

**ICT for Library and Information Professionals:
A Training Package for Developing Countries**

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Module 6

Web Page Concept and Design: Getting a Web Site Up and Running

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**Web Page Concept and Design: Getting a Web Site Up and Running. Module 6.
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1. World Wide Web 2. Web page 3. Web site

1. Title.

The materials presented do not imply the expression of any opinion whatsoever on the part of UNESCO.

Teacher's Guide

Module 6. Web Page Concept and Design: Getting a Web Site Up and Running

Introductory note

This is Module 6 of the *ICT for Library and Information Professionals (ICTLIP) Training Package for Developing Countries*. This Package is intended to provide the knowledge and skills required to deal with the application of ICT to library and information services. It is meant for library and information personnel who may become trainers in the area. The Package has been developed by the UNESCO Asia & Pacific Regional Office with funding from the Japanese Fund in Trust for Communication and Information. It contains six modules:

Module 1 - Introduction to Information and Communication Technologies

Module 2 - Introduction to Integrated Library Systems

Module 3 - Information Seeking in an Electronic Environment

Module 4 - Database Design, and Information Storage and Retrieval

Module 5 - The Internet as an Information Resource

Module 6 - Web Page Concept and Design: Getting a Web Page Up and Running

All the modules have a Teacher's Guide and a Student's Guide. The Student's Guide maybe copied by the students in electronic format. The Teacher's Guide should not be distributed to the students.

The Teacher's Guide includes the following:

- Module Introduction
 - Introductory note
 - Learning outcomes
 - General guidelines for the teachers
 - Course outline
 - Learning environment
 - Duration
 - Course content and schedule
 - Course evaluation
 - Selection criteria for participants
 - Typographical conventions
- Lessons
 - PowerPoint slides
 - Teaching tips
 - Activities
 - References and recommended further reading
- Glossary
- Evaluation forms

The Student's Guide contains the following:

- Module Introduction
 - Introductory note
 - Learning outcomes
 - Course outline
 - Learning environment
 - Duration
 - Course content and schedule
 - Typographical conventions
- Handouts: Lessons 1-7
- Glossary
- Activities
- List of references

Learning outcomes

Module 6 discusses the concepts and principles in web page creation and design, and introduces the basic steps in setting up and maintaining a web site.

By the end of the course, students should be able to:

1. Define concepts and terms, as well as understand the technology of web page creation and design
2. Identify the principles and standards followed in web page creation and design
3. Create web pages using HTML and other tools
4. Develop a simple web site ready for uploading to the World Wide Web
5. Evaluate web pages and web sites
6. Address ethical, legal and other issues related to web publishing

Note: The content of Module 1 must be understood by all students (either by students first completing Module 1, or as a result of prior knowledge of ICT) before they proceed with the remaining five modules in the *ICTLIP Training Package*.

General guidelines

1. Speak slowly and clearly to ensure that students can follow you – this is especially important if some or all the students do not have as their first language the language in which you are instructing.
2. Do not read your lecture notes verbatim – this is a sure way of losing your students' attention.
3. Always show an interest in what you are teaching – if you do not seem interested in the content, why should the students be interested.
4. The Modules have been carefully planned, with exercises and discussions as well as lectures. Try to follow the schedule as set out in the Module.
5. Try to use examples as often as possible to explain concepts. If the examples are taken from the students' own countries or regions, so much the better.

6. Try to keep within the daily timetable recommended for the Module – if you get behind in one lesson it may be difficult to make up time in a later lesson. Avoid extending the class beyond the time period allotted.
7. Be prepared to use back-up materials if for any reason the computer will not function during a lesson.
8. Try to answer all questions from students positively – never make students feel stupid for having asked a question, or they may never ask another question again. But if you do not know the answer to a question, it is better to admit it than to try and bluff.
9. Make sure that all equipment needed for a lesson is working properly before the lesson begins – things can often go wrong!
10. Be ready to stay behind for a few minutes after each lesson to answer questions that students may have but that they did not wish to ask in class.
11. The evaluation of the Module by the students is meant to help you improve your teaching and should be seen in this light rather than as a criticism of yourself. Make use of it to do an even better job next time.

