# Web Browser: Basics



# **Learning Services**

Hernando County Public Library System www.hernandocountylibrary.us

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#### Welcome...

to Web Browser: Basics. In this class, you will learn to navigate the Web with a browser, recognize and use hyperlinks, search the Web, negotiate Web portals, browse multiple sites using tabs and bookmark favorite websites.

#### What you should already know

Coming into this class, you should already have:

- The skills to use a mouse to make selections
- The ability to identify an icon
- An idea of why you might want to use the World Wide Web

#### What you will learn

In this class you will learn how to:

- Open a web browser and identify its key components
- Distinguish the World Wide Web from other subsets of the Internet
- Use the web navigational tools present in a web browser
- Recognize the difference between a web page and a web site
- Identify and use a hyperlink
- Open a new tab, switch between tabs, and close a tab
- Create and delete a Bookmark (Favorite)

#### What is a web browser?

A **web browser** is a software program that permits the user to navigate through the pages of the World Wide Web. While you can choose from among many web browsers – including *Internet Explorer*, *Firefox*, *Chrome*, *Opera* and *Safari* - for the purposes of this class we will use *Mozilla Firefox* as it is the preferred web browser for exploring the web site of the Hernando County Library System.

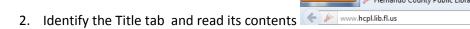
#### The World Wide Web

The World Wide Web is the portion of the Internet that permits hyperlinks and multimedia. With a web browser, one can view World Wide Web pages containing text, images, videos, and other multimedia, and navigate between them via hyperlinks. The web pages are stored on computers called **servers**, as these computers are principally used to serve individuals trying to retrieve information provided by the servers' owners.

#### Opening a Web browser



1. Double click on the Mozilla icon to open the web browser



#### Uniform Resource Locator (URL) or Web Address

Every web page is assigned a Uniform Resource Locator or URL to enable web browsers to locate and use the resources available on a server. The URL has two basic components: a top-level domain name, such as .com, .edu, .net, .gov or .org, and a lower level domain name that indicates the entity using the top-level domain, such as Amazon, the Red Cross, ATT, the Internal Revenue Service, or the University of Florida. Originally, the browser also expected the user to add www to indicate the URL referred to a resource on the World Wide Web, but now, that indicator is assumed whenever the URL is provided without any term before the lower level domain name. Thus, the URLs amazon.com, redcross.org, att.net, irs.gov and ufl.edu will take you to the same resources as www.amazon.com, www.redcross.org, www.att.net, www.irs.gov, and www.ufl.edu. The URL is often referred to as the web address, as it serves the same function as address, as it explains where a web resource may be found and who lives there.

#### **Navigation Tools**

A work ribbon appears at the top of the web browser. The upper portion of this ribbon is the **Title Bar**. Beginning at the upper left, you will see a button labeled *Firefox*. (Were we using a different browser, its name would appear on the button in the upper left corner.) To the right of that button, you will see a small bar, or **tab**, with the title of the webpage currently being accessed. On the next bar down, the **navigation bar**, you will find the **address box** where the Uniform Resource Locator (URL) of your current webpage appears and where you may type in the web address of resources you may wish to access.

To the immediate left of the address box, you will find a grayed-out button labeled with an arrow pointing to the left. This button will function as a **Back** button once you leave this first page, taking you back to resources previously used in the current session. Once you have used the Back button, a

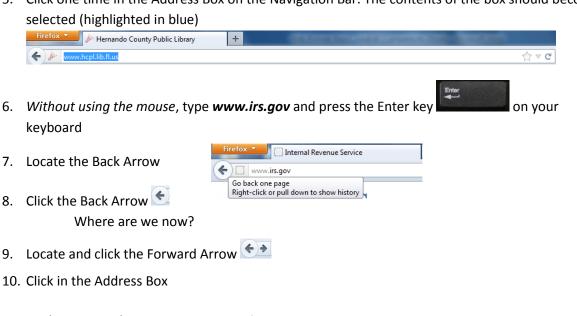
**Forward** button will also appear labeled with an arrow pointing to the right enabling you to move forward and backward along the line of Web surfing you have done during this session.

