

Extended Learning Module B

The World Wide Web and the Internet

MANAGEMENT INFORMATION
SYSTEMS FOR THE INFORMATION AGE

>> Ninth Edition

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STUDENT LEARNING OUTCOMES

1. Define the relationships among Web site, Web site address, domain name, Web page, and uniform resource locator (URL).
2. Explain how to interpret the parts of an address on the Web.
3. Identify the major components and features of Web browser software.

STUDENT LEARNING OUTCOMES

4. Define Web 2.0 and its many technologies including wikis, social networking sites, blogs, RSS feeds, and podcasting.
5. Describe the various technologies that make up the Internet.
6. Identify key considerations in choosing an Internet service provider (ISP).

STUDENT LEARNING OUTCOMES

7. Describe the communications software and telecommunications hardware you need to connect to the Internet.

INTRODUCTION

- * The Web and Internet are a part of every aspect of your life
 - * Television
 - * Magazines
 - * Education
 - * B2C e-commerce
 - * Everywhere

MODULE ORGANIZATION

1. World Wide Web
 - * Learning Outcomes #1, #2, and #3
2. Search Engines
3. Web 2.0
 - * Learning Outcome #4
4. Internet Technologies
 - * Learning Outcome #5
5. Connecting to the Internet
 - * Learning Outcomes #6 & #7

WORLD WIDE WEB

- * **Web** – multimedia-based collection of information, services, and sites supported by the Internet
 - * Interface you see and work with
- * **Internet** – vast network of computers that connects millions of people all over the world
 - * Infrastructure that makes the Web possible

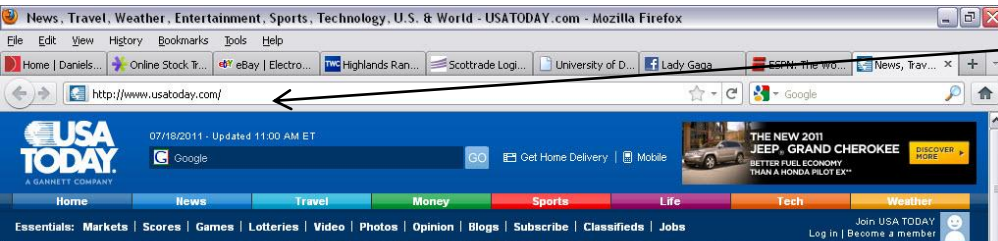
Web Sites, Addresses, and Pages

- * **Web site** – Web location where you visit, gather information, order products, etc
 - * *USA Today*
- * **Web site address** – unique name for a Web site
 - * www.usatoday.com
 - * Also called a **domain name**

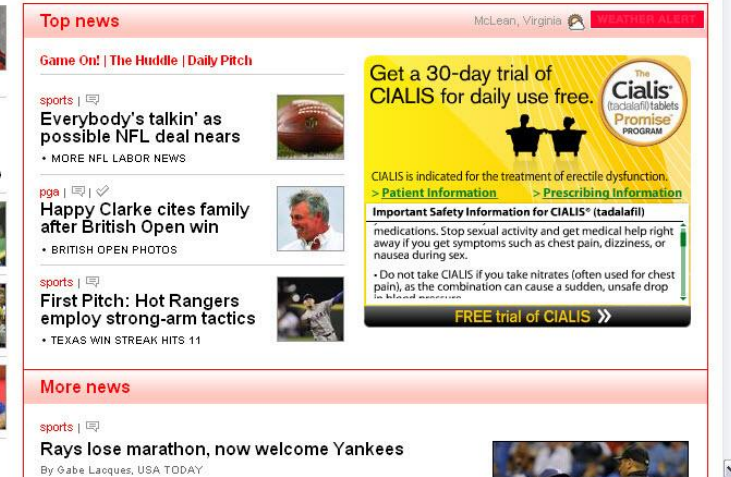
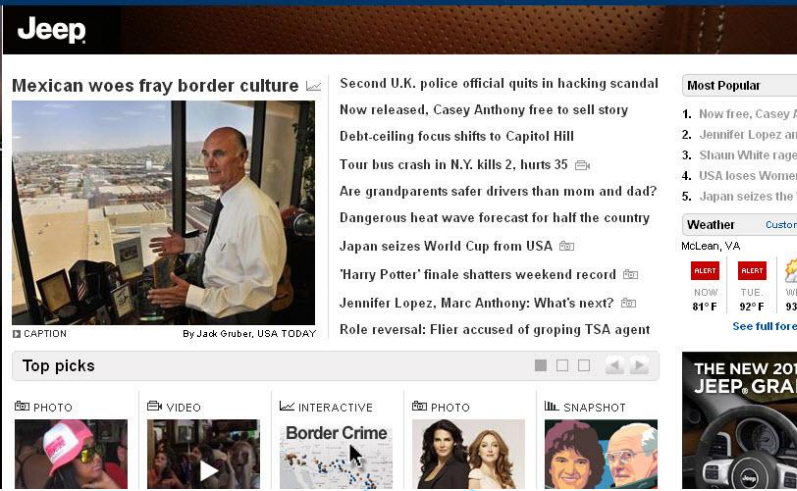
Web Sites, Addresses, and Pages