Course Outline

Lesson 1. How the World Wide Web works

Scope

- What is the World Wide Web?
- What makes the Web work?
- How does the World Wide Web work?
- What is a web server?
- What is a web browser?
- What is a web page?
- How does a web page work?
- What is a home page?
- What is a web site?

Objectives

At the end of this lesson, students should be able to:

- Demonstrate an understanding of the concepts, terms, and technology behind the World Wide Web
- Describe how the World Wide Web works
- List several web servers
- Identify different web browsers
- Define what is a web page
- Differentiate a home page from a web site
- Understand how a web page works

Lesson 2. Principles of Web Page Design

Scope

- What are the first steps in web page design?
- What are the elements of a web page?
- What are some tips in web page creation and design?
- What are the guidelines in creating library websites?
- How to evaluate web sites?

Objectives

At the end of the lesson, students should be able to:

- Identify the first steps in web page design
- Recognize the elements of a web page
- Realize the do's and don't's in web page creation and design
- Apply the guidelines in designing library websites
- Evaluate web sites

Lesson 3. Creating web pages using HTML

Scope

- What is HTML?
- What are the tools needed for creating web pages using HTML?
- What are the basic HTML tags?
- How to create a web page using HTML?
- How to build a web site using HTML?

Objectives

At the end of this lesson, students should be able to:

- Define what is HTML
- Determine the basic tools in creating web pages using HTML
- Learn basic HTML coding and tags
- Use HTML to create web pages
- Build a web site using HTML

Lesson 4. Web Site Publishing and Maintenance

Scope

- What are the steps in publishing a web site?
- Why is it important to secure a domain name?
- What are the web hosting services available?
- What do you need to upload the web pages to a web host?
- What are the steps in updating and maintaining a web site?
- How do you promote and market your web site?

- What are the ethical, legal issues and other concerns in web publishing?

Objectives

At the end of this lesson, students should be able to:

- Identify the steps in web publishing, update and maintenance
- Realize the importance of a domain name
- Differentiate the web hosting services
- Upload web pages on a web host
- Demonstrate the ability to promote and market the library's web site
- Address ethical, legal issues and other concerns in web publishing

Learning Environment

The training room must have the facilities and technical support required to carry out the course. It should have computers with CD-ROM drives and online access to the Internet and other resources such as OPACs and CD-ROM databases. The Module should be conducted by a teacher who is knowledgeable and skilled in using computers, the Internet, CD-ROMs and a variety of electronic resources, and who is skilled in teaching courses of this nature.

Duration

The Module is designed for a one-week course of 40 hours: eight hours per day for five days.

Course content and schedule.

Day	Lessons
Day 1	Lesson 1. How the World Wide Web works
Day 2	Lesson 2. Principles of Web Design
Day 3 & 4	Lesson 3. Creating Web Pages Using HTML
Day 5	Lesson 4. Web Publishing and Maintenance

Selection criteria for participants (participants profile)

Participants should be working in a library or information center, or in a school of library and information science. Participants with a degree in library and information science are preferred. Participants should normally have:

- A degree in library and information science or at least two years' experience working in a library
- A working knowledge of English
- A working knowledge of using computers in a Windows environment

Course evaluation

At the end of the course, ask your students to evaluate the course. The evaluation forms are included in this guide.

Typographical conventions



Note

General note to the teacher and additional information



Tip

Teaching tips and supplemental materials



Activity

Activity for the students



Reference

Reference and further reading materials



Glossary

Glossary of terms used in the module

Lesson 1

How the World Wide Web works

Teacher's Guide

Module 6. Web Page Concept and Design: Getting a Web Site Up and Running

Lesson 1. How the World Wide Web works



Note

The Teacher's Guide provides notes and tips for the PowerPoint presentation that you will use in conducting the course.

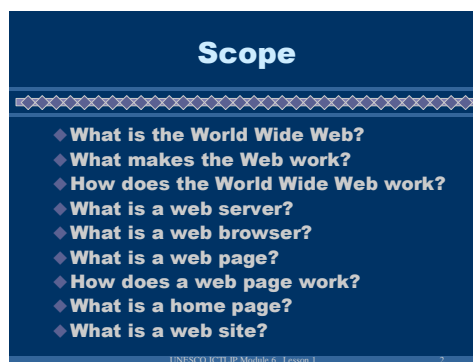
Slide 1



Tip

Emphasize the need to understand the concepts, terms and technology behind the World Wide Web, to have a clearer understanding of what a web page is, how it is created and how it works.

