The Internet, the Web, and Electronic Commerce

Chapter 2
Competencies (Page1 of 2)

• Discuss the origins of the Internet and the Web.
• Describe how to access the Web using providers and browsers.
• Discuss Internet communications, including email, text messaging, instant messaging, social networking, blogs, microblogs, Webcasts, podcasts, and wikis.
Competencies (Page 2 of 2)

• Describe search tools, including search engines and specialized search engines.
• Evaluate the accuracy of information on the Web.
• Describe cloud computing, including the three-way interaction of clients, Internet, and service providers.
• Describe Web utilities including plug-ins, filters, file transfer utilities, and Internet security suites.
Introduction

• The Internet is often referred to as the Information Superhighway because it connects millions of people across the globe.
• Unlike a typical highway, the Internet moves ideas, data, and information through networks.
• The Web provides an easy-to-use interface to Internet resources that has become an everyday tool.
• Competent end users need to be aware of the resources available on the Internet and the Web and how to access them.
The Internet and the Web

• The Internet is a large global network, connecting smaller networks worldwide
• The Internet was launched in 1969
  – US funded project to develop a national computer network
  – ARPANET (Advanced Research Project Agency Network)
• The World Wide Web or WWW was introduced in 1991 at CERN
Common Internet Uses

• Communicating
  – e-mail, photos, videos
  – Discussions

• Online Shopping

• Searching
  – Virtual libraries

• Education or e-learning

• Entertainment
Making IT Work for You ~ Online Entertainment

• Use the Internet to locate and play movies and television shows
• Netflix, Hulu, Amazon Prime
Access

• Common way to access the Internet is through a Commercial Internet Service Provider (ISP)
  – Provide a connection for individuals to access the Internet
  – Use telephone lines, cable, and/or wireless connections
Browsers

• Programs that provide access to Web resources
• Allow you to explore the web
• Popular Web browsers include:
  – Mozilla Firefox
  – Apple Safari
  – Microsoft Internet Explorer
  – Google Chrome
• Address or location of the resource must be specified
  – URL
URLs

• Uniform Resource Locator
  – Has at least two parts
    • Protocol
    • Domain name

• Top-level domain (TLD)
  – Identifies the type of organization
HTML and Hyperlinks

• Browsers interpret HTML commands
  – Hypertext Markup Language
• Display document as a Web page
• Hyperlinks
  – Connect to other web pages
    • Text files
    • Graphic images
    • Audio and Video Clips
Interactive Web Sites

• Technologies used to provide highly interactive and animated websites
  – Cascading Style Sheets (CSS)
  – JavaScript
  – AJAX
  – Applets
• Mobile Browsers
Communication

• Communication is the most popular Internet activity

• E-mail
  – Transmission of electronic messages over the Internet
  – Client-based
  – Web-based – Webmail

E-Mail Address
Spam

- Junk and/or unwanted e-mail
- Computer viruses or destructive programs are often attached to unsolicited email
  - CAN-SPAM Act
- Spam blockers / spam filters use a variety of approaches to identify and control spam
Messaging

• Text messaging / texting
  – Short electronic message

• Instant messaging
  – Extension of email that provides direct, live communication between two or more people
    • Most programs include video conferencing features, file sharing and remote assistance
Social Networking

• Connecting people and organizations that share a common interest or activity

• Three most popular:
  – Facebook
    • Facebook Profiles
    • Facebook Pages
    • Facebook groups
  – Google+
    • Circles
    • Hangouts
    • Sparks
  – LinkedIn
    • Business-oriented
Blogs, Microblogs

- Web logs or blogs – personal news pages that are date/time-stamped and arranged with the most recent items shown first

- Microblogs – short status updates that answer the question:
  – What are you doing now?
Webcasts, Podcasts, Wikis

• Webcast – streaming technology for live broadcast of audio and video
• Podcast-audio and video files that can be downloaded to your computer or media player
• Wiki – a specially designed Web site that allows visitors to edit the contents, supports collaborative writing
Making IT Work for You ~ Twitter

• Microblog to help you stay in touch with friends and family
Search Tools

• Search Engines
• Specialized Search Engines
• Content Evaluation
Security

• Payment methods must be fast, reliable, and secure

• Two options
  – Credit card
  – Digital cash
Cloud Computing

• Shifts computing activities from users’ desktops to computers on the Internet
• Frees end-users from owning, maintaining, and storing software programs and data
• Three basic components:
  – Clients (end-users)
  – Service providers
  – The Internet
Cloud Computing: Web-based Service

• Google Apps
Careers In IT - Webmasters

• Develop and maintain websites and resources
• Backup of company website
• Update and develop new resources
• Work with the marketing department to increase site traffic and monitor the flow of customer interactions
A Look to the Future

• Car’s Dashboard as a power, Internet-connected computing device
  – Safety and diagnostic features are already there
  – Potential distractions?
Open-Ended Questions (Page 1 of 3)

• Discuss the Internet, including its origins, the three generations of the web, and the most common uses.

• Describe how to access the Internet. What are the providers? Define browsers and discuss URLs, HTML, JavaScript, AJAX, Applets, and mobile browsers.

• Discuss Internet communications, including client-based and web-based email, instant and text messaging, social networking, blogs, microblogs, webcasts, podcasts, and wikis.
Open-Ended Questions (Page 2 of 3)

• Define search tools including search services. Discuss search engines and specialized search engines. Describe how to evaluate the content of a web site.

• Describe electronic commerce, including business-to-consumer, consumer-to-consumer, and business-to-business e-commerce, and security.
Open-Ended Questions (Page 3 of 3)

• What is cloud computing? Describe the three basic components of cloud computing.

• What are Web utilities? Discuss plug-ins, filters, file transfer utilities, and Internet security suites