Discovering Computers

FUNDAMENTALS, Second Edition



Today

Key terms we will discuss today:

- Internet
- Internet service provider
- Email
- The Web, web site, web page
- Hyperlink

Pay attention to the difference between

- WWW and the Internet
- IP address and URL
- Web Browser and Search Engine
- Web site and Web Page
- Domain name and email address

A worldwide collection of computers connected together that links millions of businesses, government agencies, educational institutions and individuals.

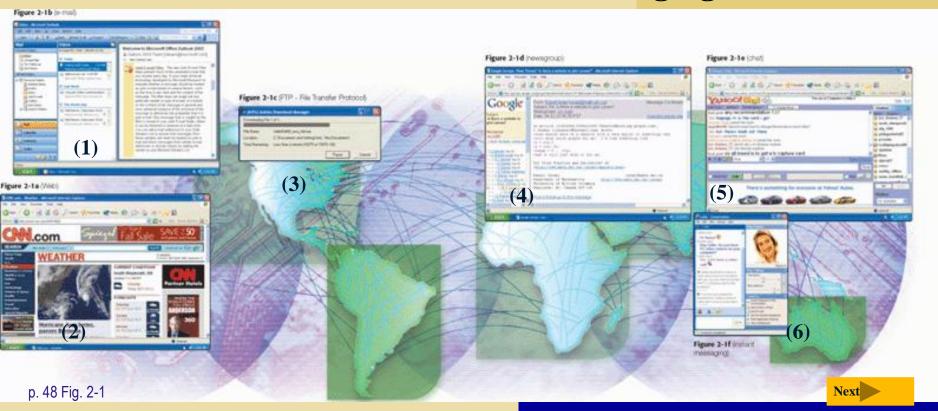
 Think of the internet as the computer hardware or the tangible part of the network.

It started in 1969 with 4 host computers and has grown to more 200 million host computers over the last 37 years

What are some services found on the **Internet?**

- 1. E-mail
- 2. Web
- 3. File transfer

- 4. Chat
- 5. Message board
- 6. Instant messaging



How did the Internet originate?

Goal:
To allow scientists
at different
locations to share
information

1969 - ARPANET

Networking project of the US Department of Defense

1986 – The Internet
ARPANET and NSF
combine

4 host computers:

- 1. UCLA
- 2. UC Santa Barbara
- 3. Stanford Research
- 4. Univ. of Utah



Who controls the Internet?

No one—it is a public, cooperative, and independent network

World Wide Web Consortium (W3C)

- Oversees research, sets standards and guidelines
- More that 500 member organizations



How the Internet Works

How can you connect to the Internet?

Slow-speed technology

Dial-up access

modem in your computer uses a standard telephone line to connect to the Internet

Connection must be established each time you log on.
Slow but inexpensive

High-speed connection

Digital subscriber line (DSL), cable telephone Internet services (CATV), cable modem, fixed wireless, and satellite modems

> Connection is always on whenever the computer is running



How the Internet Works

What are ways to access the Internet?

- 1. ISP Internet Service Provider
 - A company that provides Internet access
 - regional or national
- 2. OSP Online Service Provider
 - A company that provides Internet access and other services – membership required
 - > (AOL and MSN, for example)

How the Internet Works

What is a domain name?

Unique name that identifies every web site

What is the Internet protocol (IP) address

 Number that uniquely identifies each computer or device connected to Internet

IP address → 63.123.44.192

Domain name → www.scsite.com

top-level domain

TOP-LEVEL DOMAINS	
Original Top-Level Domains	Type of Domain
com	Commercial organizations, businesses, and companies
edu	Educational institutions
gov	Government agencies
mil	Military organizations
net	Network providers
org	Nonprofit organizations
Newer Top-Level Domains	Type of Domain
museum	Accredited museums
biz	Businesses of all sizes
info	Businesses, organizations, or individuals providing general information
name	Individuals or families
pro	Certified professionals such as doctors, lawyers, and accountants
	Aviation community members
aero	Aviation community members

What is the World Wide Web (WWW)?