- * **Web page** – portion of a Web site that deals with a certain topic
 - * Sports in *USA Today*
- * **URL (*uniform resource locator*)** – address for a Web page, document, etc
 - * www.usatoday.com/sports/default.htm
 - * Technical term for a Web page address

Web Sites, Addresses, and Pages



Web site address or domain name



Understanding Addresses

- * Consider www.uts.edu.au (University of Technology in Sydney)
 - * http:// - starts most addresses but may be left off
 - * www – World Wide Web
 - * uts – the organization
 - * edu – ***top-level domain*** (organization type)
 - * au – country location (if none, then current country)

Top-Level Domains

- * com – commercial or for-profit business
- * coop – cooperative
- * edu – educational institution
- * gov – U.S. government agency
- * mil – U.S. military organization
- * net – Internet administrative organization
- * int – International treaties organization
- * info – general information
- * biz – business
- * museum – accredited museum
- * name – personal
- * pro – Accountant, doctor, lawyer, etc.
- * Many more

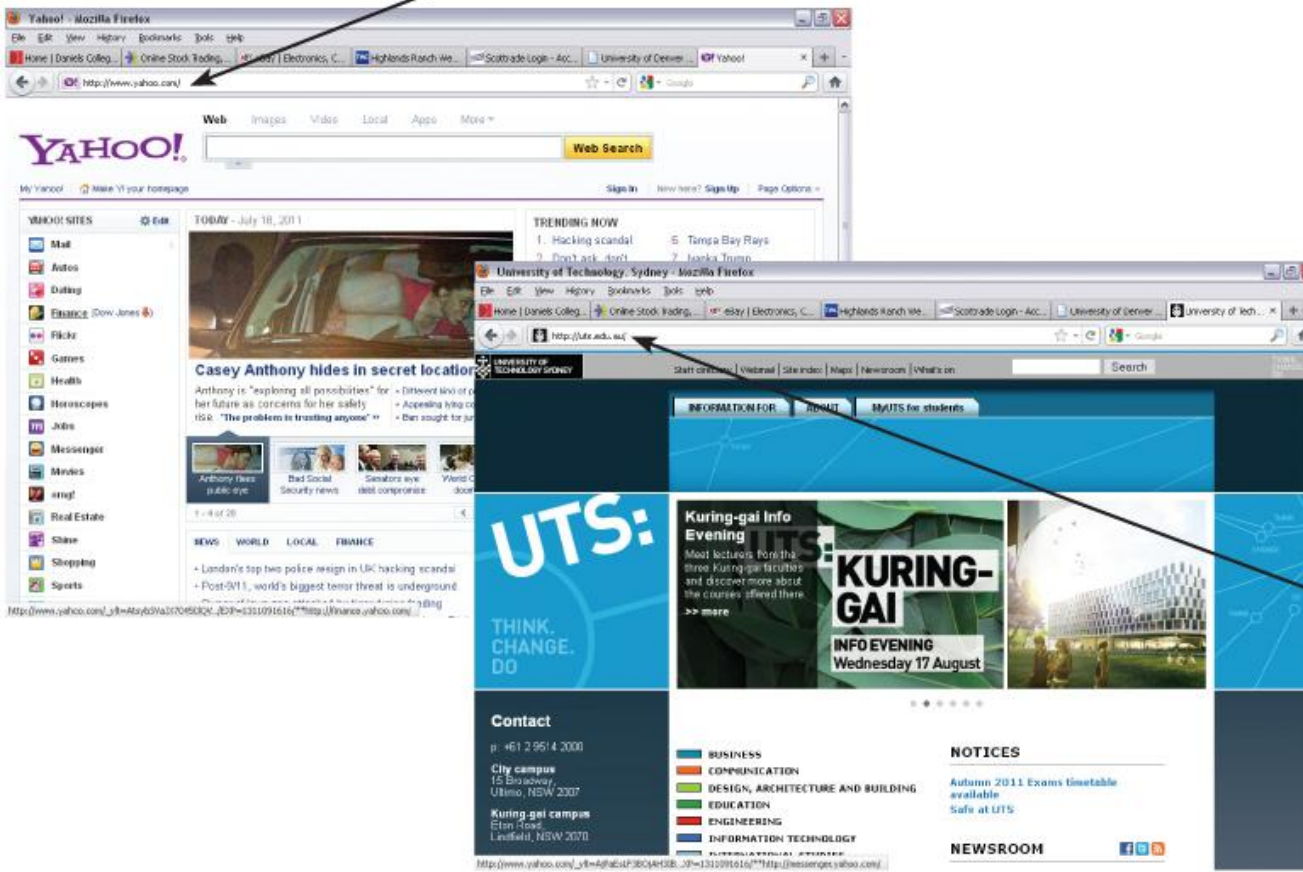
Note: Can also use specialized TLDs like .nba – requires a fee of \$185,000

Understanding Addresses

The top-level domain “.com” identifies Yahoo! as a commercial or for-profit organization.

Figure B.2

Understanding Addresses



The “.au” after the top-level domain identifies the country of origin (Australia in this case).

Web Browser Software

- * ***Web browser software*** – enables you to surf the Web
