HTML Overview

- Material developed by Richard Wiggins
  - http://www.msu.edu/staff/rww/
- Presentation by Charles Severance
  - http://www.msu.edu/~crs/

Personal Pages via the Web

- Photos, resumes, papers, voices delivered on demand

Netscape - [Richard Wiggins]
File Edit View Go Bookmarks Options Directory Help
Location: http://www.msu.edu/staff/rww/

RICHARD WIGGINS

My significant other, Judy Matthews, gave me a wonderful gift a couple of years ago. See, I'm *licensed* to do things Internet!

Internet Writing, Lecturing, and Training

- Book One: *The Internet for Everyone* I'm author of a book called *The Internet for Everyone: A Guide for Users and Providers*.

It was published by McGraw-Hill, copyright 1995. Sample chapters from this book are available at
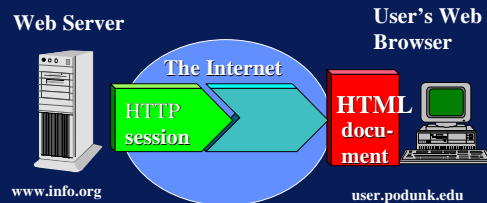
Definitions

- URL = text string that specifies a unique document
- "Home Page" = beginning of a particular Web document or collection of documents
- Web browser = a client program for navigating the Web, e.g.:
  - Netscape
  - Microsoft Internet Explorer
- HTML = the language used to compose documents for Web delivery
- HTTP = the protocol used by Web servers to deliver requested documents to Web browsers

HTTP versus HTML

- HTTP governs how files move over the Web
- HTML defines structure of Web documents

Web Server

User's Web Browser

The Internet

HTTP session

HTML docu-ment

www.info.org

user.podunk.edu

HTML = Text plus "Markup"

<H1><center>**MarketPlace.com**</center></H1>

<A HREF="http://marketplace.com:80/csd/development.html">
MarketPlace.com</A> is the Internet Information
Mall (tm) operated by Cyberspace Development, Inc.

MarketPlace.com

MarketPlace.com is the Internet Information Mall (tm) operated by **Cyberspace Development, Inc.**

- What's New at MarketPlace.com
- What's New at Cyberspace Development, Inc.

NEW RELEASE! **The Internet Adapter (tm)** is a new Internet access utility created by Cyberspace Development that lets you use Mosaic -- and all the other cool new TCP/IP tools -- on a *standard UNIX shell account*. You can buy it right here on Marketplace.com and install it immediately. Check it out!

<IMG ALIGN=LEFT ALT="" SRC="http://marketplace.com:80/
tia/TIA.1x1.4bit.COLOR.gif"> **NEW RELEASE!**

Preparing HTML Documents

- Simple option: Edit documents by hand
  - Use a text editor to manually edit your text and markup and save/upload
  - Use Netscape (or other browser) to check your work as you go click "Reload"
- "Authoring Tools" becoming popular
  - Netscape
  - Microsoft Word/PowerPoint/FrontPage
  - Adobe PageMill
  - Many Others

HTML Layout: Some control, not total

- You "mark" the *logical* elements of a document
  - Paragraphs
  - Headings
  - Etc
- Your *user* controls exact presentation by specifying browser options
- When the user resizes windows, text is re-wrapped
- How much control should be given to author?
  - The <CENTER> tag
  - Relative font tags
  - The <BLINK> tag

Template Tags

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```
<HTML>
<HEAD>
<TITLE>A Sample Document</TITLE>
</HEAD>
<BODY>
  Document body
</BODY>
</HTML>
```

HTML Tags: Headings

- <h1>Level 1 Heading</h1>
- <h2>Level 2 Heading</h2>
- <h3>Level 3 Heading</h3>

Document Title: Heading Examples
Document URL: file:///C|/TEST/X1.HTM

Level 1 Heading

Level 2 Heading

Level 3 Heading

HTML Tags: Paragraphs

This is Jane.
<p> This is Spot.
<p> See Spot bite Jane </p>   **Correct**

Document Title: Paragraphs
Document URL: file:///c:/test\x2.htm

This is Jane.

This is Spot.

See Spot bite Jane

HTML Tags: Lists (Unnumbered)

Riker
Troi
LaForge

Document Title: Unnumbered Lists
Document URL: file:///c:/test\x3.htm

- Riker
- Troi
- LaForge

HTML Tags: Lists (Numbered)

