

Module 1

Introduction to Information and Communication Technologies

Lesson 6

What is the Internet?

Rationale

The Internet is the global information network. Librarians must understand how it works and must be able to use it in accessing, organizing, publishing and delivering information

Scope

- What is the Internet ?
- What Internet tools are available?
- What is the World Wide Web?
- What is e-mail? FTP? Chat?
- What are online information resources?
- Why is the Internet important to libraries?
- What are some issues and concerns in using the Internet?

Learning Outcomes

By the end of this lesson, you should be able to:

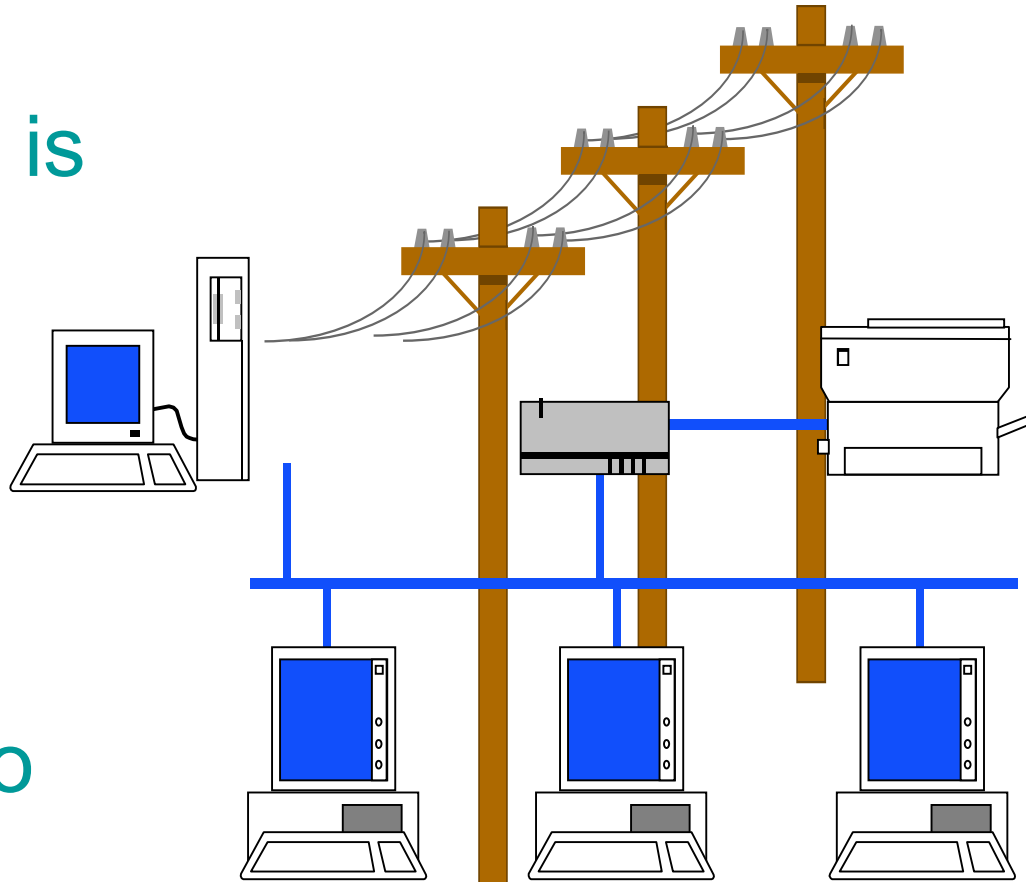
- Define what is the Internet and other Internet concepts and terms.
- Describe Internet tools and services.
- Identify information resources for libraries on the Internet.
- Use online information resources on the Internet.
- Realize the importance of Internet to libraries.
- Discuss some issues and concerns regarding the use of Internet in libraries.

What is The Internet?

- The Internet is a global network of computers communicating under one set of guidelines, formally called Transmission Control Protocol/Internet Protocol (TCP/IP).
- The Internet is not a specific place, company, or service, although places, companies and services are accessible via the Internet. Nobody owns the Internet. It is also called the Web.

The Internet

The Internet is more than a physical network of wires linking individual computers to one another.



It is also a network of people and information resources.

How do you Connect to the Internet?

