

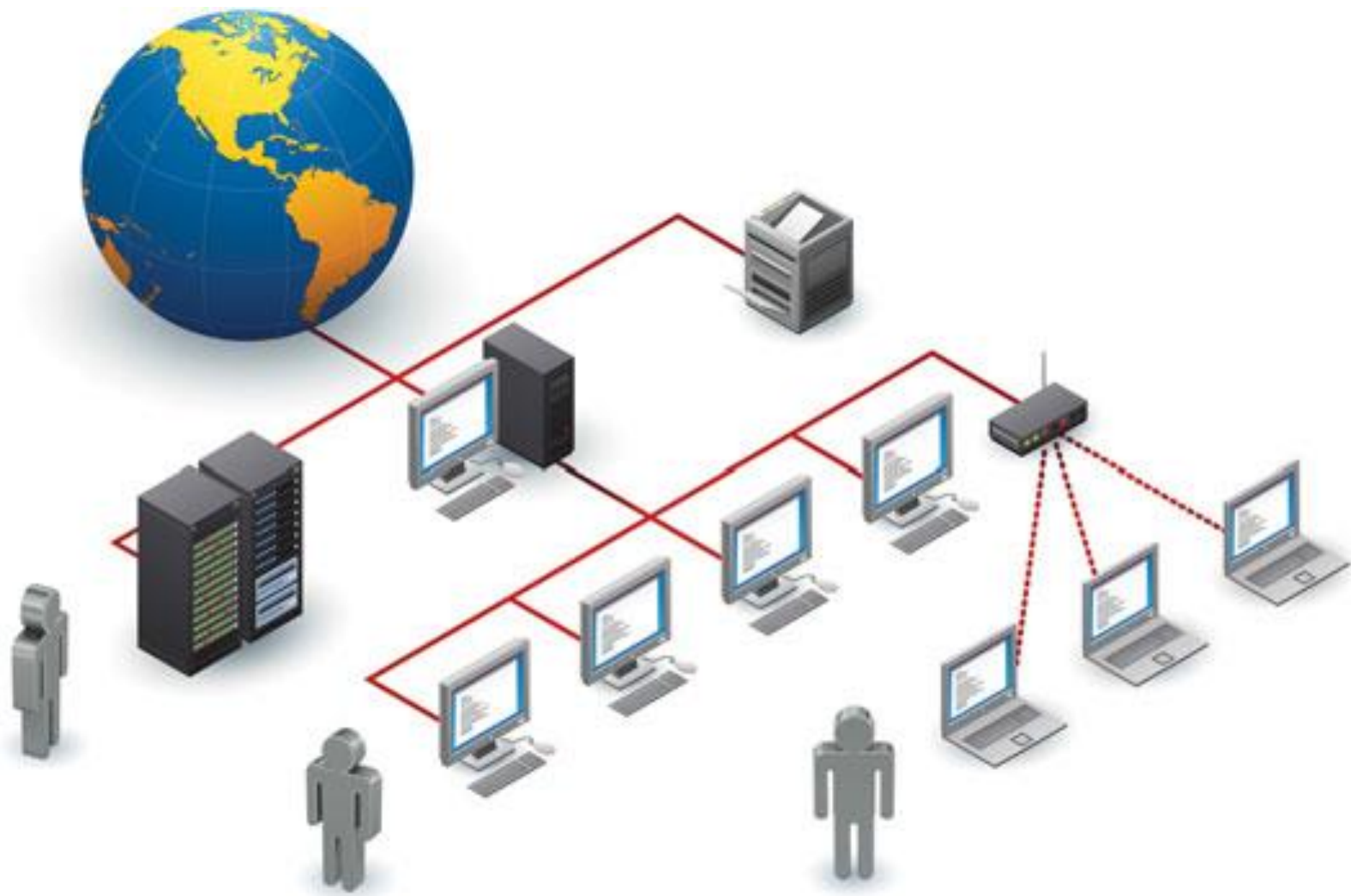


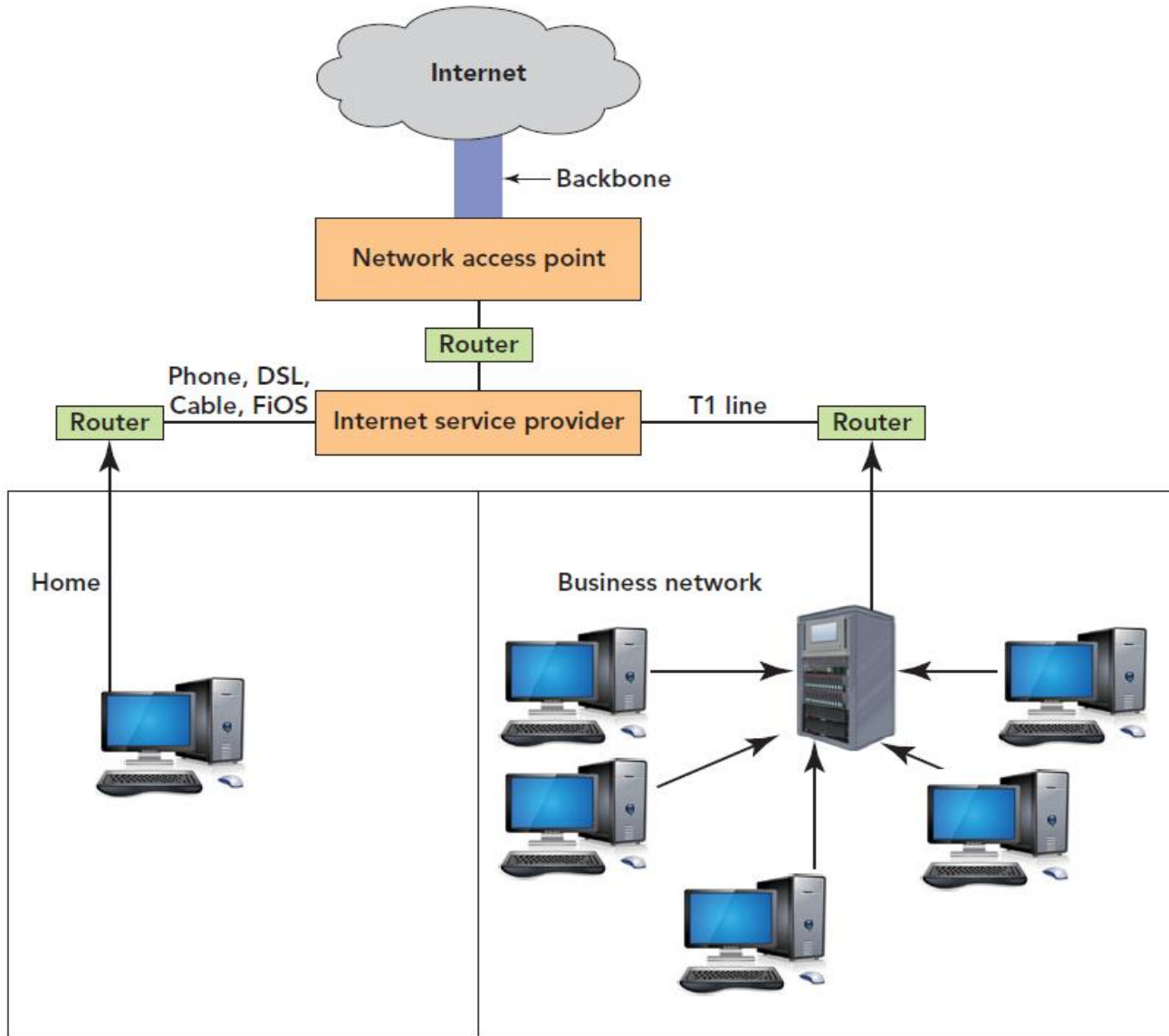
**Dr./ Ahmed Mohamed Rabie Sayed**

# **Chapter 6**

## **Internet and World Wide Web**

**The Internet, also called the Net, is a global computer network made up of thousands of privately and publicly owned computers and networks that grew and interlinked, over time, into one giant network.**





