

## Class 1: Overview of Internet Browsers and Email Clients

- ▶ Understanding various terms and language common to the internet community, knowing how and when to use which
- ▶ Basic elements & navigation common to all Browsers
- ▶ Understanding various protocols and knowing when to use which
- ▶ Types of E-mail clients and which is the best choice for you (Email vs. Webmail)
- ▶ What is required to have your own account (either of above)

### What Terms?

Web Client, Web Browser, Web Server, IE, ISP, WWW, W<sub>3</sub>C, Open Source, Home, Navigation, Surfing, LAN's & WAN's, HTML, Hypermedia, Links & Tags, IP Address, URL, Domain name, Protocol, E-Mail Client

Understanding the behind the Scenes Stuff

The “**Internet**” is nothing more than a very large numbers of computers that are connected using a common set of interconnection standards.

**Two common types of connections are:**

- ▶ **Local Area Network** – small group of computers and peripherals (printers, scanners, etc) connected together usually by cables you can actually see. Look around this room, this is a LAN.
- ▶ **Wide Area Network** – much larger groupings of connected equipment – usually over a large area – such as a City, State or large corporation. Many WAN's are made up of several groups of LAN's connected by cable, satellite, etc.

The **World Wide Web (Web, WWW, W<sub>3</sub>C)** is a set of computers using the internet (in the big sense) with a specific type of software that allows for exchange of information easily with each other.

**Three different components:**

- ▶ **Web Server:** computer that store varies web sites – files to be accessed. Only those files made public will be found on the Internet (most files are private and require special permission to access)
- ▶ **Web Client:** a computer (the one in front of you or your own) to connect to the internet
- ▶ **Web Browser:** a software program that runs on a computer to make it work as a Web Client

**What is a Web Site?**

Basically a document – a single page or many pages linked together. Written in a code language known as HTML (or XHTML, XLM. PHP, etc). These pages are linked so that when you click on (or some other way) select a “hot spot” the page changes to a new one – either another page in the web site or to something completely different.

- ▶ **HTML:** Hypertext Markup Language

- ▶ **Links & Tag:** Usually text that is underlined on a page – that when you click on it you go to another location. This ability to click on a link and go to another page is called a **Hyperlink**.
- ▶ **Surfing:** As you move from one web page to another – using the various links – this is called surfing the Web.

## What is a Browser?

The software program you use to access the World Wide Web, the graphical portion of the Internet.

**Fun Fact:** *The first browser, called NCSA Mosaic, was developed at the National Center for Supercomputing Applications in the early 1990s. Can you find out more information about this?*

Top three Browsers and current version, until March of 2008:

		
<p>Internet Explorer 7 (current)  <a href="#">Internet Explorer 8</a> (newest)</p>	<p><a href="#">Firefox 3</a></p>	<p><a href="#">Netscape</a></p>
<p><a href="#">Internet Explorer 7</a> has been designed to make everyday tasks easier, provide dynamic security protection and improve the development platform and manageability. End user improvements include a streamlined interface, tabbed browsing, printing advances, improved search functionality, instant feeds (RSS), dynamic security protection, and more.</p> <p>What are the features of IE?</p> <p><a href="#">Watch this Movie on the Newest Windows Operating System 7!</a></p>	<p><b>Monzilla Project</b></p> <p>Open Source</p> <p>Released in November 2004; version 2.0, with enhanced security and other new features was released in October 2006</p> <p>What are the Features of Firefox?</p>	<p><b>Official End of Support</b></p> <p><i>Official support ended on March 1st, 2008</i></p> <p>Given AOL's current business focus and the success the Mozilla Foundation has had in developing critically-acclaimed products, we feel it's the right time to end development of Netscape branded software.</p> 

