
"Server" A computer that has something you want.
"Client" You on your own computer.

The INTERNET A set of protocols that allow the following:
1> Client opens a connection to a server.
2> Client requests a particular document.
3> The servant answers the request.
4> The connection is closed.

A business definition of the INTERNET
A network of people, of potential customers.

TCP/IP Transmission Control Protocol (?), Internet Protocol basic routing, etc
HTTP Hypertext Transfer Protocol for exchanging files on the WWW
FTP File Transfer Protocol allow users remotely access all types of files on other computers

Demo with **stus3** password **Career3** at www.drbraukmann.com

Browser Software that gives you an interface and knows the protocol.

IP Address INTERNET Protocol Address. Every machine connected to NET has one even if it is temporarily assigned by your server.
Each one is unique.
Four numbers separated by dots 192.207.117.2 Right # is specific mach.
Subnets are separated by the dots. (255 max each)
Numbers represent which subnet, getting more specific toward the right.

Each subnet has a computer called a **router that keeps track of IP addresses in its subnet and the address of the router one level up.**

Domain Names Words instead of numbers, easier to remember.
Goes specific to general, L->R: mike.sscnet.ucla.edu
Called **domains and sub-domains**. SSCNET would aka the "host name"
Domain name servers take the Domain Name and look up IP address.

URLs **Uniform Resource Locators** The address system that makes it all possible.
Fields in the addresses: **http://www.ewu.edu/name.html**
http The Internet **protocol** used to transmit the file.
Also option: **http, ftp, gopher, wais, newsgroup**, etc.
:// Standard **formatting** tag
www.ewu.edu The INTERNET **address**, can be number or domain name where the file you want is stored.
/name.html The **filename** (the document you want the browser to open)
/students/name.html The same filename in the **directory** "students"

Note: URLs are case sensitive!

Standards The W3C World Wide Web Consortium Describes the Official Version
CSS 2.1 common now with exceptions
CSS 3 was coming but they gave in to browser programmers

HTML 5 is the latest Not all browsers use it yet. Not settled.
HTML 4.01 is the most common for HTML pages
HTML 4 Frameset allows for frames, old but simple
XHTML 2 is the latest 1 Transitional is common

What are "Extensions"?

Popular browsers as IE – FireFox – Safari have always made-up/incorporated new code ideas that they hope will catch on. Then: “This page best viewed with IE(X).”
And the opposite is also true. They historically do each other no favors.
Some ideas do get popular, and then are incorporated into the next standard.

Why is this critically important to you?

The standards actually conflict on how they show certain elements.
They sometimes ignore details that can be done with other standards.

Browsers want you to declare which standard you are using.
They then switch into standard nazi mode.
Your page may change the way it looks.

Our best defense is to check our page carefully against a particular standard.
This is called validating.

Your own site

OK you need to initialize your netstorage account if you haven't already done so. Paid the fee?
Initializing: ltech.ewu.edu

Log in to your NetStorage account and apply for web access.

Agree to create a site. Notice the url and FTP host.

NetStorage makes a folder: **website**

For FTP the host is **netstorage.ewu.edu** – or **ftp://netstorage.ewu.edu**

user **your EWU username**

password **your EWU password**

host directory is **website**

your url is <http://www.studentweb.ewu.edu/yourusername/>

make your homepage home.html for this class

otherwise make your homepage **index.html or index.htm**

index._._ Required for automatic opening of page

The order the browsers checks is, first... **index.shtml** (If using Server Side Includes),
Then, in order...

index.shtm, index.html, index.htm, index.php, index.php4, index.php3,
index.cgi, index.fquest

You must give me your username so I can make a link.

Always test your **CSS2** assignments with **Safari** and **Firefox**. Both using CSS2.1 standard

Also you must check with Internet Explorer for a real client!

No current IE for Macs – Last one in '05 which was 5.3.3. Don't bother.

You will have trouble with **IE 6** Uses CSS1

You will have less trouble with IE 7, but...

IE 8 or later should show all CSS2 just fine. IE 9 almost does SCC3.

It is part of your assignment to make certain they work.

I will probably use Safari or Firefox.

HTML is a “markup” language – concept comes from graphic arts in 70s

Most primitive HTML page without validation

```
<html>
<head>
</head>
<body>
Jim
</body>
</html>
```

Here is an example of what we used to do to spiff it up.

```
<body bgcolor="red"> Ok, the transitional standard allows this and you will see
I used it on drbraukmann.com. But CSS will be the future way.
<blink> Jim </blink>
```

HTML review part 1

- **XHTML** is fine tuned HTML
 - adds a declaration comment (DOCTYPE) before page starts in HTML
 - forces HTML to meet precise rules, disallows certain things browsers allow (BGCOLOR for example)
 - must use CSS
 - all tags must be closed either <p></p> or
 an empty element must close itself
 - makes it easier to use automatic checkers
 - many deprecated tags that can be replaced with CSS

What is deprecated in XHTML?