Slide 2



Scope

1. What is the World Wide Web?
2. What makes the Web work?
3. How does the World Wide Web work?
4. What is a web server?

5. What is a web browser?
6. What is a web page?
7. How does a web page work?
8. What is a home page?
9. What is a web site?

Slide 3

Learning outcomes

- ◆ Demonstrate an understanding of the concepts, terms, and technology behind the World Wide Web
- ◆ Describe how the World Wide Web works
- ◆ List several web servers
- ◆ Identify different web browsers
- ◆ Define what is a web page
- ◆ Differentiate a home page from a web site
- ◆ Understand of how a web page works

UNESCO ICTLP Module 6, Lesson 1

Learning outcomes

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

1. Demonstrate an understanding of the concepts, terms, and technology behind the World Wide Web
2. Describe how the World Wide Web works
3. List several web servers
4. Identify different web browsers
5. Define what is a web page
6. Differentiate a home page from a web site
7. Understand how a web page works

Slide 4

What is the World Wide Web?

World Wide Web

- ◆ a way to access and provide information in various media types via the Internet
- ◆ a hypertext based system for providing, organizing and accessing information that allows users to jump from one information space to another
- ◆ comprised of servers and client computers on the Internet that communicate using hypertext transfer protocol

UNESCO ICTLP Module 6, Lesson 1

What is the World Wide Web?

The World Wide Web is a way to access and provide information in various media via the Internet. It is a hypertext- based system that provides, organizes and accesses information in a non-hierarchical and non-sequential manner, allowing users to jump from one information

space to another. It comprises servers and client computers on the Internet that communicate using the hypertext transfer protocol (http).



Note

The World Wide Web (WWW), also called the "Web", pertains to the system used to access information but also to the information resource accessible through that system.

Slide 5

What is the World Wide Web?

World Wide Web

- ◆ information resource consisting of web pages that organize and present vast amount of information (mostly text embedded with images, audio, video, or animation), and other resources (databases, interactive multimedia, virtual environments, etc.)
- ◆ body of information available on the Web

UNESCO ICTLP Module 6: Lesson 1

World Wide Web

The Web is an information resource consisting of web pages that organize and present vast amounts of information (mostly text embedded with images, audio, video, or animation), and other resources (online databases, interactive multimedia, virtual environments, etc.). The World Wide Web refers to both the tool (hypertext-based information and communication system) and the body of information (a huge collection of web documents) available on the Web.



Tip

Read these articles:

1. Learn the Net: Surf the Web.
<http://www.learnthenet.com/english/section/www.html>
2. Understanding the World Wide Web
<http://library.albany.edu/internet/www.html>



Activity 1-1

Visit the following web documents to know more about the World Wide Web

1. How the Web Works
<http://www.learnthenet.com/english/html/13wworks.htm>
2. The Web At-a-glance
<http://www.learnthenet.com/english/web/000www.htm>

Slide 7

What makes the Web work?

The Web relies on these mechanisms:

- ◆ **Hypertext** - provides easy navigation among documents and resources
- ◆ **Protocols** - set of standards used to access resources via the Web
- ◆ **Universal Resource Locator (URL)** - uniform naming scheme for Internet resources
- ◆ **Client and server computers** - Web access is based on client/server technology

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What makes the Web work?

The Web relies on these mechanisms:

- Hypertext - provides easy navigation among documents and resources
- Protocols - set of standards used to access resources via the Web
- Universal Resource Locator (URL) - uniform naming scheme for Internet resources
- Client and server computers - Web access is based on client/server technology

Slide 8

What makes the Web work?

◆ **Hypertext**

- presents and relates information as hyperlinked documents that point to other documents or resources
- hyperlink is usually embedded in the text, on a highlighted word or phrase, or on a symbol, an icon, or other graphic elements
- web pages are hypertext documents on the Internet mostly created using HTML

UNESCO ICTLP Module 6, Lesson 1 7

Hypertext

Hypertext presents and relates information as interlinked documents, which allows the reader to explore related documents by selecting a linked object through a click of a mouse or other pointing devices. A hyperlink (hypertext link) is usually embedded in the text and appears as either a highlighted word or phrase (usually underlined and colored blue), or as a symbol, an icon, or other graphic elements, which points to other documents or resources on the Web. Placing the cursor over a hyperlinked object will change the cursor to a hand. Web pages are hypertext documents on the Internet, mostly created using HTML.