<http://www.learnthenet.com/english/html/12browser.htm>

## Browser Anatomy

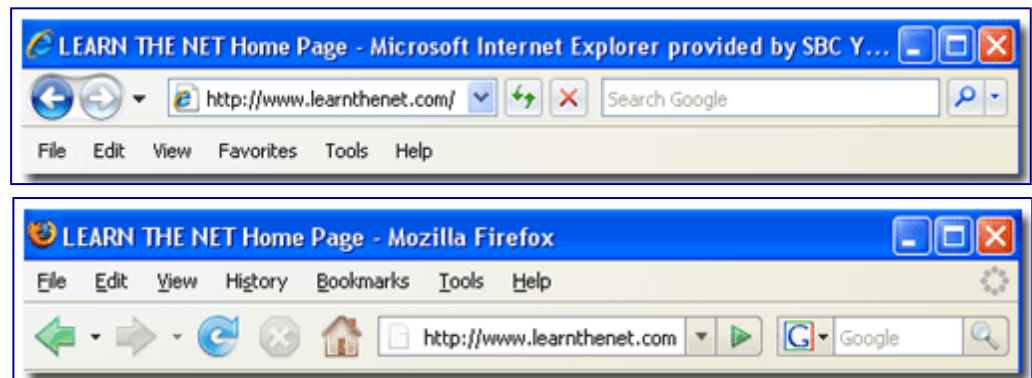
When you first launch your web browser, usually by double-clicking on the icon on your desktop, a predefined web page appears. This page is referred to as your **Home Page** or Start Page.

## The Toolbar (basic elements and common navigation)

The row of buttons at the top of your browser, known as the toolbar, helps you travel through the web of possibilities, keeping track of where you've been. The toolbars for Internet Explorer, and Firefox differ

slightly, so we will look at what they have in common – although not all are

always on the screen for you to see – you may need to turn them on if they are turned off. (We will look at that shortly)



- ▶ The **Back** button (the arrow pointing to the left) returns you the previous web page you've visited.
- ▶ Use the **Forward** button to return to the page you just came from.
- ▶ **Home** takes you to whichever home page you've chosen. (If you haven't selected one, it will return you to the default home page, usually the Microsoft, Netscape or Google website.)
- ▶ **Reload** or **Refresh** does just that, loads the web page again. Why would you want to do this? Sometimes all of the elements of a web page haven't loaded the first time, because the file transfer was interrupted. Also when you download a web page, the data is cached (pronounced "cached"), meaning it is stored temporarily in your computer's memory. The next time you want that page, instead of requesting the file from the web server, your web browser accesses it from the cache. But if a web page is updated frequently, as may be the case with news, sports scores or financial data, you won't get the most current information. By reloading the page, this timely data is updated from the web server.
- ▶ **Print** lets you make a hard copy of the current page loaded in your browser.
- ▶ The **Stop** button stops the browser from loading the current page
- ▶ **Search** connects to directories and search tools on the Microsoft, Netscape or Google websites.
- ▶ **Bookmarks or Favorites** lets you can record the addresses of websites you want to revisit. Once you add a URL to your list, you can return to that web page simply by clicking on the link in your list, instead of retyping the entire address.

Click on the link (above) to Internet Explorer 7. Take about 10 minutes reading over some of the information there. What can you find out about the features of this browser? Watch the movie about the features of this browser. Can you locate the different items on IE on the computer you are sitting at as it is being discussed?

Click on the like to information about Firefox. We do not have this browser installed here in our lab – but you should know about it. When you have your own computer – you have a choice of browsers you can download and use.

IE and Firefox are both free (at least for now). There are many other browsers, but not all are free and not all are for the general public to use.

## Going Places on the Web

### The Address System

Each computer on the internet has a unique identification number known as an **IP** (Internet Protocol) Address. Think of this as similar to your home address. To the computer, this address will look something like: 223.243.234.222. Not an address I would ever remember – and now that more people are using the internet everyday – these addresses are getting even longer and more complicated!

Lucky for us we do not need to use this form of addressing. Instead we use what is called the Domain Name system.

Domain Names – a unique name associated with a specific IP Address.

Domain Names follow a hierarchical model that you can follow from top to bottom if you read the domain names from right to left.

- ▶ **Top level domain (TDL):** the last part of the address – all the way to the right.

These TDL's are managed and named by an organization called the Internet Corporation for Assigned Names and Numbers (ICANN)

*In the beginning*, there were seven top-level domain names.

They were:

.com	US Commercial
.edu	US Four-year educational institutions
.gov	US Federal Government
.mil	US Military
.net	US General Use
.org	US Not for Profit
.us	US General Use

Today there are many more and this level of identification is still growing. Click here for a somewhat current list of TDL's:

<http://www.quackit.com/domain-names/top-level-domain-names.cfm>

The domain name can contain any number of parts, separated by periods. Most Domain Names in current use have either three or four parts.

