Chapter 2

The Internet, The Web, and Electronic Commerce
Competencies (1 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 e-mail, instant messaging, and social networking
Competencies (2 of 2)

• Describe search tools, including search engines and metasearch engines
• Discuss electronic commerce, including B2C, C2C, B2B, and security
• Describe Web utilities: Web-based applications, FTP, plug-ins, and filters
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 idea and information.
• The Web provides an easy-to-use, intuitive interface to connect to the Internet and is used by millions of people every day.
The Internet and the Web

- Large network that connects smaller networks globally
- The Internet was Launched in 1969
  - National computer network
  - US funded project called ARPANET
- World Wide Web or WWW was introduced in 1992 at CERN
Common Internet Uses

- Communicating
  - Exchange e-mail
  - Discussion Groups
- Online shopping
- Searching
  - Virtual Libraries
- Entertainment
- Education or e-learning
Internet Access Providers

- Common way to access the Internet
- Commercial Internet Service Providers (ISP)
  - National Service Providers
  - Regional Service Provider
  - Wireless service providers
Browsers

• Programs that provide access to Web resources
• Allow you to **surf** the Internet
• Three well-known **browsers**
  – Mozilla Firefox
  – Netscape Communications
  – Microsoft Internet Explorer
• **Address or location** of the resource must be specified
  – **URL**
URLs

- Uniform Resource Locators
  - All URLs have at least two parts
    - Protocol
    - Domain name
- Locates Web sites
More on Browsers

• Browsers interpret HTML commands
  – Hypertext Markup Language
  – Contained in a document
• Display document as a Web page
Communication

• Most popular Internet activity
• Types of communication
  – Electronic Mail (E-Mail)
    • E-Mail Address
    • Spam
  – Instant Messaging
  – Social Networking
E-Mail

- Transmission of electronic messages over the Internet
- Basic parts
  - Header
    - Address
    - Subject
    - Attachment
  - Message
  - Signature Line
E-Mail Address Example

user name

dcoats@usc.edu
top-level domain

domain name

Return
Spam

- Junk and/or unwanted Email
- **Computer viruses** or destructive programs are often attached to unsolicited email
  - CAN-SPAM Act
- **Spam blockers** incorporate a myriad of approached to identify and control spam
- Spam blockers are also referred to as:
  - Junk mail filters
  - Anti-spam programs
Instant Messaging

• Is an extension of email that provides direct, live communication between two or more people

• Instant messaging programs also include:
  – Video conferencing features
  – File sharing
  – Remote assistance

• Most widely used instant messaging services:
  – AOL’s Instant Messenger
  – Microsoft’s MSN Messenger
  – Yahoo Messenger
Social Networking

• One of the fastest growing uses of the Internet
• Three basic categories:
  – Reunite
  – Friend of a friend
  – Common interest

<table>
<thead>
<tr>
<th>Site</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Classmates.com</td>
<td>Reuniting, primarily for school, work, military</td>
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<tr>
<td>Facebook.com</td>
<td>Reuniting, primarily for college and high school students</td>
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<tr>
<td>Flickr.com</td>
<td>Common interest, image sharing</td>
</tr>
<tr>
<td>Friendster.com</td>
<td>Friend-of-a-friend, general</td>
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<tr>
<td>MySpace.com</td>
<td>Friend-of-a-friend, general</td>
</tr>
<tr>
<td></td>
<td>Common interest, business</td>
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<tr>
<td></td>
<td>Common interest, interest group meeting</td>
</tr>
</tbody>
</table>
Search Tools

- **Search engines**
- **Metasearch engines**
- **Specialized search engines**
- **Tips**
  - Start with the right approach
  - Be as precise as possible
  - Use multiple words
  - Use Boolean operators
  - Check your spelling
  - Keep moving
Search Engines

• Specialized programs to assist in locating information

• Types of searches
  – Keyword search
  – Directory search
## Metasearch Engines

<table>
<thead>
<tr>
<th>Metasearch</th>
<th>Site</th>
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<tbody>
<tr>
<td>Dogpile</td>
<td><a href="http://www.dogpile.com">www.dogpile.com</a></td>
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<tr>
<td>Ixquick</td>
<td><a href="http://www.ixquick.com">www.ixquick.com</a></td>
</tr>
<tr>
<td>MetaCrawler</td>
<td><a href="http://www.metacrawler.com">www.metacrawler.com</a></td>
</tr>
<tr>
<td>Search</td>
<td><a href="http://www.search.com">www.search.com</a></td>
</tr>
<tr>
<td>Web Meta Search</td>
<td><a href="http://www.webmetasearch.com">www.webmetasearch.com</a></td>
</tr>
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</table>
## Specialized Search Engines

<table>
<thead>
<tr>
<th>Specialized Service</th>
<th>Site</th>
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<tbody>
<tr>
<td>Environment</td>
<td><a href="http://www.eco-web.com">www.eco-web.com</a></td>
</tr>
<tr>
<td>Fashion</td>
<td><a href="http://www.infomat.com">www.infomat.com</a></td>
</tr>
<tr>
<td>History</td>
<td><a href="http://www.historynet.com">www.historynet.com</a></td>
</tr>
<tr>
<td>Law</td>
<td><a href="http://www.lawcrawler.com">www.lawcrawler.com</a></td>
</tr>
<tr>
<td>Medicine</td>
<td><a href="http://www.medsite.com">www.medsite.com</a></td>
</tr>
</tbody>
</table>
Content Evaluation