**Note**

There are several programming languages that can be used to create web pages. However, we will only discuss HTML in this module. HTML provides the underlying foundations on which web pages are created and linked to one another.

Slide 9

What makes the Web work?

HyperText Markup Language (HTML)

- ◆ the publishing language of the World Wide Web; the standard used to create web pages.
- ◆ markup language that defines the structure of information by using a variety of tags and attributes, which is designed to display text and other information on a screen and provide hyperlinks to other Web documents.

UNESCO ICTLP Module 6, Lesson 1

HyperText Markup Language

HyperText Markup Language (HTML) is the publishing language of the World Wide Web, the standard used to create web pages. HTML is a markup language that defines the structure of information by using a variety of tags and attributes that are designed to display text and other information on a screen and provide hyperlinks to other Web documents.

Slide 10

What makes the Web work?

Protocols

- ◆ standard set of rules that governs how computers communicate with each other, i.e. TCP/IP, SMTP, FTP, HTTP
- ◆ HTTP is the underlying protocol used to transmit information over the Web
- ◆ the Web supports several Internet protocols aside from HTTP such as SMTP, FTP, and VoIP, allowing access to huge collection of information and services

UNESCO ICTLP Module 6, Lesson 1

Protocols

Protocols are a standard set of rules that govern how computers communicate with each other. Examples are TCP/IP, SMTP, FTP, and HTTP. HTTP is the underlying protocol used to transmit information over the Web. The Web supports several Internet protocols aside from HTTP such as SMTP, FTP, and VoIP, allowing access to huge collection of information and services.

**Tip**

Read these articles:

1. HTTP Explained - <http://serverwatch.internet.com/articles/protocols/>
2. HTTP Protocol Overview - <http://www.freesoft.org/CIE/Topics/102.htm>
3. Internet Protocols- <http://www.wdvl.com/Internet/Protocols/index.html>

Slide 11

What makes the Web work?

Uniform Resource Locator (URL)

- ♦ uniform naming scheme that specifies unique addresses for web servers, documents, and other resources, no matter what its access protocol
- ♦ the URL points to where the data or service is located (the host computer and the directory in which it resides) on the Internet
- ♦ web documents and resources are located and linked through their URL's

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Uniform Resource Locator

The Uniform Resource Locator (URL) is a uniform naming scheme that specifies unique addresses for web servers, documents and other resources no matter what its access protocol. The URL points to where the data or service is located on the Internet. Web documents and resources are located and linked through their URL's. Hyperlinks contain the URLs of web pages and other online resources that point to where web documents can be found, what protocol to use, the name of the computer (web server) that hosts the document, the directory in which it resides, and the name of the file.

Slide 12

What makes the Web work?

Anatomy of a URL

Address  http://www.unesco.org/webworld/portal_bit/index.shtml

protocol **host computer** **directory path** **file name**

Note: Not all URLs will have the directory and filename

Address  <http://www.unesco.org>

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Anatomy of a URL

The first part of a URL, the protocol (http), specifies the method of access. The second part is the host computer or the server name (www.unesco.org). The directory path (/webworld/portal_bit/) points to where the web document can be found. Lastly the file name (index.shtml) of the web document specifies the actual web page that will be displayed on the screen. Note that not all URL's have a directory and file name, since web servers, based on their configuration, open the default home page of a web site when a specific file is not identified. For example, typing the URL - http://www.unesco.org on the browser's address bar will bring you directly to the UNESCO home page.

Slide 13

What makes the Web work?