#### **Using the Navigation Bar**

1. Locate the Navigation Bar



- 3. Read the URL and determine the top level domain name
- 4. Read the URL and determine the second level domain name
- 5. Click one time in the Address Box on the Navigation Bar. The contents of the box should become



- 11. Without using the mouse, type www.irs.com
- 12. Press the Enter key on your keyboard Where are we now?

Remember the Web changes constantly. Web pages come and go with no warning, as no regulating body controls the Web, nor does the Web have an editor. The appearance of a web page may change at any time. A web page may change even while you are looking at it. The **reload** or **refresh** button <sup>©</sup> will enable you to reload the latest version of the current resource. The stop button \* permits you to cancel loading the resource. In some browsers, like Firefox, the stop button is merged with the refresh button.

At the far right of the Navigation Bar a button meant to resemble a house 🏚 will return you to your home page when you click on it. This is the **Home** button.

#### What is a "home page"?

The term "home page" can be misunderstood. We generally refer to the web page or document that automatically loads when a web browser is started as the user's home page. Clicking on the Home button will return you to your home page.

However, the term "home page" is also used to refer to the first page, welcome page, or index page of a web site. So, on the browsers on the computers at the library, the home page is the Hernando County Public Library's home page.

#### **Using the Home Button**

Click the Home button located in the Navigation Bar
 Where are we now?

# **Surfing the Web**

"Surfing the Web" refers to the practice of moving from one web page to another by means of hyperlinks. The user usually has no clear notion of the final destination beyond collecting desired information. The movement from one link to another resembles "channel surfing" or the practice of switching through TV channels looking for an interesting program, hence the name.

#### Web pages, web sites, and web addresses

A **web page** is a document or information resource that is suitable for the World Wide Web and can be accessed through a web browser and displayed on a monitor or mobile device.

A **web site** is a collection of web pages. The components of the web site can be identified by the use of a common domain name in the URLs of the web pages.

#### Using the URL to identify the website

- 1. Locate the address box
  - Notice that the URL address reads **www.hcpl.lib.fl.us**. This URL identifies which web pages are parts of the library's web site.
- 2. Now click **Contact Us** in the blue bar running across the top of the page

3. View the address box again

Note that the URL has changed; more text has been added to this web address. This lets you know that you are accessing a web page on the Hernando County Public Library web site

#### Web address vs. email address

A **web address** is comprised of a server name plus a domain name to identify a web page. An **email address** is comprised of a user name plus an email provider's web address to identify an email recipient. A web address often uses slashes / or \ as punctuation. An email address never does. An email address must contain an "at" sign @. A web address can never contain an "at" sign.

#### **Examples**

Web address: www.hcpl.lib.fl.us

Email address: aadams@hernandocounty.us

#### **Hyperlinks (Links)**

A **hyperlink**, or link, is a word, phrase, or image that you can click on to jump to a new section within the current document or to a new document. The new document may be part of the current web site or may reside on another server or web site. The hyperlink creates the interconnectedness of information on different computers that characterizes the World Wide Web.

The new document might be of a similar nature, such as a link from one text selection to another, or it may link to a different sort of document entirely, say from a picture to a sound file.

Links can be identified in many ways. Typically words or phrases that serve as links appear in a different color than the surrounding text. When images are used as links, the color cue cannot be relied upon.

Instead the change in the appearance of the cursor from arrow

S

or I-bar  $^{\perp}$  , to the pointing hand  $^{\uparrow }$  serves as an indicator of the presence of a link.

#### Investigating the cursor

Move the cursor to the top of the window to the blue area
 Notice the cursor is an arrow



2. Hover over the address bar

The cursor changes to the I-bar, indicating this is a place for typing



Notice the cursor changes from an arrow to a pointing finger indicating that this is a link. When hovering over a link a pop up URL appears, providing you with a destination address.

