

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.
- Discuss electronic commerce, including B2C, C2C, B2B, and security issues.
- 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