Special purpose  
XO computer



TCP/IP



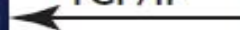
TCP/IP



Smartphone



TCP/IP



Networked computers

TCP/IP



Notebook

The TCP/IP suite of protocols ensures that any data traveling over the Internet is sent in the same format regardless of the type of computer, Internet access provider, or operating system being used.

**Internet Service Providers (ISPs)** are companies or businesses that provide access to via Internet free, for a fixed monthly charge, or for an itemized per use fee.

**An Online Service provider (OSP)** is a for-profit firm that provides a proprietary network and offers special services that are available only to subscribers.

**A Wireless Internet Service provider can be a local or national company that provides wireless Internet access to computers and other mobile devices, such as notebooks and smartphones.**



# Type of Internet Access

Type	Price Range per Month	Speed of Access (receiving data)	Advantages	Disadvantages
Dial-up	\$5 to \$20	Slow: 56 kilobits per second (Kbps)	Availability Low user cost	Slow speed
DSL	\$10 to \$30	Average: 1.5 megabits per second (Mbps) Maximum: 7+ Mbps	Speed Reliability	Availability High user cost
Cable	\$30 to \$60	Average: 3 Mbps Maximum: 30+ Mbps	Speed Reliability	Availability High user cost
Satellite	\$60 to \$100	Average: 700 Kbps Maximum: 1.5 Mbps	Availability Speed	High user cost Reliability
Fiber-optic service	\$40 to \$140	Average: 15 Mbps Maximum: 50+ Mbps	Speed	Availability High user cost

**The World Wide Web (or Web or WWW) is a portion of the Internet that contains billions of documents.**

**Standards and guidelines related to all aspects of the Web are published by the World Wide Web Consortium (W3C).**

The documents of the Web, transported over the Internet, are called **Web pages**.

**A Web browser** is a program on your computer that displays a Web document by interpreting the HTML or XHTML format, enabling you to view Web pages and activate the hyperlinks placed on a page.