Client and server computers

- ◆ computers on the Internet communicate and share resources
- ◆ servers are computers that host web documents and provide information through a web server program
- ◆ client computers access web documents using an application program called web browsers

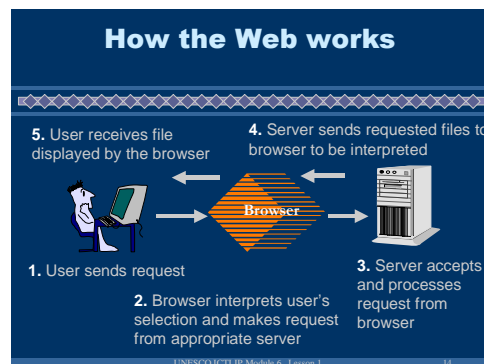
UNESCO ICTLP Module 6, Lesson 1 13

Client and server computers

Web access is based on client/server technology. The Web uses the distributed client server computing model, which generally classifies computers connected to the Internet as either a server or a client computer that transmit information using HTTP.

Server computers are computers that host web documents and provide information through a web server application program. Both the machine running the application program and the program itself are referred to as the web server. But the machine can also run other applications and may also function differently aside from being a web server. Most machines work as web server, mail server and FTP server at the same time. Big web sites usually have dedicated machine(s) as their web server(s) to provide better, faster and more efficient services. Client computers access web documents using an application program called a web browser.

A computer connected to the Internet may be both a server and a client. But companies or organizations normally run servers, while computers used by individuals who simply access the Web are client computers.

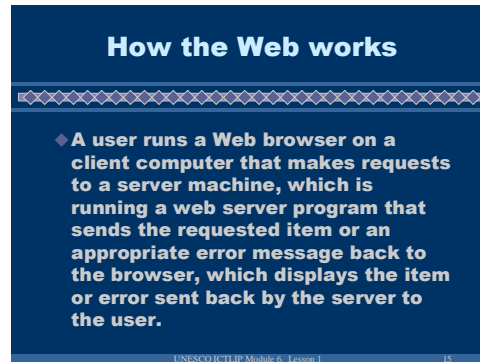
Slide 14**How the Web works**

A simplified illustration of how the web works:

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

3. Server accepts and processes request from browser
4. Server sends requested files to browser to be interpreted
5. User receives file displayed by the browser

Slide 15



How the Web works

A computer with a web browser is required to access the Web. The computer sends a request for information by typing the URL of a web page on the browser's address or location bar. The browser interprets the user's selection and makes a request from the appropriate server by interpreting the URL. Once located, the server will accept and process the request from the browser. After processing, the server will send the requested file to the browser. The browser will interpret the file sent by the server and display it on the user's monitor. An error message will appear if the requested file or service is unavailable. The same process occurs when a user selects a hyperlink on a web page.



Tip

Read these articles:

1. Overview of Web Mechanisms
http://www.cio.com/WebMaster/sem2_simple_pieces.html
2. Under the Hood of the World Wide Web
<http://www.learnthenet.com/english/html/70alan.htm>
3. What is the Internet, the World Wide Web, and Netscape?
<http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/WhatIs.html>



Activity 1-2

Read these articles to know more about how the Web works

1. Client/Server, the Internet, and WWW
<http://www.robelle.com/www-paper/paper.html>
2. How Web servers and the Internet Work
<http://www.howstuffworks.com/web-server.htm>
3. The Web At-a-glance
<http://www.learnthenet.com/english/web/000www.htm>

Slide 17

What is a web server?

Web server

- ◆ computer running an application software also called web server that listens and responds to a client computer's request made through a web browser
- ◆ machine that hosts web pages and other web documents
- ◆ provides web documents and other online services using HTTP

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What is a web server?

A web server is a computer running application software that listens and responds to a client computer's request made through a web browser. The computer is often called a “web server”. It is the machine that hosts web pages and other web documents. It provides web documents and other online services using the HTTP.

Slide 18

Web servers

- ◆ Apache - most popular open source server software on the Web
- ◆ iServer - application / web server written entirely in Java
- ◆ Microsoft Internet Information Server - IIS is fully integrated into the Windows NT / 2000 server package
- ◆ Macromedia ColdFusion - application / web server focuses on serving dynamic pages supporting other Macromedia products like Flash and UltraDev
- ◆ IBM Web Sphere Studio - combination of content creation software with web application
- ◆ Apple Webobject - application / web server for Mac

UNESCO ICTLP Module 6 - Lesson 1 15

Web servers:

- Apache - most popular open source server software on the Web
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- IBM Web Sphere Studio – combination of content creation software with web application
- Apple Webobject - application / web server for Mac

**Tip**

- 1) Read this article to know more about how web servers work.
 - a) Serving Up Web Server Basics - <http://webcompare.internet.com/webbasics/index.html>
- 2) Explore these pages that contains links to several web servers:
 - a) HTTP Servers - <http://webreference.com/internet/software/servers/http/>
 - b) Web Servers - <http://serverwatch.internet.com/webservers.html>

Slide 19


What is a web browser?