#### Scroll Bar

Any time a web pages is longer than one screen in length, a **scroll bar** appears along the right border of the window. By clicking and dragging the **slider**, you can move and down the web page, causing a different portion to appear on your screen. The same effect can be achieved by click on the arrows at either end of the scroll bar.

#### **Using Links to Surf the Web**

- 1. Hover over the word **Research** that appears on the blue bar that runs across the library's web site
- 2. Click on the word Research on the blue bar

Where are we now?

3. Click the Back Arrow

Where are we now?

- 4. On the left side of the screen, locate the green button labeled **About Us**
- 5. Click on the button
- 6. Hover over the library's logo at the top of the screen
- 7. Click the library's logo

Where are we now?

- 8. Locate and use the **scroll bar** on the right-hand side of your screen
  - To use this place your mouse on top of the scroll bar, hold down the left button, and drag the scroll bar
- 9. Scroll to bottom of library's home page

- 10. Locate box labeled Community
- 11. In the Community box, click the link labeled Hernando County

Where are we now?

12. Click the **Home** button

# Searching the Web

Surfing the web is fun, but it is neither efficient nor always effective in getting the information you want. In fact, Netcraft.com reported over 620,000,000 websites active at the beginning of October 2012. Surfing from link to link just isn't the best way to use the Web. Instead, you might try using a search engine or web portal to get information more easily.

#### **Search engines**

Google, Yahoo, Bing, Lycos, Yandex, and Duck Duck Go are all **search engines**. They are programs that search millions of databases and websites, making it easier for people to find information. Each uses a different methodology for presenting its results. Thus, searching Google and Bing may find the same sites, but not present them in the same order. However, they might not even find all the same sites. Try to exercise discretion in understanding search engine results.

Remember that the top level domain name serves as indication for the goals of the organization that placed the information on the Web. For example, a website with a .edu domain name is most interested in scholarship and so may provide no insight for consumers. On the other hand, a .com domain name always indicates that somebody somewhere is looking to make money from your visit to the website. Watch for these domain names as you examine your search results.

#### **Using a Search Engine**

1. Click one time in the Address Box

The contents of the box should become selected (highlighted in blue).

2. Type www.google.com

The blinking cursor beneath the Google image indicates that you can begin typing input here

3. Type Hernando County

Note AutoComplete as you type

- 4. Finish typing
- 5. Hit the Enter key
- 6. Note the results

Notice the geographic description given on the right

7. Click on the link "Welcome to Hernando County, Florida"
Where are we now?

#### Search Bar

A search bar contains a text box for inputting terms into a search engine. In some browsers, such as Google Chrome, the search bar function is incorporated into the address bar. The search bar may permit the user to select from among search engines to be used by the bar.

#### **Using the Search Bar**

- 1. Click in the Search Box located to the right of the address bar
- 2. Type Hernando County
- 3. Press **Enter** key
- 4. View results

Notice the link "Welcome to Hernando County, FL" is not spelled out in blue any longer.

This color change indicates that the web page has been visited by the user previously.

The Search Box accesses just one search engine at a time, but you do not always have to use the same search engine or even the same portion of the Web. If you examine the left edge of the Search Box on the Navigation Bar, you will see an icon resembling the Google logo. You will also notice a small arrow pointing down. Clicking on that arrow will give us a drop menu to choose other means of searching.

#### Changing the Search Bar's search engine

- 1. Locate the Search Box
- 2. Click on the small arrow to produce drop menu
- 3. Click Bing on the drop menu
- 4. Without touching the mouse, press the **Enter** key
- 5. Review search results

Look to see links identified as ads



#### Web portals

A **web portal** attempts to provide its users with all the services they might need in one website. The web portal typically provides access to email, search engines, news, stocks, shopping, and etcetera. For example, Yahoo and Excite are two different web portals that provide many of the same services.

#### **Examining a Web Portal**

1. Click one time in the Address Box

The contents of the box should become selected (highlighted in blue).

- 2. Type www.yahoo.com and hit the Enter key
- 3. Find Yahoo! Sites on left edge of screen
- 4. Click Autos

Take a few moments to examine this screen

- 6. Click A Yahoo!