Worldwide collection of electronic documents

The Web and the Internet are NOT the same.

Each electronic document is called a Web page

Web pages connected and related are referred to as a Web site

What is a Web browser?

Program that allows you to view Web pages

Microsoft Internet Explorer



What is a home page?

- The first page that a Web site displays
- Often provides connections to other Web pages

What is downloading?

- The process of a computer receiving information
- Depending upon connection speed, downloading can take from a few seconds to several minutes



What is a URL?



Unique address for a Web page

A web server delivers the Web page to your computer

http://www.sandiegozoo.org/CF/plants/index.cfm



What is a hyperlink (link)?

- Connection (link) to a related Web page
 - Item found elsewhere on same Web page
 - Different Web page at same Web site
 - Web page at a different Web site

How can you recognize links?

- ➤ Pointer changes to a small hand when you point to a link
- A link can be text or an image
- Text links are usually underlined and in a different color





What is a search engine?

Program used to find Web sites and Web pages by entering words or phrases called search text

> www.google.com www.yahoo.com www.dogpile.com

WIDELY	IISFN	SFARCH	2 INNT
MIDEEI	OOLD	OLAHOH	IOOLO

Search Tool	Web Address	Subject Directory	Search Engine
A9.com	a9.com		Χ
AlltheWeb	alltheweb.com		Χ
Alta Vista	altavista.com	Χ	Χ
AOL Search	search.aol.com		Χ
AOMI	aomi.com		Χ
Ask Jeeves	askjeeves.com	Χ	Χ
Excite	excite.com	Χ	Χ
Gigablast	gigablast.com		Χ
Google	google.com	Χ	Χ
HotBot	hotbot.com		Χ
LookSmart	looksmart.com	Χ	Χ
Lycos	lycos.com	Χ	Χ
MSN Search	search.msn.com	Χ	Χ
Netscape Search	search.netscape.com	Χ	Χ
Open Directory Project	dmoz.org	Χ	Χ
Overture	overture.com		Χ
Teoma	teoma.com		Χ
WebCrawler	webcrawler.com		Χ
Yahoo!	yahoo.com	Χ	Χ





What is e-mail?

- Short for electronic mail
- The transmission of messages and files via a computer network
 - Messages can consist of simple text or can contain attachments, such as documents, graphics, or audio/video clips
 - Internet access providers usually provide an e-mail program
 - lyncha@mccc.edu



What is an e-mail address?

Unique name that consists of a user name and domain name that identifies the user



What is FTP?

File Transfer Protocol—Internet standard that permits you to <u>upload</u> and <u>download</u> files with other computers on the Internet



What is a chat?

- Real-time typed conversation that takes place on a computer
- Chat room is location on server that permits users to discuss topics of interest





Click to view Web Link, click Chapter 2, Click Web Link from left navigation, then click Chat Rooms below Chapter 2



What is instant messaging (IM)?

A real-time Internet communications service that notifies you when one or more people are online and allows you to exchange messages or files

Netiquette

What is netiquette?

Code of acceptable behaviors users should follow while on the Internet

Golden Rule: Treat others as you would like them to treat you.



Think about it....

A Microsoft vice president maintains that, "In the long run, it's hard to exaggerate the importance of the Internet." Yet, has the Internet's importance been exaggerated? In an article for Newsweek magazine, Robert Samuelson suggests that technologies are historically important when they change lifestyles or beliefs. Technologies such as Gutenberg's printing press, the automobile, and antibiotics reshaped the human condition by leading to mass literacy, altering where people live, and lengthening life spans. Although still relatively young, Samuelson argues that, to date, the Internet's impact has been less significant.

Has the Internet's importance been exaggerated?

Discussion

Form groups of 3-4 people. Formulate your answers to the following questions:

What is the difference between:

- 1. WWW and the Internet
- 2. IP address and URL
- 3. Web Browser and Search Engine
- 4. Web site and Web Page
- 5. Domain name and an email address?