```
<ol>
<li>Riker
<li>Troi
<li>LaForge
</ol>
```

Document Title: Numbered Lists

Document URL: file:///c:/test\x4.htm

```
1  Riker
2  Troi
3  LaForge
```

HTML Tags: Lists (Nested)

```
<ul>
<li> Original Trek
 <ul> <li>Spock
    <li>Sulu
 </ul>
<li> Next Generation
 <ul> <li>Riker
    <li>Troi
 </ul>
</ul>
```

Document Title: Nested Lists

Document URL: file:///c:/tes

- Original Trek
  - Spock
  - Sulu
- Next Generation
  - Riker
  - Troi

HTML Tags: Font Styles

```
This is <b>bold</b> <p>
This is <i>italic</i> <p>
This is <u>underlined</u> <p>
```

Document Title: Font Styles

Document URL: file:///c:/test\x6.htm

This is **bold**

This is *italic*

This is underlined

HTML Tags: Inline Images

```
<IMG ALIGN=LEFT
 SRC="http://marketplace.com:80/tia/TIA.1x1.4bit.COLOR.gif">
 NEW RELEASE!
```

NEW RELEASE!

Image Attributes

- HEIGHT=n, WIDTH=n
  - Allows browser to preallocate space for the image
  - Speeds downloading
  - Modem friendly
  - Use with caution
- ALT=txt
  - Useful for blind users with "talkers"
  - Also useful for slow modem users
- ALIGN= [TOP, BOTTOM, RIGHT, MIDDLE]

HTML Tags: Links to Other Documents

- generally known as Anchors

```
<A HREF="http://marketplace.com:80/csd/development.html">
MarketPlace.com</A>
is the Internet Information
Mall (tm) operated by
<b>Cyberspace Development, Inc.</b>
```

MarketPlace.com is the Internet Information Mall (tm) operated by **Cyberspace Development, Inc.**

HTML Tags: Inline Images as Anchors

Netscape - [President Clinton's Address at MSU's Spring 1995 Convocation:1]

File Edit View Go Bookmarks Options Directory   Help

| Back | Forward | Home | Reload | Images | Open | Print | Find | Stop |

Location: http://web.msu.edu/conv95/ad1.html

| What's New! | What's Cool! | Handbook | Net Search | Net Directory | Newsgroups |

President Clinton's Address at MSU's Spring 1995 Convocation

Transcript of The President's address furnished by The White House Office of the Press Secretary.

`<a href="clinton1.gif">`
`<img src="clin_sm1.gif">`
`</a>`

(Duration -- 1:48) AU (873 K)

HTML Tags: <HR>

Following this line is a horizontal rule.
<hr>
Preceding this line is a horizontal rule.

Following this line is a horizontal rule.

Preceding this line is a horizontal rule.

HTML Tags: <ADDRESS>

<ADDRESS>
Rich Wiggins
wiggins@msu.edu
</ADDRESS>

Rich Wiggins
wiggins@msu.edu

HTML Tags: <mailto:>

Would you like to send some e-mail
to
Rich Wiggins? Do so now!

Would you like to send some e-mail to
Rich Wiggins? Do so now!

HTML Tags: Comments

<!-- Sometimes you want to
insert comments inside a document. -->

HTML Tags: Escape Characters

&lt   less than
&gt   greater than
&amp ampersand
&copy copyright

< less than
> greater than
& ampersand
© copyright

Copyright 1995 Richard Wiggins, Used with Permission

Background Colors

<body bgcolor="#E5E9EE">

Component colors specified as hexadecimal numbers, 2 digits for each color...

Red **Blue**

Green

<body bgcolor="#FFFFFF"> = white background

Background Images

<BODY background= "/images/paper.jpg" bgcolor="#FFFFFF" text="#000000" >

Meaning:
White background with black text and with the image stored as "paper.jpg" as a repeating background element...

Beware of Hideous Backgrounds

HTML Tags: <TABLE>

```
<html>
<body>
<table border=10 >
<caption><b>Growth in Internet Hosts</b></caption>

