What is the internet?
What is the World Wide Web?
How can I get access to the Internet?
What is a Web Browser?
What is a search engine?
How can I get a virus in my computer by accessing the internet?
How can I protect my computer from viruses?
The World Wide Web
The World Wide Web (www) is a collection of many web sites (as of 2013 there were over 675 million web sites containing over 1 trillion web pages). A web site is a collection of web pages on a Server that is accessible via the Internet using a Web address called a URL short for Uniform Resource Locator. The infrastructure that supports the World Wide Web is called the Internet which consists of many computers, electronic devices, and communication paths that connect the servers and users' computers.
The Internet
The Internet is the infrastructure that provides the capability of transmitting information between points connected to the internet. The physical network consists of wires, fiber optic cables, transmitters, receivers, switches, line amplifiers and other devices that transport information digitally from one point to another. The nodes on physical network are computers that act as servers that provide information services to other nodes on the network called clients.

How it all began
1958—Advanced Research Projects Agency (ARPA) was established by the U.S. Department of Defense to the make the U.S. a leader in scientific and technological military applications.
1965—ARPA sponsored a study on a “cooperative network of time-sharing computers.” The goal was to distribute computers so that the network would survive a man made disaster, such as a nuclear attack or a natural disaster, such as a hurricane or earthquake.
1969—ARPANET, the forerunner of the Internet, was created in by ARPA. The Internet emerged from defense, scientific and educational circles.
1990—ARPANET ceased to exist and the first dial-up service providers began providing commercial service. Today the Internet Engineering Task Force (IETF) maintains control of the Internet. The IETF is an all volunteer organization.


Contrary to Al Gore’s claim, he did not invent the internet. If anyone would be credited for inventing the internet they would be Vin Cerf and Bob Kahn. Cerf and Kahn developed TCP/IP (Transmission Control Protocol and Internet Protocol).

The World Wide Web concept was initially developed by Sir Tim Berners-Lee, a British computer scientist.
What can I do on the Internet

• Look up information
• Schoolwork, jobs, how-to, research, banking, directions, businesses, Email
• Send and receive Electronic mail
• Video teleconferencing (Team Viewer, Skype)
• Buy and sell products
• Social networking (Facebook, twitter, blogs)
• Share with friends and others what you’re doing, including sharing pictures and videos
• Watch and post videos
• News and weather
• Gas prices
• Games
• Take college courses (MOOC, Kahnacademy)
• Monitor your home when you are away
• Financial transactions; e.g. banking, stock market, pay bills
• View patents on the Patent/Trademark web site
• Download music, movies
DEFINITIONS

URL - Uniform Resource Locator The address of a webpage on the internet.

e.g.  www.gpbsc.org  is the URL or web address for the web site for the Center.

In the URL address toolbar you may type in:

    http://www.gpbsc.org

to get to the Greater Palm Bay Senior Center web site

or simply   gpbsc.org   (the domain name)

http  Hyper Text Transfer Protocol  The format of the data transfer process over the internet from a web server to the end user.

https Hyper Text Transfer Protocol Secure  A secure means of transferring hypertext data over the internet

Domain Name  a unique name for a web site that is in two parts

    Name.type

for example   gpbsc.org   is a unique name in the org group
               google.com  is a unique name in the com group
Breaking down a URL

**http://www.IBM.com**

- **http://**
  - hypertext transfer protocol – this relates the document format for a Web page
- **www**
  - World Wide Web – the page is on the world wide Web
- **IBM**
  - This is the domain name and gives details of the university, company, or organization that owns the domain. Most companies have domain names that contain all or part of their company name.
- **com**
  - business site

Other url extensions:

- **.com**
  - commercial – a business site on the Web. But you may also find:
- **.edu**
  - educational – university, school, or any educationally-based institution
- **.gov**
  - government
- **.org**
  - not-for-profit group – such as a charity, cooperative, or any other not-for-profit
- **.biz**
  - business – the latest indicator of a business domain on the Web
- **.net**
  - network provider – often an ISP or large scale communications company
Country URL extensions
You can also determine which country a Web site is from.
• .uk United Kingdom
• .tv Tuvalu
• .dk Denmark
• .ie Ireland
• .au Australia
• .nz New Zealand
• .fr France

When the country is not indicated, this usually means the Web site emanates from the United States. For example:
http://www.ibm.com is in the United States

Hyperlinks

Web pages can contain links to other pages within the Web site or to other Web sites. These are called hyperlinks. Hyperlinks can be seen as underlined words. You might also find that an image is a hyperlink. Behind each hyperlink is computer code linking to another part of the Web site or containing a URL of another Web site.

