Exploring the Internet

What is the Internet?
The Internet allows people to communicate and find information quickly. The Internet is a global network of networks while the Web, also referred formally as World Wide Web (www) is collection of information which is accessed via the Internet. Another way to look at is; the Internet is infrastructure while the Web is service on top of that infrastructure.

Internet Browsers
A browser is the software that allows you to search the Internet. The most common are:

- Google
- Chrome
- Mozilla Firefox
- Microsoft Edge
- Safari (Apple products come with Safari.)

These browsers work the same way, but might look slightly different.

Parts of the Screen

- Back/Forward Arrows
- Tabs
- Address Bar
- Bookmarks/Favorites
Connecting to the Internet

A device has to be connected to the Internet before you can access the Internet (or web). At home one can subscribe to a phone or cable company. Outside the home libraries, hotels, cafes and other businesses offer free Wi-Fi for their patron and customers.

- In the search bar at the bottom left of your screen, type “WiFi” and open the app.

- After turning WiFi on, select “Show available networks.”

- Choose a network in the list to connect to, and then select “Connect.” Unless the network is “Open,” a password will be required and can be obtained from the owner of the service (café, bookstore, etc.).

What is A Web Address?
Much like the street address for a house, a point to a specific location on the Internet. A web address is also called a URL.

http://www.lowelllibrary.org

- http:// stands for Hypertext Transfer Protocol
- www. stands for World Wide Web
- lowelllibrary Is the name of the owner of the website. This is the “street address” of the website.
- .org The 3 letters after the dot are the domain suffix.

When You type a web address into the address bar, "http://" and "www" are NOT required;
the website's name and domain suffix ARE.

Domain suffixes can give you a clue to the people who own the site and the kind of information the website will have.

.com: commercial organization, like Amazon or eBay
.net: computer network, like your ISP-provided email account
.org: non-profit organization; this is the domain suffix for the library’s website
.edu: academic institution, like UMASS-Lowell
.gov: government, like the City of Lowell's website
.mil: military

**Surfin' the Net**

To navigate the Internet means that you visit various websites. You can surf the Internet by:

- Typing in the website’s URL (web address) in the address bar and pressing the “enter” key.
- Clicking on a Hyperlink.
- Clicking on a Bookmark. If you have saved bookmarks, you can click on one of your bookmarks and visit that site.

You can save a bookmark by clicking on the yellow star below the menu bar. Clicking on the Home button. You can click on the Home icon to go to your browser's home page.

- Clicking on the Back and Forward Arrows. You can click on the Back and Forward arrows to return to pages you've already visited. These icons will be grayed out when you first open your browser because you haven’t visited any other sites yet.
- You’ll notice that an icon next to the address bar will spin or flash while the page is loading. The page may take a while to load, especially if it has a lot of pictures.

**Searching the Net**

You can perform a search, called a query, using a search engine such as Google. Search engines will have a box where you can type your query.
To perform a search:

Click in the box so you see your blinking cursor.
Type your query, or search terms.
Hit enter or "search."

Search Results

After you've typed your search query into a search engine, you'll be taken to a Search Results page. The page will list many links to websites that contain your search query. The results page will list any website that contains the words that you typed. Choose the site that is most relevant to you, noting the type of website (domain suffix).

Using Parameters

Your search query should be somewhat specific. If you don't get enough results or don't find what you are looking for, change your search terms. If you are searching for a specific phrase, surround it with quotation marks. Separate phrases with a + sign to search for both, or use a - sign to eliminate a term from a search. The results are more specific as you use more parameters.

Evaluating Websites

You can find a lot of information on the Internet, but it is not all accurate. There is no quality control on what is posted—anyone can post anything, and information may be biased or outdated. To help decide if you can trust a website: Ask if it is it a reputable source for your purposes (i.e., if researching for an academic paper, you'd want a .edu site instead of a .com site). Look for a publication or last-updated date.

