

Announcements

- CMSC 102
- Class Web site
- Office hours via “Contact” link

Web

- What is the Web ?
 - Collection of sites
 - Conceptual organization of many distinct resources
- Internet and World Wide Web do not refer to the same entity
- Tim Berners-Lee – Defined the structure associated with the world wide web (he is the father of the web).
- The following article defined was written by Berners-Lee in 1991 defining the web model

<http://groups.google.com/group/alt.hypertext/msg/395f282a67a1916c>

Web Page Organization

- What is the Web Page?
 - Hypertext Document – User interface model where you can branch on request.
 - A web page is one example of a hypertext document
 - HTML → HyperText Markup Language
 - HTML is a layout language where you can format text, pictures and create links.
- Earlier systems (e.g. Gopher) were limited to text menus.
- HyperTIES project here at UMCP explored the principles behind hypertext

<http://www.cs.umd.edu/hcil/hyperties/>

Web Page Elements

- Formatted text
- Pictures (GIFs, JPEGs, ...)
- Movies (MPEG, AVI, QuickTime, RealVideo, ...)
- Interactive applications (Flash, Java, ...)
- Sound (WAV, AU, MP3, RealAudio, ...)
- Forms (fill-ins, check boxes, pull down menus, buttons, ...)

Client and Server

- Client and server are two terms frequently used
- Client/Server Model
- Client/Server model when talking about software
- Client/Server model when talking about hardware

Web Browsers

- What is a web browser?
 - A client application that process information sent by a web server.
 - The client receives html code and interprets html so we can see the page.
 - Popular clients
 - Internet Explorer
 - Firefox
 - Opera
 - Safari (Mac)
 - Lynx – Only one in the list that is text based.
 - Mosaic (the first web client)
- Internet – Communication medium that allows client and servers to communicate

URLs

- URL – Uniform Resource Locator or Universal Resource Locator
- An HTTP URL provides all the information necessary to retrieve a resource on the web
- Typical URL

<http://www.cs.umd.edu:80/~nelson/index.html>

- http → protocol
 - www.cs.umd.edu → host
 - 80 → port number
 - ~nelson/index.html → resource path
- 80 is the default port and usually it is not specified

Accessing non-Web Resource Types

- Several resources aside from web pages.
- Resources are usually identified via the protocol used in the URL.
- Keep in mind that an URL can not only represent a web page, but it can represent a file, a newsgroup or any other resource of the internet

Typical Protocols Associated with non-Web resources

- telnet – connect using telnet
- ftp – request a file via ftp file transfer standard
- file – request a file from your local machine
- https – Connect to a secure http server
- mailto – Launch an e-mail client to write an e-mail message
- aim – Open a window to the specified buddy in an instant message communication

File Types

File Name Suffix	File Type
.txt	text file
.html	hypertext document
.shtml	html with server side processing
.gif	GIF Image
.jpg	JPEG image
.pdf	PDF document
.ps	Postscript file
.au	AU format sound file
.wave	WAVE format sound file
.mp3	MP3 compressed sound file
.mpg	MPEG movie
.zip	ZIP compressed file

Free Antivirus/Adware Tools

- <http://www.helpdesk.umd.edu/topics/applications/anti-virus/mcafee/>
- <http://www.lavasoftusa.com/software/adaware/>
- <http://www.safer-networking.org/en/index.html>
- <http://www.spybot.com/en/index.html>