**A Web site is a collection of related web pages.**

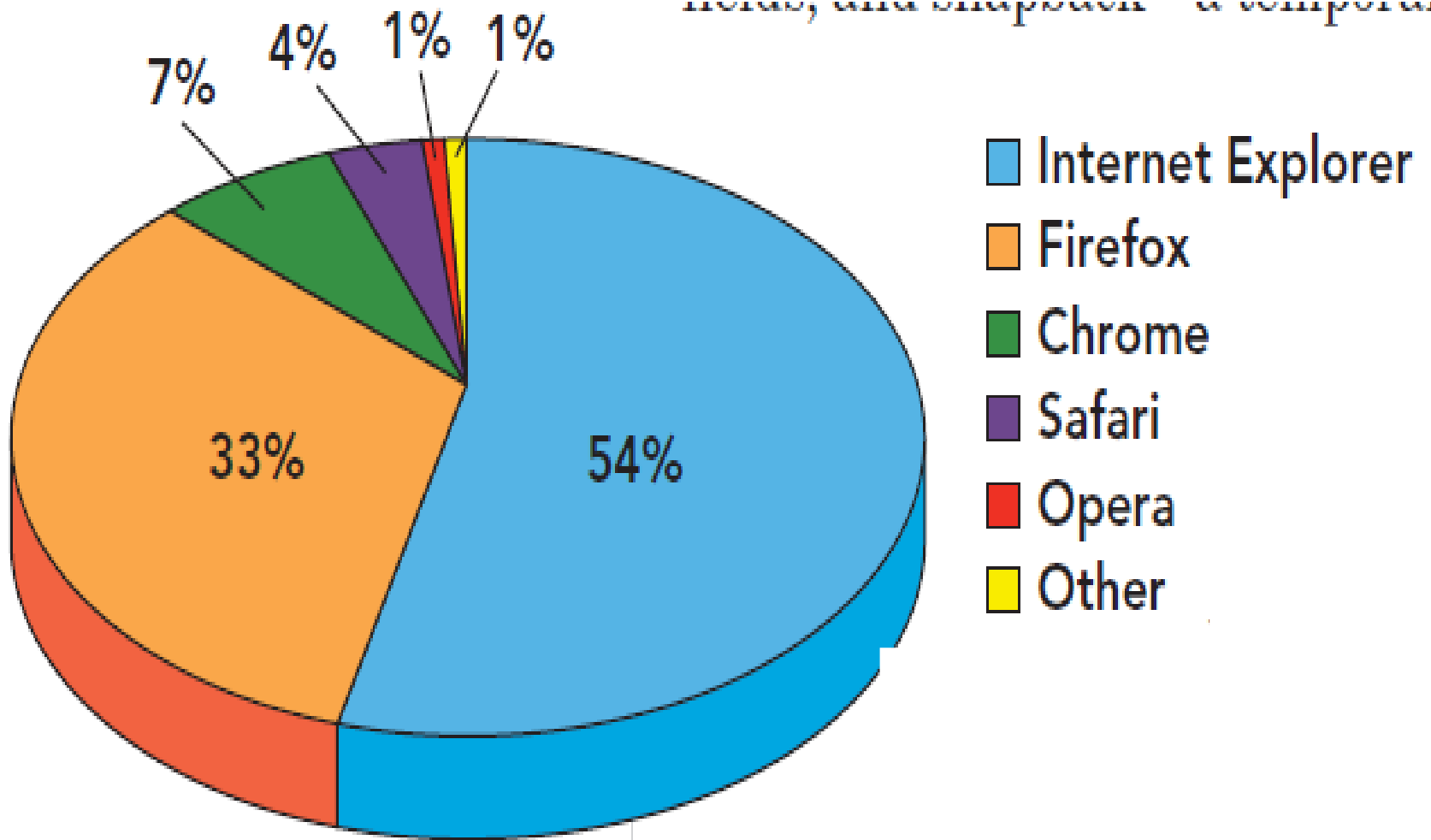
**Home page (also called an index page), which is a default page that's displayed automatically when you enter a site at its top level.**

**(HTML) or Extensible Hypertext Markup Language**

**(XHTML): HTML is a language that uses a tag system of code to create Web pages. In this system.**

**Hypertext is a system in which objects (text, pictures, music, programs, and so on) can be creatively linked to each other.**