### Uniform Resource Locators

The IP and the Domain Name each identify a specific computer on a network – but they do not actually indicate where any specific web site's document information is located. In order to identify this information, the Web Browser needs more information: a Uniform Resource Locator (URL), which is a 4-part addressing scheme. The URL will tell a Web Browser each of the following:

1. The **Protocol** it (the Web Browser) needs to use to transport the file. We will be using a protocol called: HTTP, HTTPS  
*HTTP: Hypertext Transfer Protocol, HTTPS: Hypertext Transfer Protocol Secure*
2. The **Domain Name** of the computer on which the files resides

3. The **Pathname** of the folder or directory on the computer on which the file resides (*Think of the pathname you see in the Save As or Open Dialogue Boxes when you route the computer to your folder on the Desktop*)
4. The **File Name**  
*Protocol: the etiquette or guidelines/rules to be followed*

For example, the URL for the Martinsburg VA Medical Center is:

<http://www.martinsburg.va.gov/>

Let's look at what the different parts are and where there are in this address.

**Protocol:** http://

**Domain Name:** www.martinsburg.va.gov

**Pathname:** none here

**File Name:** none here

Further into the Web Site is the Visitor Page: <http://www.martinsburg.va.gov/visitors/index.asp>. Its break down is a bit more, as seen here:

**Protocol:** http://

**Domain Name:** www.martinsburg.va.gov/

**Pathname:** visitor/

**File Name:** /index.asp

## E-mail

An e-mail client (Mail User Agent (MUA) or e-mail reader) is a frontend computer program used to manage e-mail. When you pay for an Internet Service Provider (ISP) to set up your personal computer with access to the internet (from your home), one of the items loaded onto your computer will be a software program that allows for you to Send/Receive Emails.

You will create an email name & password. The email name, along with the name of your service provider will become your email address.

You may choose to use a different software program, such as MS Outlook which might be part of the Microsoft software Suite (Word, PowerPoint, Excel). If so – your ISP will step you through the correct setting for the software to work with your account.

This type of account requires you to be at your computer, in the email program to read and send messages.

## Webmail

Web-based e-mail programs called webmail. Webmail has several advantages which include the ability to send and receive e-mail from anywhere using a single application: a web browser. This

eliminates the need to configure an e-mail client. Significant examples of e-mail services which also provide the user a webmail interface are Hotmail, Gmail, AOL and Yahoo.

The main drawbacks of webmail are that user interactions are subject to network response and that there is no offline capability (although Gmail does offer Offline Gmail through the installation of Gears).

Webmail (or Web-based e-mail) is an e-mail service intended to be primarily accessed via a web browser, as opposed to through an e-mail client, such as Microsoft Outlook, Mozilla's Thunderbird, or Apple Inc.'s Mail. Very popular webmail providers include Gmail, Yahoo! Mail, Hotmail and AOL.

A major advantage of web-based e-mail over application-based e-mail is that a user has the ability to access their inbox from any Internet-connected computer around the world. However, the need for Internet access is also a drawback, in that one cannot access old messages when not connected to the Internet.

Email Option	Link	Right for You?
MS Outlook	<a href="http://office.microsoft.com/en-us/outlook/default.aspx">http://office.microsoft.com/en-us/outlook/default.aspx</a>	
Thunderbird	<a href="http://www.mozillamessaging.com/en-US/thunderbird/">http://www.mozillamessaging.com/en-US/thunderbird/</a>	
Webmail		
Gmail	<a href="http://mail.google.com/mail/help/intl/en/about.html">http://mail.google.com/mail/help/intl/en/about.html</a>	
Yahoo! Mail	<a href="https://login.yahoo.com/config/mail?.intl=us">https://login.yahoo.com/config/mail?.intl=us</a>	
Hotmail	<a href="http://www.ehow.com/how_2068166_create-hotmail-account.html">http://www.ehow.com/how_2068166_create-hotmail-account.html</a>	
Info on how to create account		
AOL	<a href="http://www.webmail.aol.com">http://www.webmail.aol.com</a>	

## Basic Etiquette (Netiquette) for emails

Writing on the Internet – not the same as a letter to mom.

Watch this flash presentation: <http://www.studygs.net/netiquette.htm>

<http://www.dtcc.edu/cs/rfc1855.html>

<http://www.albion.com/netiquette/corerules.html>

<http://www.answers.com/topic/netiquette>