<tr>           <th> Date </th>  <th> Hosts </th> </tr>
<tr align=right> <td> 08/81 </td> <td>   213 </td> </tr>
<tr align=right> <td> 05/82 </td> <td>   235 </td> </tr>
<tr align=right> <td> 08/83 </td> <td>   562 </td> </tr>
<tr align=right> <td> 10/84 </td> <td> 1,024 </td> </tr>
</table>
```

Growth in Internet Hosts

Date	Hosts
08/81	213
05/82	235
08/83	562
10/84	1,024

Meta Tags - Redirect

```
<HEAD> <TITLE>Dr. Chuck's Other Home Page</TITLE>
<META HTTP-EQUIV="refresh"
   CONTENT="5;URL=http://www.egr.msu.edu/~crs/">
</HEAD>
<body bgcolor="#FFFFFF">
<H1>Charles Severance's <br> Other Home Page</h1>
Hello, you have arrived at one of my "other" home pages.
My real home page is at
<a href=http://www.egr.msu.edu/~crs/>
http://www.egr.msu.edu/~crs/</a>
 and if things work well you will be sent there in
 five seconds 5... 4... 3... 2... 1...
</body>
```

More Meta

- You can control how a page is indexed using META

  <META name="description"
  content="We specialize in grooming pink poodles.">
  <META name="keywords" content="pet grooming,
  Palo Alto, dog">

Building an HTML Document

- Use all of these possible elements
- And others...
- To build your documents according to your style
- It's much easier than it may appear at first

HTML Preparation Tips

- Tip: Find documents that are similar to the ones you want to put online
- ... then use View Source to save the other document as a template
- Tip: Edit your document in one window;
  - Use "Reload" option
- Be sure to view your document on multiple platforms:
  - Different video cards
  - Different Web browsers

HTML Tips (Cont'd)

- Consider low-bandwidth users
  - Use thumbnail images that link to larger images
  - Give file sizes on links to large documents
  - Minimize number of separate inline images in a document
- Consider Lynx users:
  - Use the ALT construct:
  - <IMG SRC="flower.gif" ALT="[Yellow Rose]">
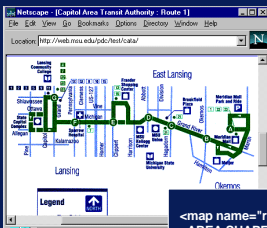 - Offer menus as an alternative to any image maps
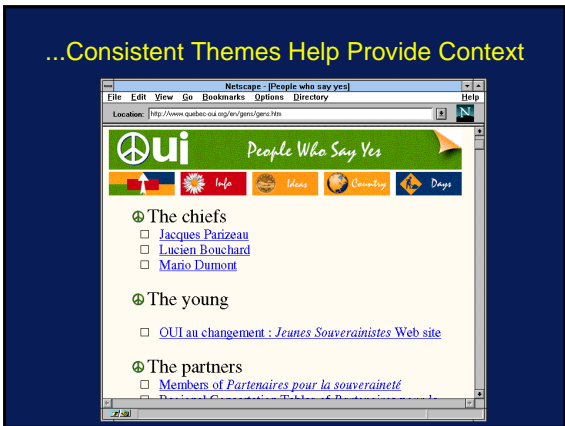
Image Map Example