Internet Explorer 54%

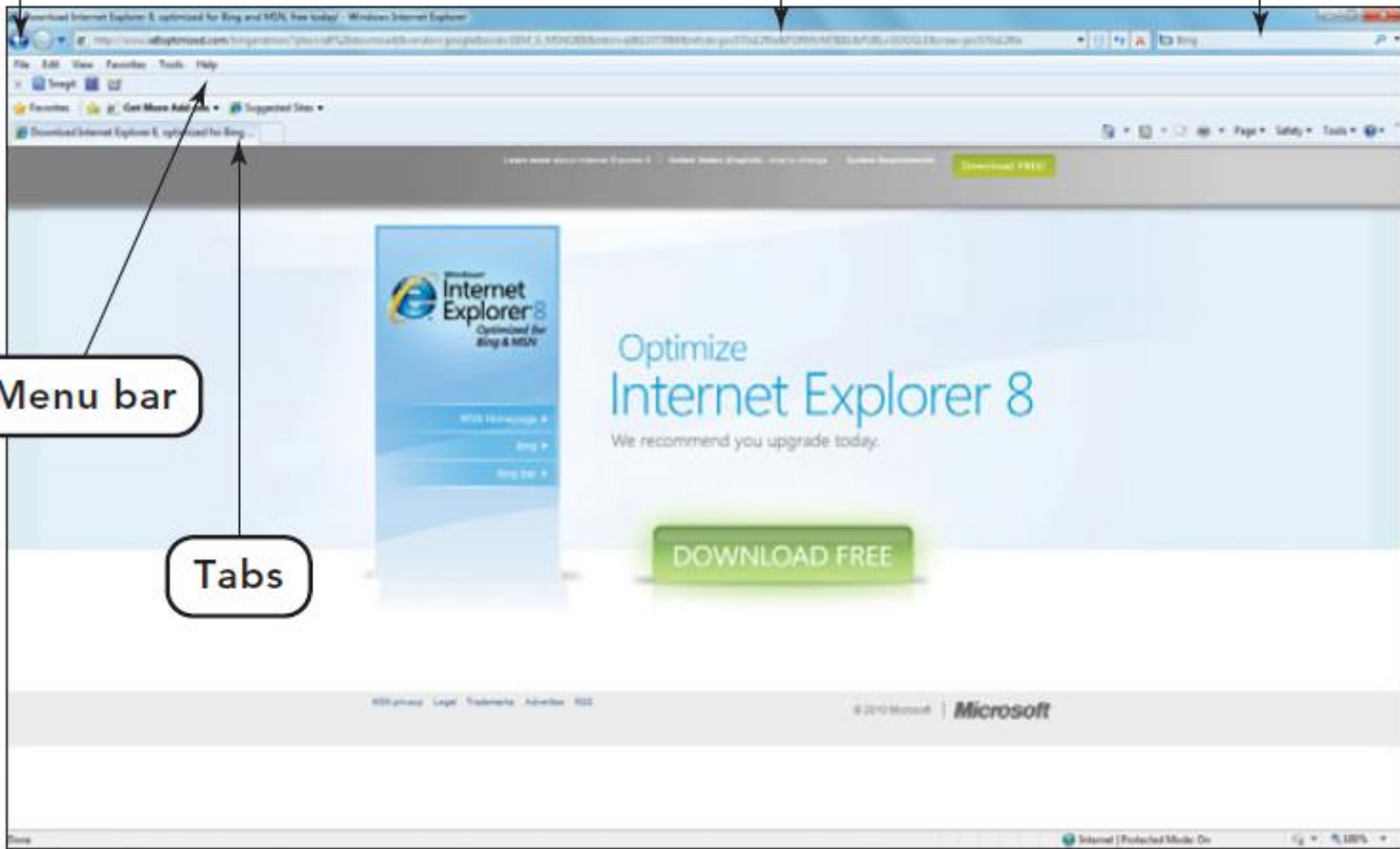


Source: <http://gs.statcounter.com/>

Navigation buttons

Address bar

Search box



Menu bar

Tabs

**Plug-ins** which are **additional software** programs, located on the user's computer, that extend the ability of the browser, usually to enable multimedia features.

