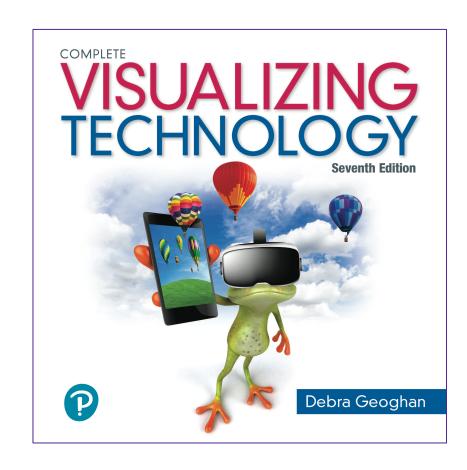
# **Introductory Visualizing Technology**

Seventh Edition



#### **Chapter 7**

The Internet

# **Learning Objectives**

- 7.1 Recognize the Importance of the Internet
- 7.2 Compare Types of Internet Connections
- 7.3 Compare Popular Web Browsers
- 7.4 Demonstrate How to Navigate the Web
- 7.5 Discuss How to Evaluate the Credibility of Information Found on the Web



# **Learning Objective 7.1**

Recognize the Importance of the Internet

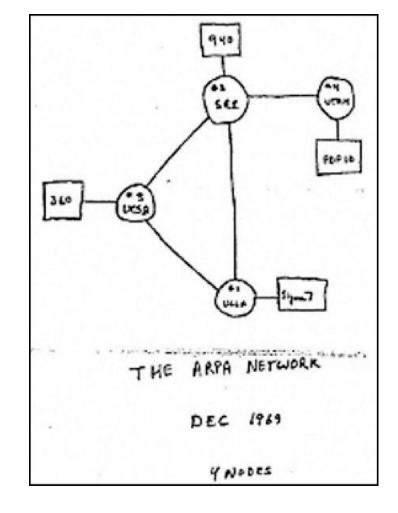
# Recognize the Importance of the Internet





#### **Internet Timeline—How it All Got Started (1 of 5)**

- How it all got started
  - 1957—Soviet Union launches Sputnik
  - 1960s—U.S. Department of Defense develops the ARPA project





#### **Internet Timeline—How it All Got Started (2 of 5)**

- ARPA (Advanced Research Projects Agency)
  - Started in 1958 by President Eisenhower
  - The Internet started as an ARPA project named ARPANET
    - Had four sites



#### **Internet Timeline—How it All Got Started (3 of 5)**

- The Computer Science Network (CSNET)
  - Founded in 1979 by the National Science Foundation
  - Connected computer science departments at universities
  - Used ARPANET technology



#### **Internet Timeline—How it All Got Started (4 of 5)**

- Internet backbone high-speed connection points between networks
  - Mid-1980s—NSF created NSFNET
  - Late 1980s—NSFNET was the primary Internet backbone



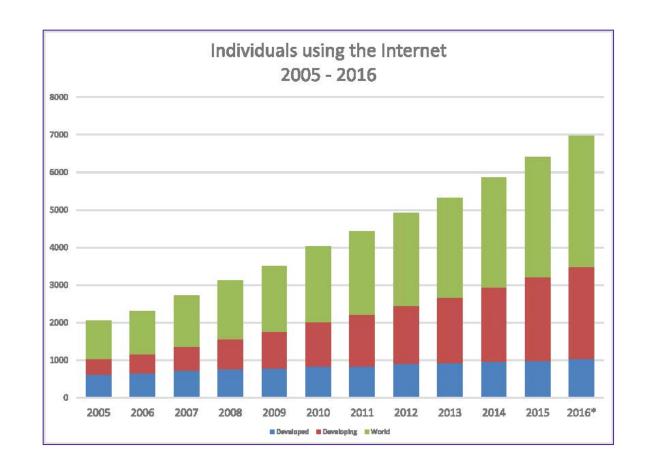
#### **Internet Timeline—How it All Got Started (5 of 5)**

- 1995—NSF backbone decommissioned and privatized
- New backbone established using five Network Access Points
- Today the backbone is composed of Internet Exchange Points around the world