- Not all information on the web is accurate
- Ways to evaluate accuracy of Web information include:
  - Authority
  - Accuracy
  - Objectivity
  - Currency
Electronic Commerce

- Also known as e-commerce
- Buying and selling of goods over the Internet
  - Business-to-consumer (B2C)
  - Consumer-to-consumer (C2C)
  - Web auctions
  - Business-to-business (B2B)
Business to Business

- Involves the sale of a product or service from one business to another (B2B)
- Primarily a manufacturer supplier relationship
Business to Consumer

- Fastest growing type of e-commerce
- Three most widely used B2C applications:
  - Online banking
  - Financial trading
  - Shopping

<table>
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<tr>
<th>Support</th>
<th>Site</th>
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<tbody>
<tr>
<td>Product comparisons</td>
<td><a href="http://www.shopping.com">www.shopping.com</a></td>
</tr>
<tr>
<td>Locating closeouts</td>
<td><a href="http://www.overstock.com">www.overstock.com</a></td>
</tr>
<tr>
<td>Finding coupons</td>
<td><a href="http://www.ebates.com">www.ebates.com</a></td>
</tr>
<tr>
<td>Reviewing classifieds</td>
<td><a href="http://www.craigslist.org">www.craigslist.org</a></td>
</tr>
</tbody>
</table>
Consumer to Consumer Web Auctions

- Consumer-to-consumer e-commerce (C2C)
- Similar to traditional auctions
- Types
  - Auction house sites
  - Person-to-person auction sites

<table>
<thead>
<tr>
<th>Organization</th>
<th>Site</th>
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<tbody>
<tr>
<td>Amazon</td>
<td><a href="http://www.auctions.amazon.com">www.auctions.amazon.com</a></td>
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<tr>
<td>Bidz</td>
<td><a href="http://www.bidz.com">www.bidz.com</a></td>
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<td>eBay</td>
<td><a href="http://www.ebay.com">www.ebay.com</a></td>
</tr>
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<td>Sotheby’s</td>
<td><a href="http://www.searchsothebys.com">www.searchsothebys.com</a></td>
</tr>
<tr>
<td>Yahoo!</td>
<td><a href="http://www.auctions.yahoo.com">www.auctions.yahoo.com</a></td>
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Security

• Payment methods must be fast, reliable, and secure
• Three basic options
  – Checks
  – Credit card
  – Digital cash

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</thead>
<tbody>
<tr>
<td>ECash</td>
<td><a href="http://www.ecash.com">www.ecash.com</a></td>
</tr>
<tr>
<td>Google</td>
<td>checkout.google.com</td>
</tr>
<tr>
<td>Internet Cash</td>
<td><a href="http://www.internetcash.com">www.internetcash.com</a></td>
</tr>
<tr>
<td>PayPal</td>
<td><a href="http://www.paypal.com">www.paypal.com</a></td>
</tr>
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Web Utilities

- Specialized utility programs that make using the internet & web safer and easier
  - Web-based applications
  - FTP
  - Plug-Ins
  - Filters
  - Internet Security Suites
# Plug-Ins

<table>
<thead>
<tr>
<th>Application</th>
<th>URL</th>
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<tbody>
<tr>
<td>Acrobat Reader</td>
<td><a href="http://www.adobe.com">www.adobe.com</a></td>
</tr>
<tr>
<td>Media Player</td>
<td><a href="http://www.microsoft.com">www.microsoft.com</a></td>
</tr>
<tr>
<td>QuickTime</td>
<td><a href="http://www.apple.com">www.apple.com</a></td>
</tr>
<tr>
<td>Real Player</td>
<td><a href="http://www.service.real.com">www.service.real.com</a></td>
</tr>
<tr>
<td>Shockwave</td>
<td><a href="http://www.adobe.com">www.adobe.com</a></td>
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</table>
## Filters

<table>
<thead>
<tr>
<th>Filter</th>
<th>Website</th>
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<tbody>
<tr>
<td>CyberPatrol</td>
<td><a href="http://www.cyberpartrol.com">www.cyberpartrol.com</a></td>
</tr>
<tr>
<td>Cybersitter</td>
<td><a href="http://www.cybersitter.com">www.cybersitter.com</a></td>
</tr>
<tr>
<td>IProtectYou Pro Web Filter</td>
<td><a href="http://www.softforyou.com">www.softforyou.com</a></td>
</tr>
<tr>
<td>Net Nanny</td>
<td><a href="http://www.netnanny.com">www.netnanny.com</a></td>
</tr>
<tr>
<td>Safe Eyes Platinum</td>
<td><a href="http://www.safeeyes.com">www.safeeyes.com</a></td>
</tr>
</tbody>
</table>
Internet Security Suites

• Collection of utility programs designed to maintain your security and privacy while on the web
  – McAfee
  – Norton
Careers In IT - Webmasters

- Develop & maintain websites
- Back-up of the company website, updating resources, and development of new resources
- Work with the marketing department to increase the site traffic flow
A Look to the Future
Homes of Tomorrow

• “Smart” appliances in homes will have their own Web page
• Refrigerators will be able to manage their inventory and automatically order to re-supply
• Internet cameras, wireless technologies, & high-speed internet will allow you to virtually monitor your home while on travel
• Downsides?
Discussion Questions (Page 1 of 2)

- Discuss the uses of the Internet. Which activities have you participated in? Which one do you think is the most popular?

- Explain the differences between the three types of providers.

- What are the basic elements of an e-mail message?
Discussion Questions (Page 2 of 2)

• What is social networking? Describe the three types of social networking sites.

• Describe the different types of search engines. Give an example of the type of search each engine is best for.