**Acrobat Reader**

**Adobe Flash Player**

**Adobe Shockwave Player**

**Apple QuickTime**

**Real Player**

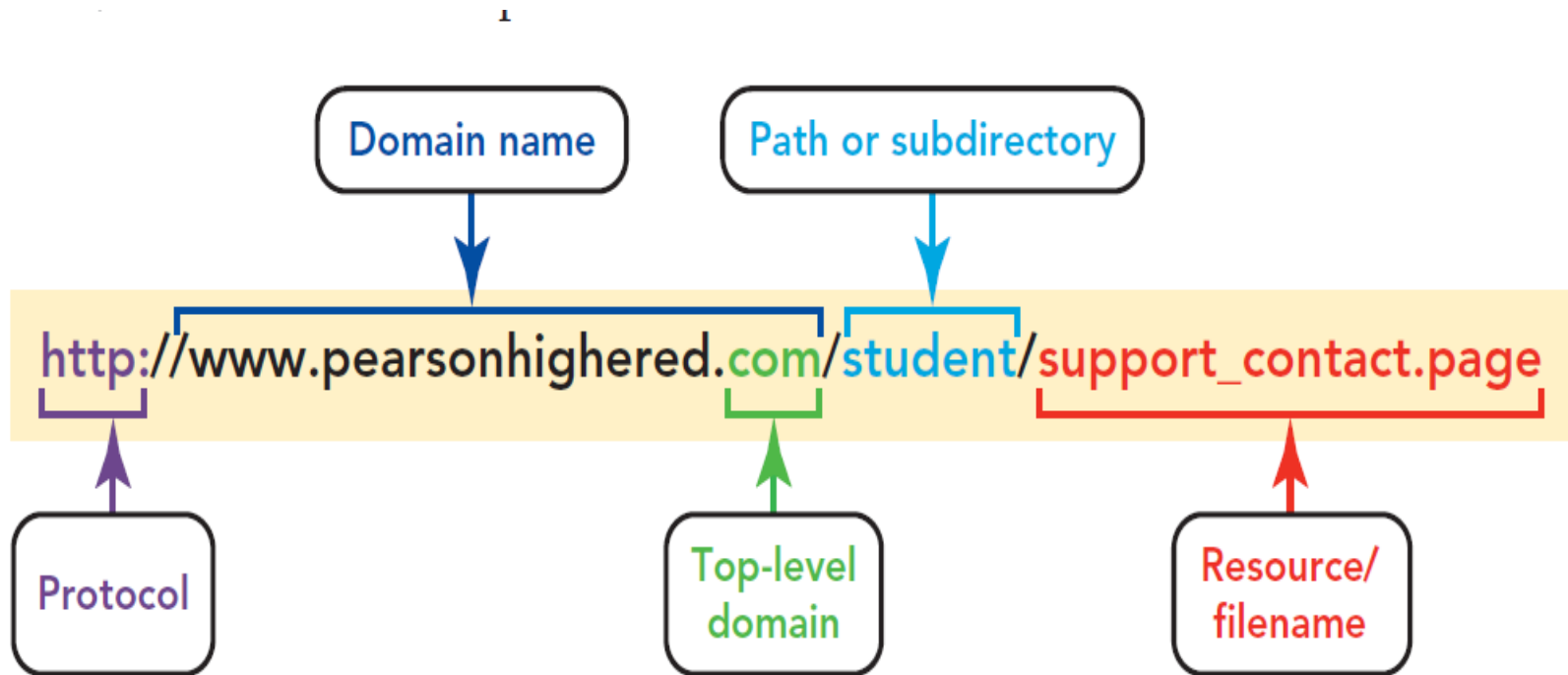
**Windows Media Player**



**When you browse a Web page for the first time, the page is actually stored on your hard drive in a storage space referred to as **browser cache**.**

**Every host, computer, server, device, and application that communicates over the Internet is assigned an Internet Protocol address (IP address), a numerical identification and logical address that is assigned to devices participating in a computer network.**

**A URL (Uniform Resource Locator) is a string of characters that precisely identifies an Internet resource's type and location.**



**Protocol** The first part of a complete URL specifies the **Hypertext Transfer Protocol (HTTP)**, the Internet standard that supports the exchange of information on the Web.

**Domain Name:** The second part of a complete URL specifies the Web site's domain name, which correlates to the Web server's IP address. The domain name has two parts **a host name** and **a top-level domain name.**

**Domain Name System (DNS):** It links domain names with their corresponding numerical IP addresses, functioning like a phone book for the Internet.

**One of the current ways to keep abreast of updates on news, weather, and sports in our fast-moving and informative world is through the use of Really Simple Syndication (RSS).**

**A wiki (short for *wiki-wiki*): is a simple Web page on which any visitor can post text or images, read previous posts, change posted information, and track earlier changes.**



**A blog is the Internet equivalent of a journal or diary. Bloggers post their thoughts and opinions, along with photos or links to interesting Web sites, for the entire world to see.**

**Search engines** make use of databases of the Web pages they've indexed.

**Wildcards** Many search engines enable you to use **wildcards**.

**Wildcards** are symbols such as \* and ? that take the place of zero or more characters in the position in which they are used.