#### Internet Timeline—World Wide Web (1 of 2)

- One way information moves on the Internet
- Internet and World Wide Web are two different things
- Other ways to use the Internet
  - Email
  - Instant messaging
  - VoIP (Voice over IP)





#### Internet Timeline—World Wide Web (2 of 2)

- Hypertext—text that contains links to other objects
- Hyperlink—links that connect web objects



#### **Internet Timeline—Internet2**

- A second Internet for education, research, and collaboration
- Internet2 membership includes
  - Universities
  - Museums
  - Art galleries
  - Libraries
  - Hospitals

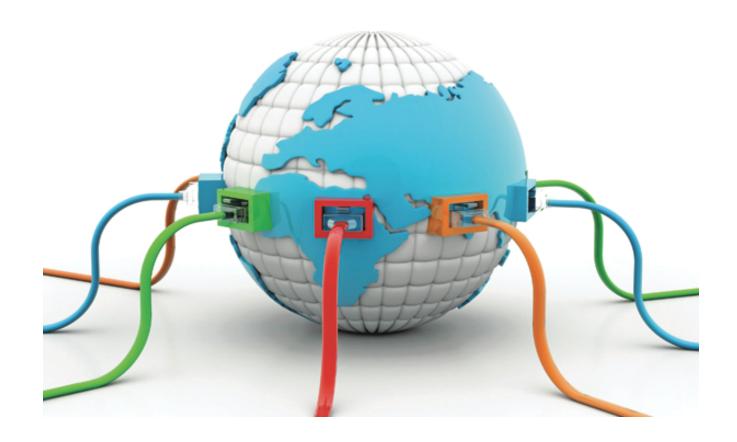




# **Learning Objective 7.2**

Compare Types of Internet Connections

# **Compare Types of Internet Connections**





#### Get Connected—How Do You Get Connected? (1 of 3)

- Internet Service Providers—companies that offer Internet access
- Comparing bandwidth of Internet connections
- Bandwidth—the data transfer rate of a network
  - -Measured in kilobits, megabits, or gigabits per second