- * Three most popular
 - * Internet Explorer (Microsoft)
 - * Firefox (Mozilla)
 - * Chrome (Google)

Web Browser Software

- * All look slightly different but work the same with the same features
 - * Printing Web pages
 - * Working with a Favorites list or Bookmark list
 - * Etc.

Web Browser Software

The image shows two overlapping browser windows displaying the eBay homepage. The top window is Mozilla Firefox, and the bottom window is Windows Internet Explorer. Both windows show the eBay website with a search bar, navigation links, and promotional banners for 'Free shipping' and 'dailydeals'. The Firefox window also shows a search dropdown menu with suggestions like 'Are you looking for: My eBay - Motors'. The Internet Explorer window shows a search dropdown menu with suggestions like 'Are you looking for: My eBay - Motors'. The eBay homepage features a 'Free shipping' banner with images of a Garmin nuvi GPS, Canon Rebel SLR camera, BlackBerry Storm phone, and Apple iPad. Below the banner are sections for 'Your recent searches', 'Shop safely on eBay', 'Sign in', and 'Welcome to eBay'. The 'Welcome to eBay' section includes links for 'New to eBay', 'How to buy', 'How to sell', and 'Increase sales'. The 'Shop safely on eBay' section features 'eBay Buyer Protection' and 'eBay Top-Rated Sellers'. The 'Sign in' section includes a 'Sign in' button and a 'Register' button. A 'Special Financing for 6 Months on Your 1st eBay Purchase' banner is visible in the bottom right corner.