When you place the cursor arrow over the link (whether it’s an image, word or a phrase), the cursor usually turns into a hand with a pointer finger. Most web browsers will show a pop-up with the URL address when the cursor hovers over the hyperlink. If you want to see what’s next, simply click the mouse and one of these links will take you to another page or a different Web site.

Getting
WEB BROWSERS

A web browser is an application program that runs in the operating system environment of a computer system and provides a user interface to access information on the internet.

Four web browsers are available for computers running Windows operating systems:

1. Internet Explorer - Microsoft
2. Firefox - Freeware
3. Chrome - Google
4. Safari - Apple
5. Opera - Opera software
6. Microsoft Edge - Microsoft

In this class we will use Internet Explorer

Open Internet Explorer
Title bar – top bar in a Window that provides information about the program running and what it is doing. (Title bar is visible if the display is in Classic mode which can be set in the Control Panel.)

URL Address Bar – identifies the web page being viewed.

Menu bar - a region of the screen or application interface where drop down menus are displayed. The menu bar's purpose is to supply a common housing for window- or application-specific menus which provide access to such functions as opening files, interacting with an application, or displaying help documentation or manuals.

Favorites Bar – A place to save favorite web sites URL's for easy access later

Command Bar – Contains icons for some IE commands

Tabs – Allows multiple web pages to be accessed concurrently
CONFIGURING INTERNET EXPLORER

The features of Internet Explorer can be set with the user's preferences for many options:

- Home page (the web page that is displayed when Internet Explorer is opened)
- Show/hide menu bar
- Open a new tab
- View in Full screen mode
- Setting Favorites (bookmarks)
- Organizing Favorites
- Toolbars
- Change Text Size
- Zoom
- Manage Add-ons
Adding/change Home page
Show/hide menu bar - right click in the blank toolbar area

Select the toolbar you wish to add (or remove), in this case the menu bar

Alternate method, select View <LC> Toolbars
Open a new tab

REFRESH WEB PAGE

NEW TAB

THE NEW TAB WILL OPEN A BLANK WEB PAGE
Add/change Home Page

RIGHT CLICK HERE

Add on remove toolbars by clicking toolbar name
• View in Full screen mode
Setting Favorites (bookmarks)
• Organizing Favorites
• Add
• Toolbars
• Change Text Size
• Zoom

Manage Add-ons
See the web site for this class:

www.gpbsc.org/cccc
Functions that can be used to make objects easier to view:

The minimize button (upper-right hand corner of the window) hides the window and places it on the task bar.

The resize button causes the window to be reduced from full screen to something less than full screen. Once the window is reduced to something less than full size the icon changes. Selecting it again will cause it to go back to full size.

The close program button closes the program; first it will ask if you want to save any data that the program has created.
A window that has been reduced from full screen:

Two or more windows can be placed on one monitor screen.
When two or more programs are open on the screen, only one can be communicating with the user at a time. The program that is accepting keystrokes is said to be in Focus or in the Foreground.

You can show or hide the Menu bar, Favorites or Links bar, Command bar, and status bar. Here's how:

1. Open Internet Explorer
2. Click the Tools button, point to Toolbars, and then click the toolbar you want to show or hide.

You can show or hide the Menu bar, Favorites bar, Command bar, and status bar. Here's how:

1. Click the Tools button, point to Toolbars, and then click the toolbar you want to show or hide.
## Proofreading Marks

<table>
<thead>
<tr>
<th>Marks &amp; Meanings</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>⇨</td>
<td>They fished in lake tahoe.</td>
</tr>
<tr>
<td>/</td>
<td>Five students missed the bus.</td>
</tr>
<tr>
<td>sp.</td>
<td>The day was cloudy and cold.</td>
</tr>
<tr>
<td>○</td>
<td>Tomorrow is a holiday.</td>
</tr>
<tr>
<td>□</td>
<td>Kim knew the answer.</td>
</tr>
<tr>
<td>□</td>
<td>Six were in the litter.</td>
</tr>
<tr>
<td>△</td>
<td>He ate peas, corn and squash.</td>
</tr>
<tr>
<td>△</td>
<td>An otter swam in the bed.</td>
</tr>
<tr>
<td>△</td>
<td>The child’s bike was red.</td>
</tr>
<tr>
<td>△</td>
<td>Why can’t I go? she cried.</td>
</tr>
<tr>
<td>△</td>
<td>He read two books.</td>
</tr>
<tr>
<td>△</td>
<td>Her favorite game is soft ball.</td>
</tr>
<tr>
<td>△</td>
<td>We had fun. Next we went to</td>
</tr>
</tbody>
</table>
Sometimes when I'm alone, I google myself

Google was named after the biggest named number, googleplex, which is 1 followed by 100 zeros or $10^{100}$. George Gamow named this number in his book “One, Two, Three, Infinity.”