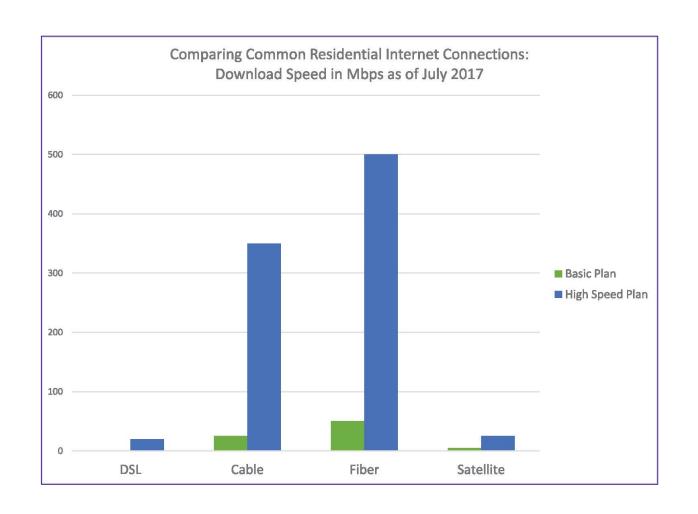


# Get Connected—How Do You Get Connected? (2 of 3)

Dial-up



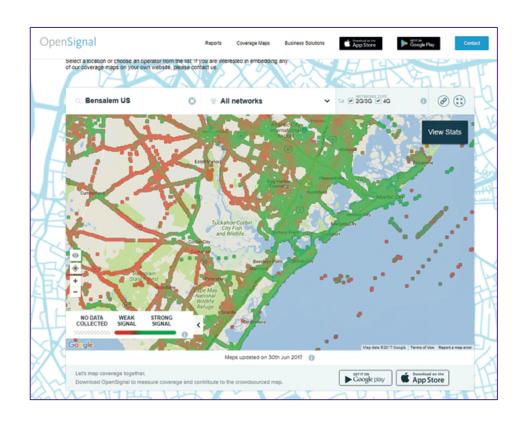
- Broadband
  - Faster web access

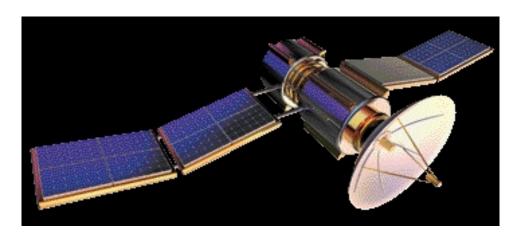




#### Get Connected—How Do You Get Connected? (3 of 3)

#### Wireless









# **Learning Objective 7.3**

Compare Popular Web Browsers

# **Compare Popular Web Browsers**



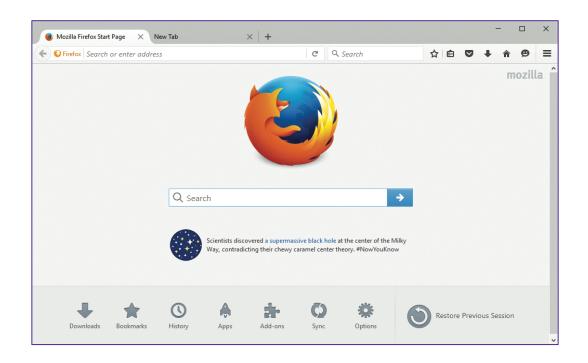


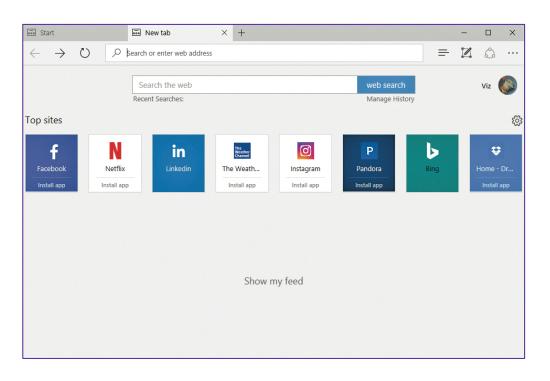
# Surf's Up—Web Browsers (1 of 5)

- PC browsers
  - Internet Explorer and Microsoft Edge
  - Firefox
  - Chrome
  - Safari



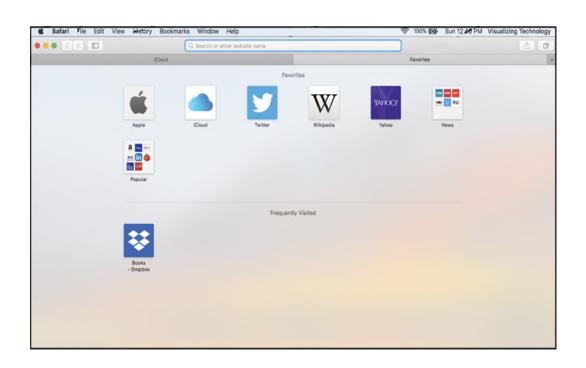
# Surf's Up—Web Browsers (2 of 5)

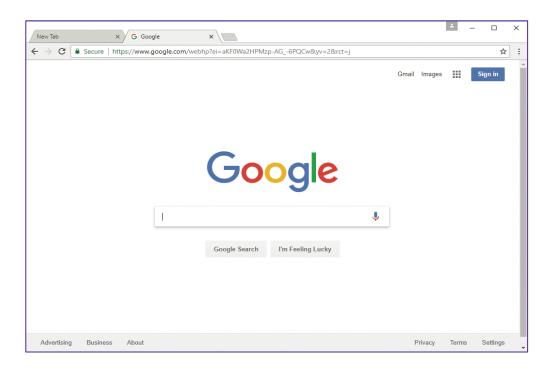






# Surf's Up—Web Browsers (3 of 5)







# Surf's Up—Web Browsers (4 of 5)

- Mobile browsers
  - Chrome
  - Firefox
  - Safari
  - Opera





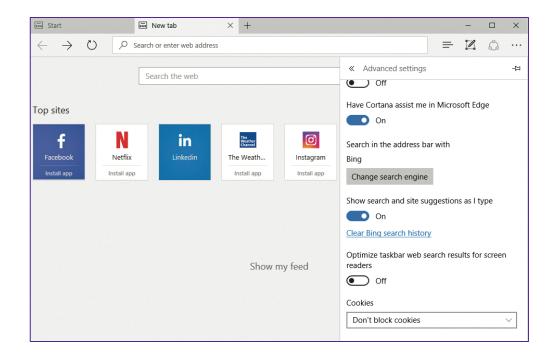
# Surf's Up—Web Browsers (5 of 5)