This takes you back to the web site's home page

- 7. Find Yahoo! Sites on left edge of screen
- 8. Click Finance
- 9. Take a few moments to examine this screen
- 10. Click 🏦 Yahoo!
- 11. Find Yahoo! Sites on left edge of screen
- 12. Click Mail
- 13. Take a few moments to examine this screen
- 14. Click on the Home button on the Navigation Bar

# **Browsing Multiple Sites**

#### **Tabs**

Tabs can be most easily understood as files in a filing cabinet. By opening a tab, the user can have easy access to two web documents at the same time.

1. Click one time in the Address Box

The contents of the box should become selected (highlighted in blue).

2. Type www.google.com

- 3. Click in the Search Box
- 4. Without touching the mouse, type Cat
- 5. Press **Enter** to search
- 6. To open a new tab click the + located at the end of the current tab
- 7. Type *yahoo.com* in the Address Bar
- 8. Locate the Search Box at the top of the screen
- 9. Click in the Search Box
- 10. Without touching the mouse, type Cat
- 11. Hit the **Enter** key to search

  Notice the tabs have different titles
- 12. Click the **left tab** shaded in grey labeled **cat Google Search**Notice the other webpage appears
- 13. Click the right tab titled cat Yahoo! Search Res...
- 14. Click back and forth between the tabs comparing the results

Compare the number of results found

Examine the results for ads

Examine the results for similar listings

What other result shows purple in the listing?

End your comparisons on the Yahoo! Results page

- 15. Locate the x on the right tab titled cat Yahoo! Search Res...
- 16. Hover over the x
- 17. Click the x to close tab

# **Bookmarks (Favorites)**

As you browse the World Wide Web, you find yourself returning to some pages over and over again. You may want to keep a record of such pages so you can return there whenever you need. You could memorize the URLs. You could write them down on a piece of paper. Or you could use a feature built into your browser that creates a link within the browser to facilitate your return.

*Internet Explorer* calls these recorded URLs **favorites**, but every other browser identifies them as **bookmarks**, recalling the placeholders we typically leave in a book so they we can conveniently return to that spot.

#### Creating and removing a bookmark

- 1. Select Cat Products & Services in the search results
- 2. Find the star in the Address Bar
- 3. Hover over the star
- 4. Select the **star**

Note the star becomes gold indicating this page is bookmarked

5. Select the **Bookmark Menu** button

This will allow you to see your bookmarks in many ways

6. Hover over Recently Bookmarked

Here you will find the Caterpillar page as a Bookmark

- 7. Click on the **Home** button
- 8. To delete a bookmark, Select the **Bookmark Menu** once again
- 9. From the list choose Unsorted Bookmarks
- 10. In the white area, right-click Cat Products & Services
- 11. Choose Delete

Notice this website disappears from the menu as it is no longer Bookmarked

12. Click the to close the web browser

# **Web Security**

Any introduction to web browsing must discuss web security: protecting your computer from malware and hackers. Malware includes viruses, Trojan horses, spyware, and other intrusive software. Often designed to breach your security, these programs always make your computer run slower and errantly. Hackers want to get onto your computer and use it for their purposes rather than yours. In order to prevent malware, you need a malware protection program. In order to keep out hackers, you need a firewall. If you have Windows Vista, Windows 7, or Windows 8, then you have Windows Defender on your computer. You have protection. These versions of Windows also have Windows Firewall. If you have an earlier version of Windows, you may need protection. Many reliable programs are available for

free or a moderate charge. Mozilla Firefox offers some virus protection, which is another reason we use it on HCPL computers.

# **Restarting the Computer Lab Computers**

At the Library, to make your lab computer available to others now that class is over, please follow the steps below to **Restart**, not Shut down your computer:

- 1. Do not click on Shut down
- Left-click the Windows Start button in the left corner of the screen
- 3. Hover over the arrow button to the right of the Shut down
- 4. Click on **Restart**, found on the resulting fly-out menu



#### Thank you for your help.

At home, in order to close your computer down safely, you begin by clicking the Windows Start button in the lower left corner of the screen. At home, you would find the Shut down button on the resulting menu and click it...