 <basefont> <center> <s>strikethrough <u>underlined
<frames> and link targets - and a few others

What do we use, then? html, body, head, h p tags, img src, ul and ol
a links, including relative and absolute URLs

- Use comments everywhere <!-- comment -->
- Using a convention for **naming files**. No untitled, etc.

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- Let's do a basic XHTML web page
 - Then let's put it up on the site.

Note: If you have never done HTML, you have a bit more work this weekend.

HTML Intro http://www.w3schools.com/html/html_intro.asp
Get Started, Basic, Elements, Attributes, Headings, Paragraphs, Links, Lists

XHTML http://www.w3schools.com/html/html_xhtml.asp

Practical Demo With Proper Techniques and Pointers

- Write the basic steps on the board!
 - 1) create or identify the root folder
 - 2) text edit, save as name.html
 - 3) use browser to test by loading file (repeat 1 and 2 for a while. Us the reload button.)
 - 4) test with a second browser – validate code
 - 5) send FTP
 - 6) test URL with a browser – and other typical browsers.
 - 7) test on other computer. Why? Because yours might be felling sorry for you and supplying a graphic that it has but the server actually does not have!
- Set up two programs, an editor and a browser.
- Make a folder on the desktop. Name it. "Root" might be the most generally descriptive. The other parts that we add to the page or website also must be in that folder. Never move a page file without its hood and homeys. Put a picture file in it. (Suggestion: Use my pic from the website)
- Make a basic html page with simple text editor. Not a word processor.
 - HTML in lower case now
 - File Names (no spaces, punctuation marks except _ , avoid caps, standardize extensions)
 - Use 8charact.htm to be safe.
- Add a Doctype comment

The "DOCTYPE" begins the HTML document and tells a validator which version of HTML to use in checking the document's syntax.

Why the DocType?

- Browsers will often show your page wrongly if they don't know which standard you are trying to use. They have options built in and use them.
- Validity checkers will not be able to point out problems.
- Page ranking will suffer without this attention.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
```

```
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en">
```

Older style pages should use (includes deprecated HTML and frames etc)

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
```

Add an image to the page. ``

Now add the second browser and recheck.

Now add `<p style="text-align:center"> </p>` **This is inline CSS**

Look out for wrongly nested tags - problems with some browsers

```
<p>Here is <strong> some </p> text </strong>
```

Note, don't try to put `<h>` tags inside `<p>` tags. `<p>` tags won't work completely right!

Note, quotation marks usually won't work if they are the right and left typographic ones!

Use Fetch and put up the site. Test it on a browser (Safari or FireFox)

Then open a second browser and test it.

Other tags to show? Attributes:

```
<body style="background:cyan">
```

Other tags to show?

```
<ul></ul> and <li>
<ol></ol> and <li>
```

Attributes: **will now do most of this with CSS**

also `<ul type="circle">` or "disc" or "square"
also `<ol type="A">` or "a" or "1" or "i" or "l"

Show what happens if you forget to send the image with the page to the site.

HTML files are cross-platform (protocol makes them work) so you can edit on Mac, then on Win, etc.

Could assign a **odd URL** such as myhome.htm depending on where they have their site.

For a class, it wouldn't make sense to register/pay for a domain name.

Naming a home page. Why **index.htm** See the OH list.

File names are case sensitive. **Mac -> thumbdrive** sometime adds capitalization

If they don't match it may be **easier to rename the file on the server** with FTP tools.

Don't use spaces, punctuation in file names or in folder names.

Use the browser's **View > Source** option to check which file you are actually viewing.

- You may find the problem and just need to **rename an image file**, for instance.
- You **may be checking a different file than you are editing** in the other program.
- **Clearing the cache.**

Notepad users:

Windows may be adding .txt to all of your files! Take control!

Start > Settings > Folder Options **Then turn OFF the “Hide Typical Extensions”**
or You can defeat this by putting your **filenames in quotes**, as in SAVE AS “myhome.htm”

Mac users:

Finder > Preferences > Show all extensions
TextEdit Turn off Rich Text Options

More deprecated stuff

<i>Attribute</i>	<i>Deprecated if used in:</i>
align	<caption>, , <table>, <hr>, <div>, <h1..6>, <p>
alink	<body>
background	<body>
bgcolor	<body>, <table> <tr> <td> <th>
clear	
compact	,
color	<basefont>,
border	, <object>
hspace	, <object>
link	<body>
noshade	<hr>
nowrap	<td>, <th>
size	<basefont>, , <hr>
start	
text	<body>
type	
value	
vlink	<body>
width	<hr>, <pre>, <td>, <th>
vspace	, <object>

Not deprecated yet but replaceable with css <i></i>

Tables are sort of deprecated.

They should be used for tabular data - spreadsheet stuff.

In the future they should not be used for layout with lots of rowspans, etc.