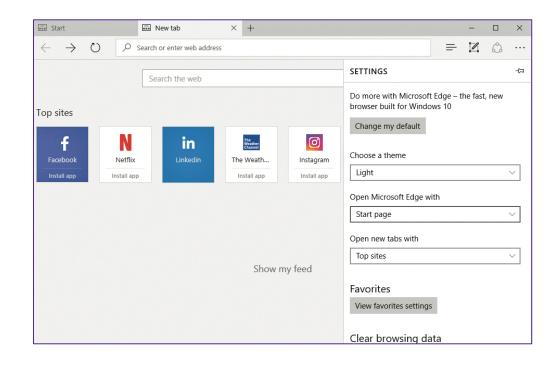
- HTML
  - Hypertext Markup Language
  - Authoring language that defines the structure of a webpage
- Web browsers
  - Programs that interpret the HTML
  - Display webpages
    - Home page—the first page of a website; page that appears when you first open your browser



#### Surf's Up—Configuring Your Web Browser

- Setting the home page
- Setting the search providers







# Surf's Up—Add-Ons, Plug-Ins, and Toolbars (1 of 2)

- Plug-in
  - Third-party program, such as Adobe Reader
- Add-on
  - Created for a specific browser to add features to it



# Surf's Up—Add-Ons, Plug-Ins, and Toolbars (2 of 2)

- Toolbar
  - Added to a browser for quick access to a feature of an application that installed it
  - Be wary of toolbars that come bundled with software
  - Can be a source of malware and can slow down browsing



# **Learning Objective 7.4**

Demonstrate How to Navigate the Web

# Demonstrate How to Navigate the Web





# **Navigating the Net**

- Two ways to navigate to a website
  - Type the URL (uniform resource locator) webpage address
    - http://www.google.com
  - Follow hyperlinks embedded in the webpages



# Navigating the Net—Web Addresses (1 of 2)

#### ICANN

- Internet Corporation for Assigned Names and Numbers
- Coordinates the Internet naming system

#### IP address

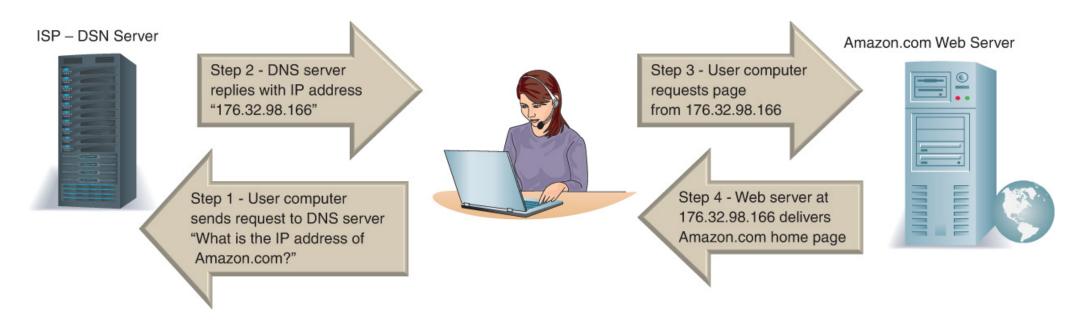
- Internet Protocol address
- Unique numbered address associated with a website





# Navigating the Net—Web Addresses (2 of 2)

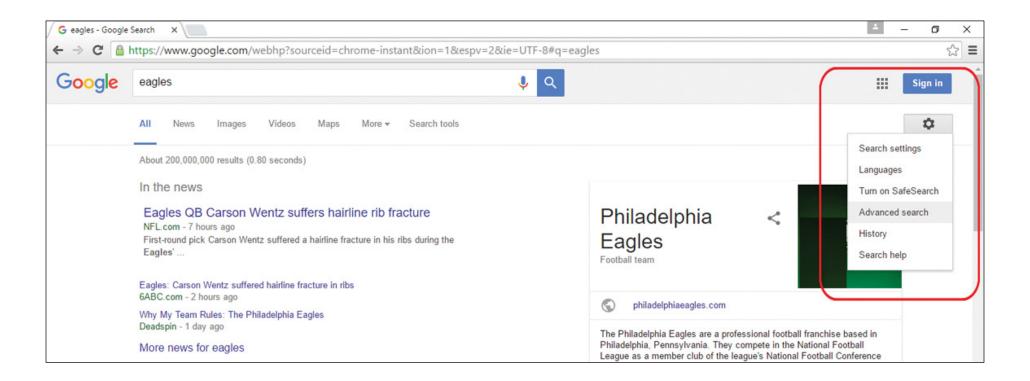
- DNS
  - Domain Name System
  - Provides a user-friendly name instead of an IP address





