

Creating and Building Websites

Stanford University Continuing Studies CS 21

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Course Web Site: <http://web.stanford.edu/group/csp/cs21>

Week 8



- Inline Frames
- Internal Links
- Meta Tags
- Content Management Systems
- Web site hosting and setting up a domain name

Inline Frames

- Inline frames allow a webmaster to insert more than one web page into a single window.
- They allow one part of the screen stay up and running at all time regardless of what's loaded onto the rest of the page.

The *iframe* tag

- The tag **iframe** lets you insert a frame within the regular flow of an HTML document.
- Many websites, including YouTube and Google (e.g., Gmail) use iframes to dynamically display content stored on multiple servers at once.

- **Syntax:**

```
<iframe src="location.html" width="xx"
height="yy">Browser can't process frames? <a
href="location.html">Go to the framed page</a>
</iframe>
```

- **An iframe example:**

```
<iframe width="560" height="315"
src="http://www.youtube.com/embed/fpMZbT1tx2o"
frameborder="0" allowfullscreen></iframe>
```

Internal Links

What if you wanted to let visitors jump around your web page? Suppose you have a long page, and want users to have the ability to jump back to the top of the page or right to the bottom of the page?

Or suppose you're putting a paper on the web and you want to have footnotes? Web designers can use an internal link to satisfy these types of needs.

Internal links let visitors be pointed to a specific spot on a web page.

```
<a id="specificspot"></a>
```

The text in the ID attribute can be anything, but must be all one word. Point users to this spot by using the number sign with whatever was used in the ID attribute.

```
<a href="#specificspot">Go to this location.</a>
```

Meta Tags

Meta tags are mostly used by webmasters to provide information about their website to search engines.

```
<meta  
  name="xxx"  
  content="yyy"  
  dir="ltr|rtl"  
  http-equiv="yyy" />
```

name: specifies the type of information

content: sets the content

dir: sets the direction of the text (left to right or right to left)

http-equiv: affects the way the browser & server react to the webpage

Meta tag examples

```
<meta name="description"  
content="This is where I would  
put a one-paragraph description  
of this website" />
```

```
<meta name="keywords"  
content="this, is, where, I,  
would, put, keywords, related,  
to, the, website, separated,  
by, commas" />
```

Character Set

- Defining the character set can help prevent hackers from adding malware to your site:

- *HTML 4/3/2/1 & XHTML 1.1/1*

```
<meta http-equiv="Content-Type"
content="text/html; charset=UTF-8">
```

- *HTML 5*

```
<meta charset="utf-8">
```


Client-pull

- A main use of the meta tag is to force the browser to open a new page in a different location (or to refresh an existing page after a set number of seconds).

```
<meta http-equiv="refresh"  
content="10; url=newlocation.html" />
```

- You can also create a text file called `.htaccess` to define and process the redirect.
 - http://en.wikipedia.org/wiki/URL_redirection#Using_.htaccess_for_Redirection

Cache control

- Webmasters also use meta tags to force browsers to show current pages, rather than viewing them from the cache.

```
<meta http-equiv="Expires" content="0" />
```

- Causes browser to NEVER view the page in the cache

```
<meta http-equiv="expires" content="Sat, 14 Mar 2015 09:26:53 GMT" />
```

- Causes browser to check for new content starting on 3/14/15, otherwise it'll show what's in the cache.

Preventing Search Engines from indexing your site

```
<meta name="robots" content="noindex" />
```

- Don't take any info from this page

```
<meta name="robots" content="noindex, nofollow" />
```

- Don't take any info from this page, and don't go looking at any links

```
<meta name="robots" content="noindex, follow" />
```

- Don't take any info from this page, but go ahead and index links.

You can also create a text file called `robots.txt` specifying your exclusion desires.

- <http://en.wikipedia.org/wiki/Robots.txt>

Forcing handheld devices (phones/tablets) to use their real size

- By default, handheld devices “shrink” a processed web page to fit the device’s screen. But if you want to make a mobile-friendly version of a page or site, you need to force the device’s browser to use the real width:

```
<meta name="viewport"  
content="width=device-width,  
initial-scale=1.0, user-scalable=yes">
```

Content Management Systems *(CMS)*

- **Wiktionary Definition:**

http://en.wiktionary.org/wiki/content_management_system

A computer software system for organizing and facilitating collaborative creation of documents and other content, especially for loading to a website

Content Management Systems

(continued)

- In a content management system, content pieces (articles, stories, bios, documents, etc.) are stored in a database, while computer scripts automatically display and organize the information presented based on the actions of the visitor to the web site. This means that content producers do NOT need to be experts in programming or HTML; they can focus their attention onto the actual content they are writing.
- Examples :
 - WordPress (<http://wordpress.org>)
 - Drupal (<http://drupal.org>)
 - Joomla! (<http://joomla.org>)

Web Site Hosting

- Options:
 - Internet Service Providers
 - Often will give you a certain amount of disk space to play with on the web (often 20-100 MB)
 - Address would be: <http://www.isp.com/userid/>
 - Free Web Pages
 - We've been using byethost
 - Others also exist: tripod.com, 50megs.com, etc.

Setting up a domain

- Right now, your web address looks something like:
<http://yourname.byethost.com/>
- If you'd rather have it look something like
<http://www.yourname.com>, you will need to register your own domain name with one of the Internet's domain registrars.
- Most registrars charge around \$10-50/year to register a domain name.
- <http://www.internic.net>
- <http://www.internic.net/alpha.html>

Learning More...

- Many local colleges and universities offer a variety of classes on Web topics. Here are some suggestions:

Stanford University's Continuing Studies:

<http://continuingstudies.stanford.edu/>

Canada College:

<http://canadacollege.net/>

San Jose City College:

<http://sjcc.edu/>

Foothill College:

<http://www.foothill.fdha.edu/>

Learning More (cont.)

- Books and Websites -- check the resources page; although they can be great resources, books are often "outdated" before they're even published.
- Practice! Most web designers learned how to "do" HTML by looking at the source codes of others and playing around with tags.