SEARCH ENGINES

- * ***Search engine*** – helps you find sites with the information/services you want

Search Engines

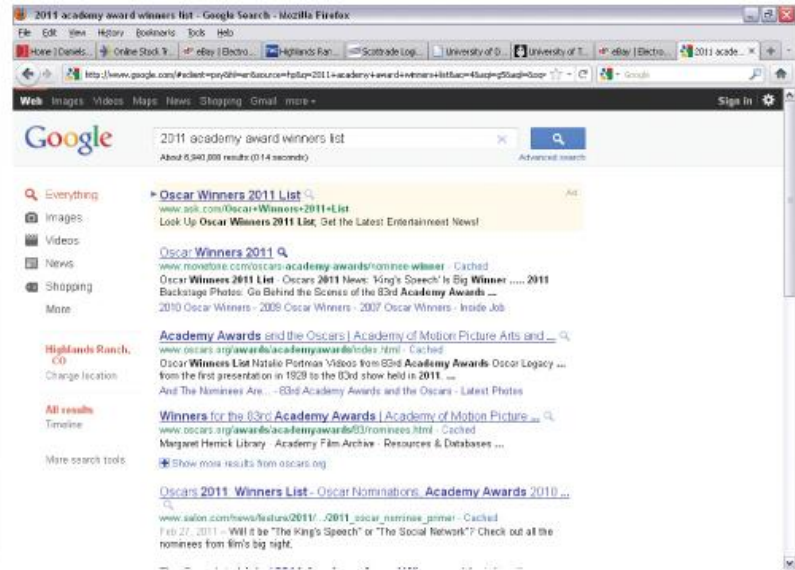
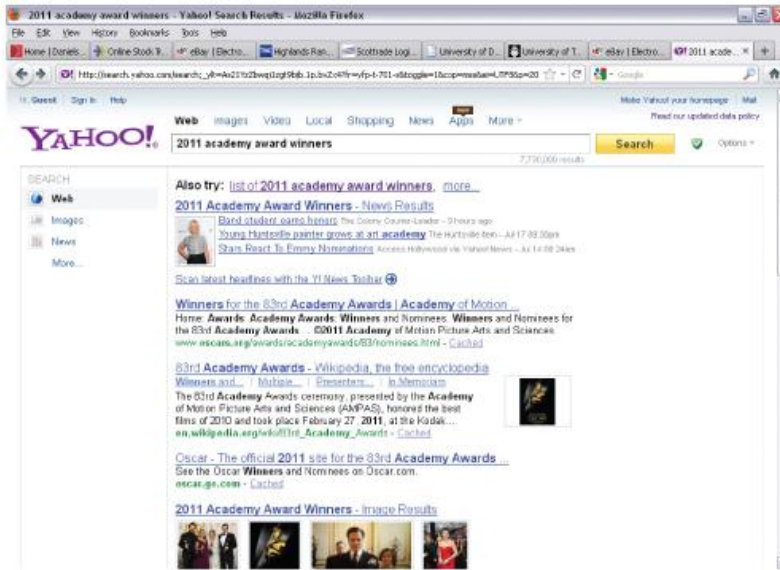


Figure B.5
Search Engines

Boolean Operators

- * **Miami Dolphins** – everything related to either Miami or dolphins and both
- * **Miami + Dolphins** – everything related to both appearing in a Web site
- * **Miami – Dolphins** – everything related to Miami without dolphins

WEB 2.0

- * ***Web 2.0 (Live Web)*** – second generation of the Web; focuses on online collaboration, users as both creators and modifiers of content, dynamic and customized information feeds, etc.
 - * Wikis
 - * Social networking sites
 - * Blogs
 - * RSS feeds
 - * Podcasting
 - * Many others

Wikis & Social Networking Sites

- * **Wiki** – site that allows you – as a visitor – to create, edit, change, and often eliminate content
 - * Wikipedia is the most popular
- * **Social networking site** – site on which you post information about yourself, create a network of friends, read about other people, share content such as photos and videos, and communicate with other people (e.g., Facebook)

Blogs & RSS Feeds

- * **Blog** – Web site in the form of a journal in which you post entries in chronological order and often includes the capabilities for other viewers to add comments to your journal
 - * **Microblogging** (like Twitter)
- * **RSS feed** – technology that provides frequently published and updated digital content on the Web

Podcasting

- * ***Podcasting*** – your ability at any time to download audio and video files for viewing and listening using portable listening devices and personal computers.