Web browser

- ◆ application software that is used to locate and request for the page on the web server that hosts the document, then interpret the file sent back by the web server and display it on the monitor of the client computer
- ◆ computer program that lets you view and explore information on the World Wide Web

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What is a web browser?

A web browser is application software that is used to locate and issue a request for the page on the web server that hosts the document. It also interprets the page sent back by the web server and displays it on the monitor. It is therefore a computer program that lets you view and explore information on the World Wide Web.

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Web browsers

- ◆ Microsoft Internet Explorer – browser integrated with the Windows operating system. Mac versions are available.
- ◆ Netscape Navigator - available for Windows, Mac, and Unix platforms.
- ◆ Opera – one of the alternatives to the two most popular browser discussed above
- ◆ Mozilla – open source web browser software
- ◆ Lynx - the popular Unix text-based browser

UNESCO ICTLP Module 6: Lesson 1 19

Web browsers

- Microsoft Internet Explorer – browser integrated with the Windows operating system. Mac versions are available.
- Netscape Navigator - available for Windows, Mac, and Unix platforms.
- Opera – one of the alternatives to the two most popular browsers mentioned above
- Mozilla - open source web browser
- Lynx - popular text-based browser

**Tip**

Read the following articles to know more about browsers:

1. Learn the Net: Web browsers
<http://www.learnthenet.com/english/html/12browser.htm>
2. Internet Tutorials: University at Albany Libraries
<http://library.albany.edu/internet/#browsers>



Activity 1-3

Explore these pages that contain links to several web servers and browsers

1. World Wide Web Server Software - <http://www.w3.org/Servers.html>
2. Browsers - <http://www.webreference.com/internet/software/browsers/>

Slide 22

What is a Web page?

Web page

- ◆ electronic document that typically contains several types of information accessible via the World Wide Web
- ◆ set of information created, and organized, using HTML and/or other web page authoring and development tools
- ◆ Interpreted and displayed on the screen according to the instructions of the web page authoring tool

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What is a Web page?

A web page is an electronic document that typically contains several types of information, accessible via the World Wide Web. It is a set of information created, and organized, in a document-like format using HTML and/or other web page authoring and development tools. The web document is interpreted and displayed on the screen according to the instructions of the web page authoring tool.

Slide 23

How web pages work

Sample web page and its source.

- ◆ The source contains the instructions that define the contents, layout, and structure of a web page.
- ◆ The instructions are written in HTML or another web authoring tool used in creating the page.
- ◆ The browser uses these instructions to interpret and display the web page on the screen.

UNESCO ICTLP Module 6: Lesson 1 23

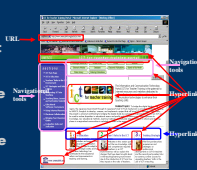
How web pages work

The captured image of the US Library of Congress web page shows how it is displayed on the screen once you visit its home page at <http://www.loc.gov>. Beside it is the image of its source (part of it), an ASCII file created using HTML or other web page authoring tool. The source contains the instructions that define the contents, layout, and structure of a web page. The instructions are written in HTML or another web authoring tool used in creating the page. The browser uses these instructions to interpret and display the web page on the screen.

Slide 24

How web page works

- ◆ The user requests a web page by entering its URL on the address location bar of a web browser.
- ◆ The browser transmits the request to a web server through http.
- ◆ The web server processes the request, locate and sends back the requested web document also using http.
- ◆ The web browser interprets the file sent by the server and displays it on the monitor.
- ◆ The same process happens when the user selects any of the hyperlinks or navigational tools on the page.



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How web pages work

The user requests a web page by entering its URL on the address or location bar of a web browser. The browser transmits the request to a web server through http. The web server processes the request, locates and sends back the requested web document also using http. The web browser interprets the file sent by the server and displays it on the monitor. The same process happens when the user selects any of the hyperlinks on the web page.