Thank you for joining us today. Have a wonderful afternoon!

# **Appendix**

# Domain table

Name	Entity	Notes
<u>.aero</u>	air-transport industry	Must verify eligibility for registration; only those in various categories of air-travel-related entities may register.
<u>.asia</u>	Asia-Pacific region	This is a TLD for companies, organizations, and individuals based in the region of Asia, Australia, and the Pacific.
<u>.biz</u>	business	This is an open TLD; any person or entity is permitted to register; however, registrations may be challenged later if they are not held by commercial entities in accordance with the domain's charter. This TLD was created to provide relief for the wildly popular .com TLD.
<u>.cat</u>	Catalan	This is a TLD for Web sites in the Catalan language or related to Catalan culture.
<u>.com</u>	commercial	This is an open TLD; any person or entity is permitted to register. Though originally intended for use by for-profit business entities, for a number of reasons it became the "main" TLD for domain names and is currently used by all types of entities including nonprofits, schools and private individuals. Domain name registrations may be challenged if the holder cannot prove an outside relation justifying reservation of the name, to prevent "squatting".
<u>.coop</u>	cooperatives	The .coop TLD is limited to cooperatives as defined by the Rochdale Principles.
<u>.info</u>	information	This is an open TLD; any person or entity is permitted to register.
<u>.int</u>	international organizations	The .int TLD is strictly limited to organizations, offices, and programs which are endorsed by a treaty between two or more nations. However, there are a few grandfathered domain names that do not meet these criteria.
<u>.jobs</u>	companies	The .jobs TLD is designed to be added after the names of established companies with jobs to advertise. At this time, owners of a "company.jobs" domain are not permitted to post jobs of third party employers.
<u>.mobi</u>	mobile devices	Must be used for mobile-compatible sites in accordance with standards.
<u>.museum</u>	<u>n</u> museums	Must be verified as a legitimate museum.
<u>.name</u>	individuals, by name	This is an open TLD; any person or entity is permitted to register; however, registrations may be challenged later if they are not by

Name	Entity	Notes
		individuals (or the owners of fictional characters) in accordance with the domain's charter.
<u>.net</u>	network	This is an open TLD; any person or entity is permitted to register. Originally intended for use by domains pointing to a distributed network of computers, or "umbrella" sites that act as the portal to a set of smaller websites.
.org	organization	This is an open TLD; any person or entity is permitted to register. Originally intended for use by non-profit organizations, and still primarily used by some.
<u>.pro</u>	professions	Currently, .pro is reserved for licensed or certified professionals worldwide. A professional seeking to register a .pro domain must provide their registrar with the appropriate credentials.
<u>.tel</u>	Internet communication services	A contact directory housing all types of contact information directly in the Domain Name System.
<u>.travel</u>	travel and tourism industry related sites	Must be verified as a legitimate travel-related entity.
<u>.XXX</u>	adult entertainment	For sites providing sexually explicit content, such as pornography.

# **USA top-level domains**

Name	Entity	Notes		
<u>.edu</u>	educational	The .edu TLD is limited to specific educational institutions such as, but not limited to, primary schools, middle schools, secondary schools, colleges, and universities. In the US, its usability was limited in 2001 to post-secondary institutions accredited by an agency on the list of nationally recognized accrediting agencies maintained by the United States Department of Education. This domain is therefore almost exclusively used by US colleges and universities. Some institutions that do not meet the current registration criteria have grandfathered domain names.		
.gov	governmental The .gov TLD is limited to governmental entities and agencies in the US.			
<u>.mil</u>	US military	The .mil TLD is limited to use by the US military.		

<sup>&</sup>quot;List of Internet Top-level Domains." Wikipedia. Wikimedia Foundation, 26 Oct. 2012. Web. 26 Oct. 2012. <a href="http://en.wikipedia.org/wiki/List\_of\_Internet\_top-level\_domains">http://en.wikipedia.org/wiki/List\_of\_Internet\_top-level\_domains</a>.