INTERNET TECHNOLOGIES

- ***Internet backbone*** – major set of computer connections on Internet



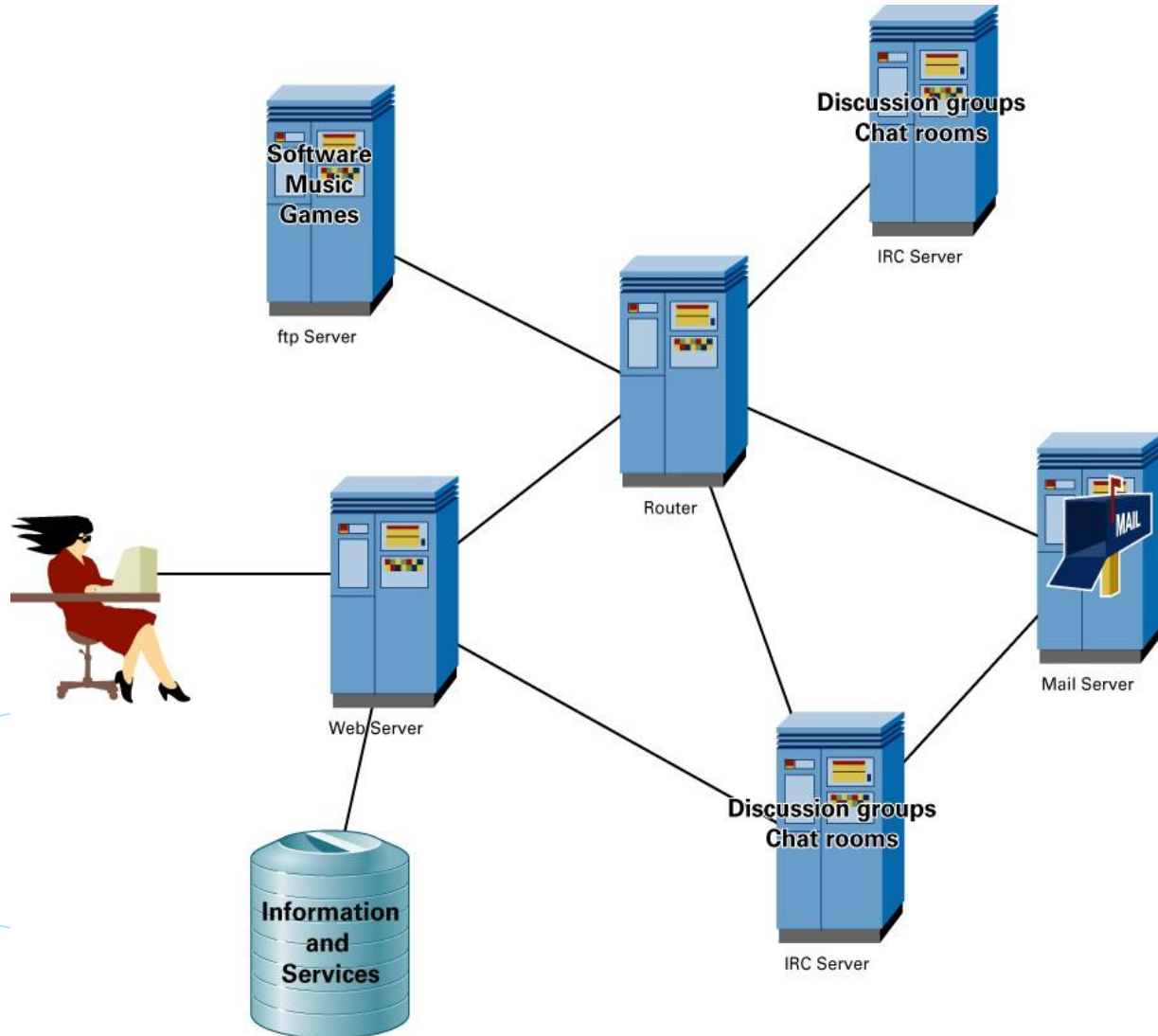
INTERNET TECHNOLOGIES

- * ***Network access point (NAP)*** – point on Internet where connections converge (Dallas)
- * ***Network service provider (NSP)*** – owns and maintains routing computers, NAPs, and even connection lines
 - * AT&T
 - * MCI

INTERNET TECHNOLOGIES

- * ***Internet Service Provider (ISP)***
 - provides access to the Internet
 - * AOL
 - * NetZero
 - * Your school
 - * Your work
- * Connects its computers to the Internet at an NAP

Internet Servers



Internet Servers

- * ***Internet server computer*** – provides information and services on the Internet
- * ***Web server*** – provides information and services on the Web
- * ***Mail server*** – provides e-mail services

Internet Servers

- * ***ftp (file transfer protocol) server***
 - maintains files you download
- * ***IRC (Internet Relay Chat) server***
 - supports discussion groups and chat rooms

Communications Protocols

- * ***Communications protocol***– set of rules computers follow to transfer information
- * Most common
 - * TCP/IP
 - * http
 - * ftp

Communications Protocols

- * ***TCP/IP*** – primary protocol for sending information on the Internet
- * ***http*** – supports movement of information on the Web
- * ***ftp*** – support file transfers (downloading and uploading) from/to other computers

CONNECTING TO THE INTERNET

- * You do it through an ISP
- * ISPs can be free, charge a monthly fee, charge a per-minute fee, etc
- * Many offer **Web space** – storage area where you keep your Web site

CONNECTING TO THE INTERNET

The screenshot shows the NetZero website in a Mozilla Firefox browser window. The page features several promotional banners and service options:

- Accelerated Dial-Up Service:** Promoted at \$14.95 a month with a first month free. Features include: Fastest Dial-Up You Can Get, Norton™ Antivirus, Pop-Up Blocker, No Credit Card Required, and Email with Spam Protection and More... A "Sign Up Now" button is present.
- Unlimited Dial-Up Service:** Promoted at \$9.95 a month with a first month free. Features include: Video Mail & Video Chat, No Credit Card Required, and Email with Spam Protection. "More Info" and "Sign Up Now" buttons are available.
- DSL / Broadband:** A section titled "Looking for even more speed?" with a "Check For Availability" form that asks for a home number.
- Free Dial-Up Internet Access:** A section at the bottom left, circled in black, stating: "Enjoy reliable connections, plus Free NetZero Email. Easy signup, no obligation." with a "More Info" link.

At the bottom of the page, there is a small line of text: "NetZero provides nationwide Internet Service Provider access in more than 8,000 cities across North America. NetZero offers unlimited paid service and a Free ISP. See our Products and Services page for a full list of our offerings."

Figure B.9

NetZero Is a Popular Free ISP

NetZero free Internet access is for up to 10 hours per month.

Communications Software

- * ***Connectivity software*** – connect to your ISP
- * ***Web browser software*** – to surf the Web
- * ***E-mail*** – electronically communicate with e-mail

Telecommunications Hardware

- * Many types
- * More coverage in *Extended Learning Module E*
- * Telephone modem (modem)
- * Digital Subscriber Line (DSL)
- * Cable modem
- * Satellite modem

Telecommunications Hardware

- * ***Telephone modem*** – connects your computer via a phone line (slow)
- * ***DSL*** – uses phone lines but supports simultaneous phone calls (fast)
- * ***Cable modem*** – uses your cable TV service (fast)
- * ***Satellite modem*** – Internet access through satellite dish (fast)

Telecommunications Hardware