```
<map name="r1">
<AREA SHAPE="RECT"
  COORDS="367,90 432,134" HREF="route01A.html">
<AREA SHAPE="RECT"
  COORDS="327,113 366,175" HREF="route01B.html">
<AREA SHAPE="RECT"
  COORDS="273,96 305,146" HREF="route01C.html">
...
</map>
```
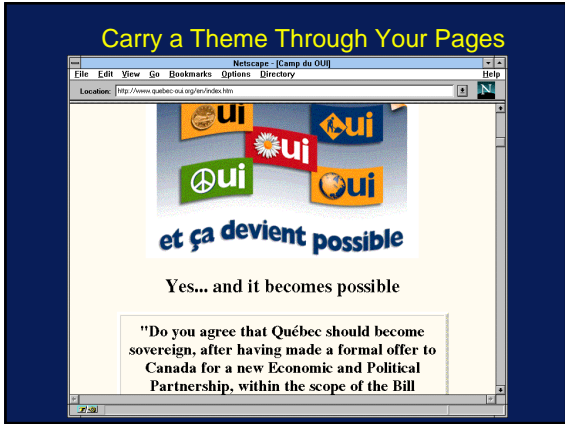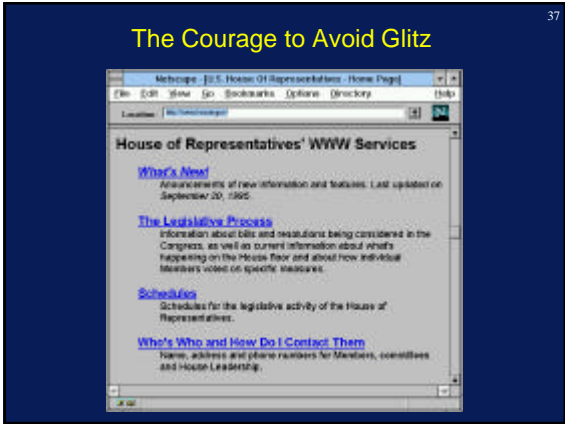
Design Issues

- People expect high quality graphics
- .... but beware of glitz
- Don't forget the user on older quipment...
- ...or slow modems
- Avoid designing for the machine on your desktop
- Beware of designing pages that only work with the latest version of Netscape
- Avoid excessive use of harsh color, complex backgrounds

Content vs Glitzy Presentation

The Courage to Avoid Glitz

House of Representatives' WWW Services

What's New!
Announcements of new information and features. Last updated on September 20, 1995.

The Legislative Process
Information about bills and resolutions being considered in the Congress, as well as current information about what's happening on the House floor and about how individual Members voted on specific measures.

Schedules
Schedules for the legislative activity of the House of Representatives.

Who's Who and How Do I Contact Them
Name, address and phone numbers for Members, committees and House Leadership.

Carry a Theme Through Your Pages

et ça devient possible

Yes... and it becomes possible

"Do you agree that Québec should become sovereign, after having made a formal offer to Canada for a new Economic and Political Partnership, within the scope of the Bill

---

...Consistent Themes Help Provide Context

People Who Say Yes

The chiefs
- Jacques Parizeau
- Lucien Bouchard
- Mario Dumont

The young
- OUI au changement : *Jeunes Souverainistes* Web site

The partners
- Members of *Partenaires pour la souveraineté*

Style: To Link or Not To Link

- Don't add a link every time a common phrase appears
- Your pages will look like Christmas trees...
- ... and will be impossible to read
- Consider a "Return to Home Page" link on every page
- Avoid internal links within a single page
  - Very confusing to readers
  - Is it a link to a new page, or to part of this page? Hard to tell..

Style: Label Links Naturally

- Explore our Online Photo Gallery
- Read about today's ski conditions

...not...

- If you want to see today's ski conditions, click **here**

Style: Don't Force HTML

- Don't use the <BR> tag excessively
  - And don't use it to simulate word wrap!
  - Your video setup is not the same as your readers!
- Go easy on the <HR> tag
- Be judicious in use of Netscape font extensions
  - If at all
- Don't <BLINK>

Style: No Dead Ends!

Netscape - [Current Weather Information]
File Edit View Go Bookmarks Options Directory Window Help
Location: http://www.wtns.com/sating.html

StormCenter 6
Inter@ctive

Satellite Images

- Don't add a link if the document doesn't exist!
- The whole Web is under construction; why bother labeling your service as such?

Style: Keep Inline Logos Simple

- Consider very small logos
- Try to keep logos < 500 or so pixels wide
- Excellent examples:
  - Lycos
  - Yahoo
  - Netscape
  - UCLA

Style: Don't Design for Your Desktop

- Try viewing your pages with other browsers...
  - Older Netscapes
  - Mosaic
  - AOL, Prodigy
  - Lynx
  - Turn off Images
- ... At other screen capabilities:
  - 640 X 480 instead of 1024 X 768
  - 256 (or even 16) colors instead of 16-bit

Style: Be Modem Friendly

- Use small inline images
- Provide thumbnails that point to larger images
- Keep number of inline images on a page small
  - Consider image maps instead of multiple images
- Label your links that point to large files
  - E.g. Clinton Speech (1400K .wav file)