFFF00">
<tr>
<td width="200" height="100"><h2>This</h2></td>
<td width="200" bgcolor="#00FFFF"><h2>class</h2></td>
<td width="200"><h2>is</h2></td>
</tr>
<tr bgcolor="#FF00FF">
<td height="100"><h2>so</h2></td>
<td><h2>much</h2></td>
<td><h2>fun!</h2></td>
</tr>
</table>
</body>
</html>
```

Tables

Combining cells in a table:

```
<table border="1">  
<tr>  
  <td colspan="2">This cell spans over two columns</td>  
</tr>  
<tr>  
  <td>column 1</td>  
  <td>column 2</td>  
</tr>  
</table>
```

Fonts

```
<font size="2" face="Verdana">  
This is a paragraph.  
</font>
```

Note: The `` tag is massively used, but has been deprecated and future browser support is not guaranteed.

A more powerful and appropriate way to define fonts, formatting and positioning are Cascading Style Sheets (CSS). We'll learn to use CSS later in this class.