



# **THE INTERNET AND WORLD WIDE WEB**

# USES OF THE INTERNET

Receive Latest Information



Research for Information



Online Education



Communicate with People



Source of Entertainment



Online Banking and Transactions



E-Commerce



# REQUIREMENTS FOR AN INTERNET CONNECTION

- You need...
  - Computing Device
    - Personal Computer
    - Portable Computer
    - Mobile Device
  - Connection Device
    - Modem
      - Converts digital information into analog information and transmits it over a phone line
      - Internal or External
  - Internet Service Provider (ISP)
    - Company that provides Internet connectivity to individuals, businesses, and organizations



# REQUIREMENTS FOR AN INTERNET CONNECTION

- Methods of Connecting to the Internet
  - Cables
    - Physical connection
  - Wireless
    - Wireless Fidelity or Wi-Fi
    - Access Point (AP)
      - Used to connect a wireless computing device to a wired network



# TYPES OF INTERNET CONNECTIONS

## ○ Dedicated Internet Connection

- Connected to the Internet all the time
  - Do not request your ISP every time you want to connect to the Internet
  - Large organizations and schools who use Internet extensively

## ○ Dial-up Internet Connection

- Connected to the Internet for only a short time
  - Connect to the ISP every time you want to connect to the Internet
  - Need to disconnect from the Internet after completing
  - Less expensive and slower data transfer rate



# WHAT IS BANDWIDTH?

- Bandwidth
  - The amount of data that can be transmitted over a network in a certain amount of time
- Measured by...
  - Mbps (megabits per second)
  - Kbps (kilobits per second)
  - Bps (bits per second)



# TYPES OF CONNECTION

- Dial-up
  - Allow data transfer rates up to 56.6 kbps
- Digital Subscriber Line (DSL)
  - Data transfer rate is 384 kbps to 8 Mbps
- Cable Modem
  - High speed Internet connection from cable TV provider
  - Connected to the Internet all the time
  - Data transfer rates of 4 Mbps
- T1
  - Dedicated phone line connection
  - Popular for businesses
  - Data transfer rates of 1.544 Mbps
- Wireless
  - Data transfer rates range from 11 Mbps to 45 Mbps



# INTRODUCTION TO THE WEB

- Web refers to the collection of information that is accessible to the Internet
  - Text, pictures, and sound
- The terms **Web** and **Internet** are two different things
  - **Internet** connects multiple computers and forms networks on which a computer can communicate with another computer
  - **Web** is a way of accessing and sharing information over the Internet by using a Web browsers



# COMPONENT

- Web Browser
  - A software program that enables you to view and interact with various resources on the Web
- Web Page
  - A formatted text document on the Web that a Web browser can display
  - Create a Web Page by using a software language known as **Hypertext Markup Language (HTML)**
- Web Site
  - One or more Web Pages that reside on a single server
    - This server is known as a Web Server
  - Home page is the first Web Page you access
    - Every Web Site has a unique **home page**



# OVERVIEW OF WEB ADDRESSES

- Each computer on the Web is identified by a unique address, known as **Internet Protocol (IP)** address
  - Numeric address
    - 192.168.0.1
- IP address is linked to a corresponding **domain name**



# WEB ADDRESS

- Uniform resource Locator (URL)

Element	Description
http://	The protocol to be used to access a file
www	The Web site is on the Web
Google	The name of the domain
.com	The type of domain
/search?hl=	The path of the document



# WEB ADDRESS

- Domain name suffix

Suffix	Description
.com	The Web site is for commercial organization
.edu	The Web site if for educational institutions, schools, colleges
.net	The Web site is for a network-oriented organization or for an ISP
.org	The Web site is for a nonprofit organization
.info	The Web site is informative in nature
.us/.uk/.jp	Country-level domains that are specifically used by country