

Study Guide:
Lessons 1-6
Web Design 1

[Sputnik](#) --- History changed on October 4, 1957, when the Soviet Union successfully launched Sputnik I. The world's first artificial satellite was about the size of a basketball, weighed only 183 pounds, and took about 98 minutes to orbit the Earth on its elliptical path. That launch ushered in new political, military, technological, and scientific developments. While the Sputnik launch was a single event, it marked the start of the space age and the U.S.-U.S.S.R space race.

[ARPAnet](#) --- The precursor to the Internet, ARPANET was a large wide-area network created by the United States Defense Advanced Research Project Agency (ARPA). Established in 1969, ARPANET served as a test-bed for new networking technologies, linking many universities and research centers. The first two nodes that formed the ARPANET were UCLA and the Stanford Research Institute, followed shortly thereafter by the University of Utah. Because of his unique expertise in data networking, Washington to play a key role in preparing a functional specification for the ARPANET - a government-supported data network that would use the technology which by then had come to be known as "packet switching".

[J. C. R. Licklider](#) (The Visionary)--- J. C. R. Licklider is largely credited as the man with the earliest vision of the Internet as it is today. As Director of the Information Processing Techniques Office (IPTO), "Lick" implemented the funding priorities that would lead to the development of many of the inventions we use today including the Internet, mouse, windows, and hypertext. In the end, Licklider created a managerial style where grad students were allowed to build a multi-billion dollar research project; the ARPAnet.

[Bob Taylor](#) --- In 1966 Robert Taylor took on the role of director of ARPA's Information Processing Techniques Office (IPTO), formerly headed by J. C. R. Licklider. Upon arrival, Larry began to notice a lot of duplicate work being done at ARPA funded institutions. Furthermore, these institutions were always asking for newer and better (more expensive) computers. Realizing the enormous cost associated with this Roberts decided that ARPA should link these institutions together. Only eleven months after the launch of the ARPAnet Taylor left in September 1970 to create the computer science lab at Xerox Corp.'s Palo Alto Research Center.

[Dr. Leonard Kleinrock](#) --- is known as the Inventor of the Internet Technology, having created the basic principles of packet switching, the technology underpinning the Internet, while a graduate student at MIT. This was a decade before the birth of the Internet, which occurred when his Host computer at UCLA became the first node of the Internet in September 1969. He wrote the first paper and published the first book on the subject; he also directed the transmission of the first message ever to pass over the Internet.

[Packet Switching](#) --- Refers to protocols in which messages are [divided into packets](#) before they are sent. Each packet is then transmitted individually and can even follow different routes to its destination. Once all the packets forming a message arrive at the destination, they are recompiled into the original message.

[Vinton Cerf](#) --- Widely known as a "Father of the Internet," Cerf is the co-designer of the TCP/IP protocols and the architecture of the Internet. In December 1997, President Clinton presented the U.S. National Medal of Technology to Cerf and his partner, Robert E. Kahn, for founding and developing the Internet.

[Bob Kahn](#) --- Member of BBN team that created the ARPAnet (1969), co-inventor of TCP/IP (1973).

[TCP/IP](#) --- Abbreviation for **T**ransmission **C**ontrol **P**rotocol/**I**nternet **P**rotocol, the suite of communications protocols used to connect hosts on the Internet. On January 1, 1983 the ARPAnet -- and every network attached to the ARPAnet -- officially adopts the TCP/IP networking protocol, developed in the 1970s by pioneering network engineers Vinton Cerf and Bob Kahn. From then on, all networks that use TCP/IP are collectively known as the Internet. The standardization of TCP/IP allows the number of Internet sites and users to grow exponentially.

[ISOC](#) (**I**nternet **S**ociety) --- A non-governmental, non-profit organization dedicated to maintaining and enhancing the Internet. Through its committees, such as the Internet Advisory Board and the Internet Engineering Task Force, the Internet Society is responsible for developing and approving new Internet standards and protocols.

[Tim Berners-Lee](#) --- The inventor of the World Wide Web (WWW) in 1989 while working at CERN a European particle physics laboratory in Geneva. He wrote the first World Wide Web server, "http", and the first client, "[WorldWideWeb](#)" a what-you-see-is-what-you-get hypertext browser/editor, which ran in the NeXTStep environment. Also, Tim is currently the Director of the W3C.

[W3C](#) --- The World Wide Web Consortium (W3C) develops interoperable technologies (specifications, guidelines, software, and tools) to lead the Web to its full potential. W3C is a forum for information, commerce, communication, and collective understanding.

[HTTP](#) (Hyper Text Transfer Protocol) --- The HTTP protocol is a request/response protocol between web servers and client browsers.

[HTML](#) --- Short for **H**yper**T**ext **M**arkup **L**anguage, the authoring language used to create documents (web pages) on the World Wide Web.

Tag --- (n) A command inserted in a HTML file that specifies how the HTML file, or a portion of the HTML file, should be formatted. In addition to **commands** (<HR>) tags may contain one or more **attributes** (<HR **SIZE**="?" **COLOR**="?">) and their specific **properties** (<HR SIZE="3" COLOR="navy">).