Look for valid contact information. Look at the paragraph organization and number of spelling
and grammar mistakes. A disreputable source usually has lots of mistakes. Can you verify the information found on this site against other, reputable sources?

**Internet Safety**

People you talk to on the Internet are like that stranger on the subway. You must safeguard your online presence and be aware of scams. Whenever you enter personal information or credit card numbers online, be sure that you are using a secure site. The URL should begin with https.

**Identity Theft**

A common way to have your identity stolen online is replying to an email from someone posing as your bank who is requesting your username, password and card#. If you receive an email like that, you should contact your bank directly. DO NOT REPLY TO THE EMAIL!

**Chat & Dating**

"Connection" websites, like eHarmony, don’t screen their members. Any random person can sign up and start chatting with you.

**Adware & Viruses**

Much like people, computers can become sick by contracting viruses. Common methods of exposure are:

- Visiting websites loaded with ‘adware'
- Downloading software from a disreputable site
- Opening an infected email attachment
- Allowing scammers who call claiming they are from Microsoft or an antivirus company remote access to your computer.

A sick computer can:

- Corrupt data stored on your hard drive
- Lock your computer

Record your information and keystrokes and send this to identity thieves. They can then look at the collected info and sign into websites with your info. "Look" at a person’s email address book and send an email without the email account owner’s knowledge.

You can prevent infection by installing anti-virus programs. You can download reputable software such as he built-in Windows Defender, Malware Bytes, and Norton from reputable websites, like www.cnet.com. During installation, check "Look for Updates Automatically." The anti-virus program will update itself to prevent infection from new viruses. If you receive an email with an attachment from a person you don’t recognize, or the attachment seems out of character from that person, DON'T DOWNLOAD IT! Viruses can be sent via email attachments.
Vocabulary

**Address Bar**: A long box at the top of the screen that allows you to navigate to a new webpage by typing in the web address (aka URL).

**Bookmarks**: A saved link to a website that you visit frequently. Clicking on a bookmark will then take you to the corresponding website.

**Email (Electronic Mail)**: Allows you to send a 'letter' to someone nearly instantaneously. You can also 'attach' things to the letter, such as a digital picture.

**Ethernet Cable**: A cable that connects to the Ethernet ports on the back of a computer and on the back of a router or modem.

**Ethernet Port**: A port in the wall or on a computing device that allows for Internet access. It is rectangular.

**Home Page**: The first page you see when you open your browser. You can set this yourself to whatever you want.

**Hypertext Transfer Protocol (http://)**: A technical way to say that webpages will adhere to a set of rules, called internet protocols.

**Hyperlinks**: Text or picture that, when clicked, will take you to another page. Text usually appears as a different color and is underlined. Pictures change appearance (color, shape, etc.) when you roll the mouse over them. You can click on them to go to another webpage.

**Internet Service Provider (ISP)**: The company that gives you access to the Internet. Comcast is the dominant ISP in this area.

**Menu Bar and Toolbar**: Provide menus and buttons to help you navigate and perform tasks.

**Modem**: A networking device that plugs into a wall port and transmits Internet signal to one computing device.

**Router**: A piece of networking equipment that allows you to split the Internet signal among multiple devices (computers, gaming consoles, phones). Wi-Fi Routers put out a wireless signal that allows devices such as laptops, phones or eReaders to wirelessly connect to the Internet.

**Search Engine**: A website where you can type in the topic you are searching. The website then looks for its keywords all across the Internet. **Parameters**: Ways to limit your search results.

**World Wide Web**: A system of Internet servers that support specially formatted documents that support links to other documents, as well as graphics, audio, and video files. Not all Internet servers are part of the World Wide Web.

**Web Address**: Points to a specific location on the Internet. Also known as a URL.

**Web Browser**: Software that allows you to access, view and navigate web pages. The most common browsers are Internet Explorer, Mozilla Firefox and Google Chrome.

**Webpage**: A single page on the Internet. **Website**: A collection of closely-connected webpages that often begin with the same URL.