Operator/Symbol	Example	Result
Inclusion/Plus sign (+)	CD+Radiohead	Web pages that contain all search terms listed, in any order. In this case, pages would include <i>both</i> the word <b>CD</b> <i>and</i> the word <b>RADIOHEAD</b> .
Exclusion/Minus sign (—)	CD+Radiohead — eBay	Web pages that contain all included search terms listed, but not the excluded term. In this case, pages would include <i>both</i> the word <b>CD</b> <i>and</i> the word <b>RADIOHEAD</b> but <i>not</i> the word <b>EBAY</b> .
Wildcards (*)	CD*	Web pages that include variations of the search term or additional words. For example, pages could include the terms <b>CD</b> , <b>CDs</b> , <b>CD Ripping</b> , <b>CD Files</b> , etc.
Quotation Marks (“ ”)	“Radiohead Just Push Play CD”	Web pages that contain the exact phrase in the order listed.

Terms	Examples	Result
AND	CD AND Radiohead	Returns the same result as using the plus sign (+)
OR	CD OR Radiohead	Web pages that include either or both of the search terms listed, usually providing a large number of hits. For this example, results would include <i>either</i> the word <b>CD</b> <i>or</i> the word <b>RADIOHEAD</b> <i>or both</i> .
NOT	CD AND Radiohead NOT eBay	Returns the same results as using the minus sign (—)
Parenthesis ( )	(CD OR MP3 OR Record) AND Radiohead	Search terms in parenthesis are located first, using the search operator provided. In this case, results would include pages that included any combination of <b>CD</b> , <b>MP3</b> , or <b>RECORD</b> <i>and</i> the word <b>RADIOHEAD</b>

**Many e-mail users receive unsolicited e-mail advertising called **spam**.**

**Some spam can contain **malware**, malicious software, that places a computer in the spammer's control. This type of software can wreak havoc on a user's system by deleting files and directory entries.**

The spammer just moves on to a new account. A more modern way to send spam is through a **botnet**, a set of computers infected with a malicious program that places the computers under the control of a bot herder.

Spam can also act as **spyware** gathering data from a user's system without the user knowing it.

**Internet relay chat (IRC)** is an Internet service that enables you to join chat groups, called channels, and participate in real-time, text-based conversations

**Social networking** is a way to build expanding online communities. On a social networking site like **Facebook**

**Instant messaging (IM)** systems alert you when a friend or business associate who also uses the IM system (a buddy or contact) is online (connected to the Internet).

**A thread:** is a series of articles that offer a continuing commentary on the same specific subject.



**Electronic mailing lists of e-mail addresses** are similar in many ways to newsgroups and forums, but they automatically broadcast messages to all individuals on a mailing list.

**VoIP (Voice over Internet Protocol)** allows a user to speak to others over a broadband Internet connection instead of traditional analog phone

**Usenet** is a worldwide computer-based discussion system accessible through the Internet. It consists of thousands of topically named newsgroups, which are discussion groups devoted to a single

**File Transfer Protocol (FTP)** is one way that files can be transferred over the Internet, and it is especially useful for transferring files that are too large to send by e-mail.

**E-commerce (electronic commerce)** is the use of networks or the Internet to carry out business of any type.

**When a business uses the Internet to provide another business with the materials, services, and/or supplies it needs to conduct its operations, they are engaging in **business-to-business (B2B) e-commerce.****

**The online exchange or trade of goods, services, or information between individual **consumers** is **consumer-to-consumer (C2C) e-commerce.****

**When a business uses the Internet to supply consumers with services, information, or products, they are engaging in **business-to consumer (B2C) e-commerce.****

**Netiquette**, short for Internet etiquette, is the code for acceptable behavior and manners while on the Internet.