Text Editor (We use [Gedit](#)) --- A program that enables you to create and edit text files. There are many different types of editors, the distinction between editors and word processors is not clear-cut, but in general, word processors provide many more formatting features. Nowadays, the term editor usually refers to source code editors that include many special features for writing and editing source code.

Save As (.HTM) --- This allows you to create a web page when using a text editor such as Notepad. Not manually adding the file extension, .HTM will result in the creation of a .txt, a Text document that will not be a web page. (I will ALWAYS use .HTM in my instructions but, you may use .HTML if you so desire...)

[Web Browser](#) --- A software application used to locate and display Web pages. The two most popular browsers are Microsoft Internet Explorer and Netscape Navigator. Both of these are graphical browsers, which mean that they can display graphics as well as text. In addition, most modern browsers can present multimedia information, including sound and video, though they require plug-ins for some formats such as FLASH and JAVA.

Key Points – Helpful Information Below:

-Every Web page must/will have these 8 tags:

```
<HTML>
```

```
<HEAD>
```

```
<TITLE> Give page a title here
```

```
</TITLE>
```

```
</HEAD>
```

```
<BODY>
```

All information to be displayed in the browser goes here

```
</BODY>
```

```
</HTML>
```

-Spaces in file names are bad! Use an “*underscore*” _ if need to separate

-All files (including pictures and media) associated with a webpage(s) must in the same folder or directory.

-Not all tags have a corresponding closing tag; these tags are called single tags.

-Tags have commands and may also have attributes and properties.

-To edit a page, you must first “VIEW SOURCE CODE” this will open Gedit.

-A shortcut is represented by an icon that when activated will take you to a file or location. The icon will have an arrow on it in the lower left-hand corner. If the arrow isn’t present on the icon then it is not a shortcut.

-CTRL key and “S” pressed at the same time will SAVE a document.

-CTRL key and “C” pressed at the same time will COPY any highlighted item.

-CTRL key and “V” pressed at the same time will PASTE a copied item over any highlighted portion of a page.

-The F5 key will REFRESH a web page and allow you to see the changes or updates you have made while creating or editing a page.

-A misspelled word will cause your code to not work properly, you must spell every thing exactly correct for you source code to be understood by the browser.

-Never have more than one window of a pages source code open at one time!

-Space or Layout your source code so that you can easily come back and debug it or look for errors.

-Nested lists are lists contained within a list.

-Default is automatic, the action will happen with out a command or attribute.

-The default file extinction in PhotoShop is .psd and a .psd file will not work in HTML. You must choose SAVE AS and change the files format to .jpg or .gif

-Tag commands and attributes are always separated by a space, a tag can have more than one attribute and there is no particular order for attributes.

Below is a list of all the HTML Tags we have covered – ALL **COMMANDS-ATTRIBUTES-VALUES**

Tag (Open & Close)	Attributes	Description
<A> 	HREF="some file location" TARGET="_new"	Anchor tag: hyperlinks, where link opens.
 		Defines bold text
<BODY> </BODY>	BGCOLOR="some color" BACKGROUND="some image file" LINK="some color" ALINK="some color" VLINK="some color" BGPROPERTIES="fixed"	Defines the body element: after the <BODY> is all information displayed in the browser window. Also, defines background page color, background page image, link colors, watermark (background image doesn't move when scrolling)
 		Inserts a single line break
<CENTER> </CENTER>		Defines centered text or image
 	FACE="some font face" SIZE="# 1-7" COLOR="some color"	Defines the font face, size, and color of text
<HEAD> </HEAD>		Defines information about the document: <META> tags and <SCRIPT> tags
<HR>	SIZE="some #" COLOR="some color" WIDTH="some #"	Defines a horizontal rule: size, color, and width
<HTML> </HTML>		Defines an html document
<I> </I>		Defines italic text
	SRC="files location" ALT="description of image" BORDER="some #" ALIGN="top or middle or bottom" HEIGHT="some #" WIDTH="some #"	Defines an image: location, alternative text, border on image, and display dimensions.
 		Defines a line item in a list
<MARQUEE> </MARQUEE>	BEHAVIOR="scroll or slide or alternate" DIRECTION="left or right or up or down" LOOP="infinite or a #" SCROLLAMOUNT="a #"	Defines a <MARQUEE> and it's BEHAVIOR, DIRECTION, LOOP, and SCROLLAMOUNT.
<META>		Defines meta information: page information, page transitions, and page redirects.
 	TYPE="A or I or 1"	Defines an ordered list: A or I or 1
<P> </P> ALIGN>	ALIGN="left or right"	Defines a paragraphs alignment: left or right
<STRIKE> </STRIKE>		Defines strike-through text
		Defines subscripted text
		Defines superscripted text
<TITLE> </TITLE>		Defines the document title
<U> </U>		Defines underlined text
 	TYPE="square or disc or circle"	Defines an unordered list