Slide 25

What is a web site?

Web site

- ◆ a collection of related web pages of a certain individual, group, or organization, connected through a system of hyperlinks, hosted in a particular domain
- ◆ can be a single web page that contains links to related information located on several web sites

UNESCO ICTLP Module 6, Lesson 1 25

What is a web site?

A web site refers to the collection of related web pages of a certain individual, group, or organization, connected through a system of hyperlinks, hosted by a web server in a particular domain. A web site can be composed of a single web page that contains links to related information located on several web sites.

Slide 26

What is a home page?

Home page

- ◆ the main page of a website that typically serves as an index or table of contents to other web documents
- ◆ usually the first web page or the welcome page the users see when they visit a website

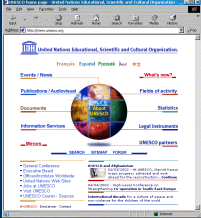
UNESCO ICTLP Module 6, Lesson 1 27

What is a home page?

A home page is the main page of a web site that typically serves as an index or table of contents to other web pages? It is usually the first web page users see when they visit a web site.

Slide 27

Web page? Web site? Home page?



◆ This web page is the home page of the UNESCO web site

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Web page ...

The terms web page, home page and web site are used interchangeably since they refer generally to electronic documents that populate the World Wide Web. Slide 28 states the basic difference when used at the same time in the simple statement "This web page is the home page of the UNESCO web site".

**Note**

In this module the terms web page, home page and web site are used interchangeably.

**Tip**

Read these articles:

1. About the World-Wide Web - <http://wdvl.com/Internet/Web/About.html>
2. Anatomy of a Web Page - <http://www.learnthenet.com/english/html/14wbpganat.htm>



Activity 1-4

Read these articles to know more about how a web page works:

1. What is a web page? - <http://www.dreamink.com/beginners/b2.html>
2. How web pages work - <http://www.howstuffworks.com/web-page.htm>
3. How Web Sites Work - <http://www.workz.com/content/629.asp>



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Greer, David J. *Client/Server, the Internet, and WWW*. Robelle Solutions Technology Inc. [Online] URL <http://www.robelle.com/www-paper/paper.html>

Hughes, Chris and Birznicks, Gunther. *WebCompare: Serving Up Web Server Basics*. INT Media Group. [Online] URL <http://webcompare.internet.com/webbasics/>

Learn the Net: *Anatomy of a Web Page*. Michael Lerner Productions. [Online] URL <http://www.learnthenet.com/english/html/14wbpganat.htm>

Learn the Net: *How the Web Works*. Michael Lerner Productions. [Online] URL <http://www.learnthenet.com/english/html/13wworks.htm>

Learn the Net: *Surf the Web*. Michael Lerner Productions. [Online] URL <http://www.learnthenet.com/english/section/www.html>

Learn the Net: *The Web At-a-glance*. Michael Lerner Productions. [Online] URL <http://www.learnthenet.com/english/web/000www.htm>

Learn the Net: *Under the Hood of the World Wide Web*. Michael Lerner

Productions. [Online] URL

<http://www.learnthenet.com/english/html/70alan.htm>

Learn the Net: *Web browsers*. Michael Lerner Productions. [Online] URL

<http://www.learnthenet.com/english/html/12browser.htm>

Marshall Brain. HowStuffWorks: *How web pages work* [Online] URL

<http://www.howstuffworks.com/web-page.htm>

Marshall Brain. HowStuffWorks: *How Web servers and the Internet Work*.

[Online] URL <http://www.howstuffworks.com/web-server.htm>

Richmond, Alan. Web Developer's Virtual Library: *About the World-Wide Web*. INT Media Group, Inc. [Online] URL

<http://wdvl.com/Internet/Web/About.html>

Richmond, Alan. Web Developer's Virtual Library. *Internet Protocols*. INT Media Group, Inc. [Online] URL

<http://www.wdvl.com/Internet/Protocols/index.html>

Rowan, Laare. DreamInk: Web Design Guide tutorials. *Beginners: What is a web page?* [Online] URL <http://www.dreamink.com/beginners/b2.html>

Shaw, Russell. *How Web Sites Work*. Pinnacle WebWorkz. Aug. 15, 2000.