To have access to the Internet you need:

- a personal computer with a network card
- a modem
- a telephone line or DSL or cable
- an Internet Service Provider

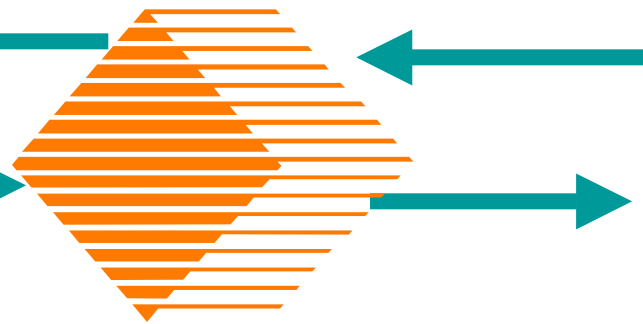
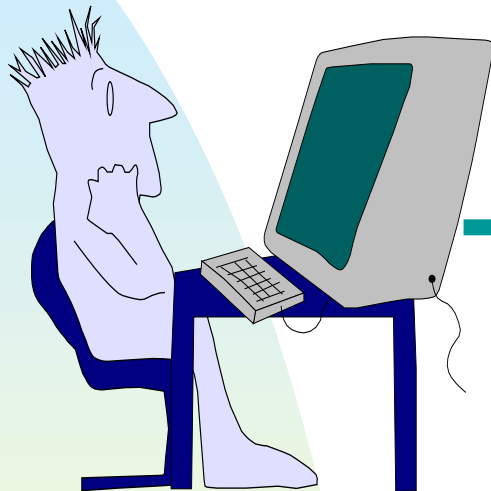
Web Components

- Web servers
- Web browsers
- Search engines
- Hypertext Transfer Protocol
- Hypertext Markup Language
- Uniform Resource Locators (URL) and Web pages
- Information resources

Web Browsers and Servers

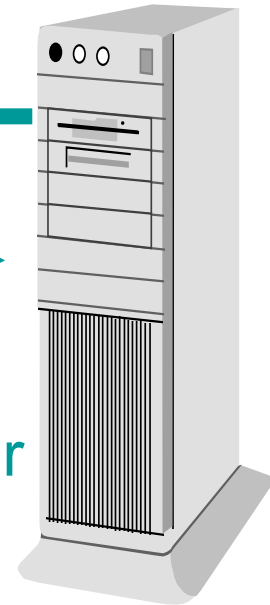
5. User receives file

4. Server sends requested files to browser to be interpreted.



Browser

3. Server accepts and processes request from browser.



1. User sends request

2. Browser interprets user's selection and makes request from appropriate server.

HTTP and HTML

- Web servers and browsers use HyperText Transfer Protocol (HTTP), an Internet-standard protocol, to handle the transfer of text and other files between different computers.
- HTTP “defines how messages are formatted and transmitted, and what actions web servers and browsers should take in response to various commands.”
- HTML defines how web pages are formatted and displayed by web browsers

The World Wide Web

- The World Wide Web (WWW) is the collective name for all the computer files in the world that are accessible through Internet web servers.
- The files are accessible through the use of HyperText Transfer Protocol (HTTP), HyperText Markup Language (HTML), browsers, and the Uniform Resource Locator.

Domain Name Server (DNS)

- The Domain Name System converts host names (web server) and domain names into IP addresses on the Internet or on local networks that use the TCP/IP protocol.

An example of a DNS is:

mail.cslib.upd.edu.ph

Its IP address 165.220.19.30

Hypertext Links between Web Resources

- Hyperlinks are special HTML codes included in web pages that connect web resources, instruct the browser to fetch a resource, run an application or jump to another site.
- Hyperlinks consist of the following:
 - HTML tags - instruct web browser and web servers what file to get or what program to run, include URL's and/or pointers to applications and files to run
 - Anchor – text or image used to place a hyperlink, the clickable object that activates the hyperlink
 - Uniform Resource Locator (URL) – address of web resources