# Navigating the Net—Smart Searching

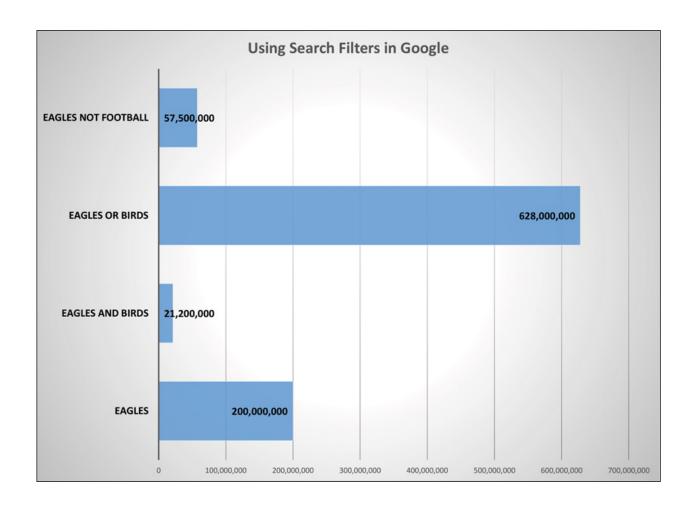
Search engines are databases that index the web





# **Searching the Web**

- Boolean operators define a relationship between words
  - AND
  - OR
  - NOT





# **Learning Objective 7.5**

Discuss How to Evaluate the Credibility of Information Found on the Web

# Discuss How to Evaluate the Credibility of Information Found on the Web





#### Would I Lie to You?—Who Wrote It? (1 of 4)

- User-generated content
  - Content written by everyday users
    - Blogs
    - Websites
    - Wikis
    - Social media sites



#### Would I Lie to You?—Who Wrote It? (2 of 4)

- It is important to know about blogs
  - What is credible
  - How to evaluate the information you find



# Would I Lie to You?—Who Wrote It? (3 of 4)

- Check for credibility
  - Look at the URL
    - Top-level domain (TLD)—.edu, .gov, or .com
  - Read the home page and the About Us page
    - Conflicts of interest or obvious biases
    - Contact information



# Would I Lie to You?—Who Wrote It? (4 of 4)

- Stick with well-known sources for important information
- Use Google Scholar for scholarly research



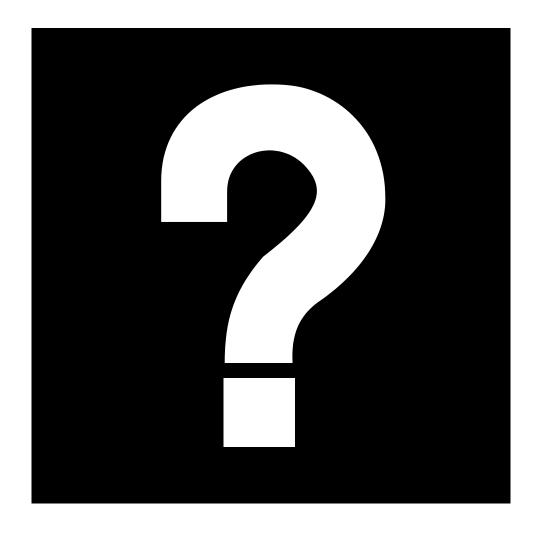
# Would I Lie to You?—What about the Design?

- How up-to-date is the website?
  - Usually found at the bottom of the home page
- Look at the design of the website
  - Sophisticated
- Lacks grammar and spelling errors
- Does the information match other sites?





# **Questions**





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