Uniform Resource Locators

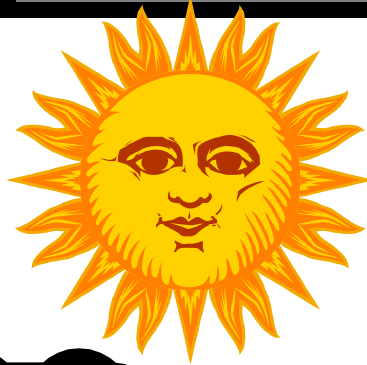
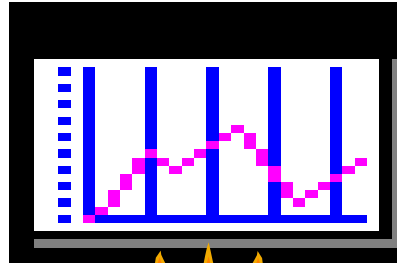
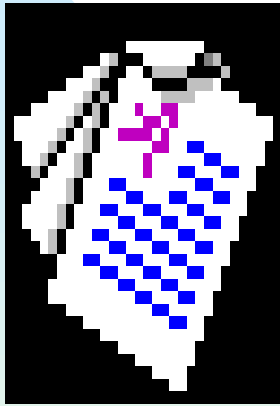
The Uniform Resource Locator (URL) is used to locate resources on the Internet. It contains

- `http://` -- for the hypertext transfer protocol which may or may not be followed by `www`
- the Domain Name
- and the location of the file or resource in the computer.
- Example –
`http://rizal.lib.admu.edu.ph/catalog`

Ways to Locate Information

- Net surfing
- Search engines
- Meta-search tools
- Subject directories
- Virtual libraries
- Newsgroups
- Mailing lists (Listservs)
- Library catalogs
- Online databases
- e-journals
- Organizations
- Other services

Information Materials



- Text
- Sound
- Images
- Video
- Animation
- Full-text
- Statistical data
- Abstracts/Indexes
- Software
- Library catalogs
- News and more

Sites with Free Information Materials

- General Reference Materials

- Encyclopedias
- Dictionaries and thesauri
- Almanacs
- Other

- Books

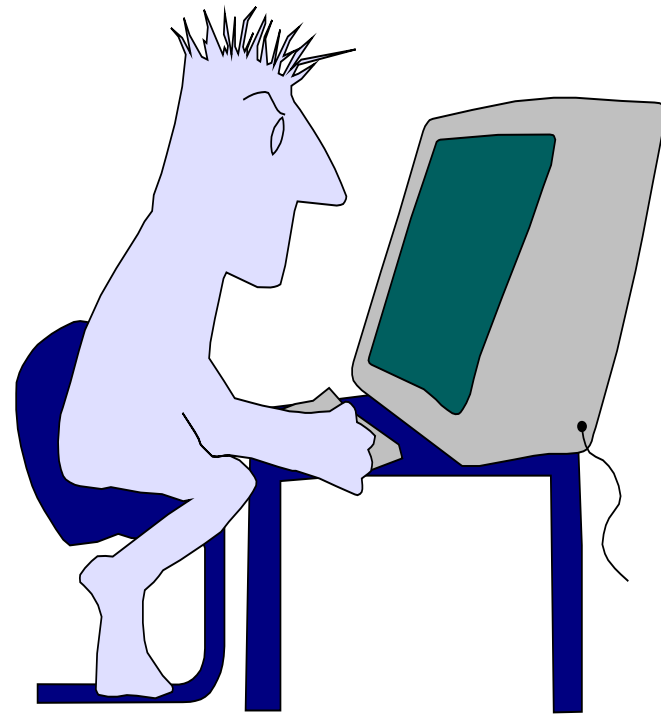
- Journals

- Specialized Materials

- Mathematics
- Language and grammar
- Literature
- Science and technology
- History
- Library Science

What can you do on the Internet?

- Send messages via Electronic Mail
- Talk/Chat
- Access information via the World Wide Web
- Transfer files (FTP)
- Other



Issues

- Accuracy of documents
- Authority of web documents
- Currency of information
- Limitations in technology
- Credibility of the site where it is published (domain name)
- Copyright and IPR
- Anybody who knows how can publish on the Net.



Why is the Internet Important to Librarians?

- Many information resources may be accessed through the Internet:
 - online library catalogs
 - documents in various formats
 - databases
 - educational and information services
- Documents can be sent through the Internet (e.g, e-mail, FTP, file-sharing)
- Librarians can communicate with people using e-mail, chat, newsgroups etc...