[Online] URL <http://www.workz.com/content/629.asp>

ServerWatch Tutorials: *HTTP Explained*. INT Media Group, Inc. Reprinted from The Web Developer's Virtual Library. By Alan Richmond. [Online] URL

<http://serverwatch.internet.com/articles/protocols/>

ServerWatch: *Web Servers*. INT Media Group [Online] URL

<http://serverwatch.internet.com/webservers.html>

University at Albany Libraries. Internet Tutorials: *Browsers*. Maintained by

Laura Cohen. [Online] URL <http://library.albany.edu/internet/#browsers>

University at Albany Libraries: Internet Tutorials. *What is the Internet, the World Wide Web, and Netscape?* Maintained by Laura Cohen. [Online] URL

<http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/WhatIs.html>

University at Albany Libraries: Internet Tutorials. *Understanding the World Wide Web*. Maintained by Laura Cohen. [Online] URL

<http://library.albany.edu/internet/www.html>

W³C (World Wide Web Consortium): *World Wide Web Server Software*.

[Online] URL <http://www.w3.org/Servers.html>

WebMaster Magazine. *Overview of Web Mechanisms*. CIO Communications, Inc. [Online] URL http://www.cio.com/WebMaster/sem2_simple_pieces.html

WebReference: *Browsers*. INT Media Group [Online] URL <http://www.webreference.com/internet/software/browsers/>

WebReference: *HTTP (Hyper Text Transfer Protocol) - HTTP Servers*. INT Media Group. [Online] URL <http://webreference.com/internet/software/servers/http/>

Lesson 2

Principles of Web Page Design

Teacher's Guide

Module 6. Web Page Concept and Design: Getting a Web Site Up and Running

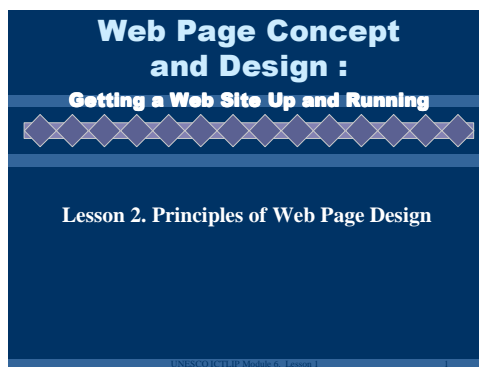
Lesson 2. Principles of Web Page Design



Note

The Teacher's Guide provides notes and tips for the PowerPoint presentation that you will use in conducting the course.

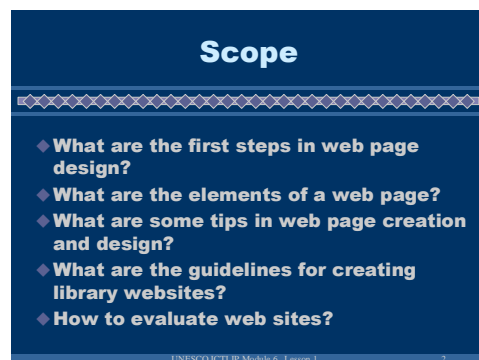
Slide 1



Tip

In any endeavor, planning is very crucial for the project's success since it is at this stage that you will define what you would like to do, what you will need, and how you will do it. Point out that in web page design it helps to be aware of some of the basic principles that will guide and show you the first steps in web page design.

Slide 2



Scope

1. What are the first steps in web page design?
2. What are the elements of a web page?

3. What are some tips in web page creation and design?
4. What are the guidelines for creating library websites?
5. How to evaluate web sites?

Slide 3

Learning outcomes

- ◆ Identify the first steps in web page design
- ◆ Recognize the elements of a web page
- ◆ Realize the do's and don't's in web page creation and design
- ◆ Apply guidelines in designing library websites
- ◆ Evaluate web sites

UNESCO ICTLP Module 6: Lesson 1 3

Learning outcomes

At the end of this lesson, students should be able to:

1. Identify the first steps in web page design
2. Recognize the elements of a web page
3. Realize the do's and don't's in web page creation and design
4. Apply guidelines in designing library websites
5. Evaluate web sites

Slide 4

What are the first steps in web page design?

- ◆ State your purpose/objective – why build a website for your library?
- ◆ Determine your audience – who are your target audience?
- ◆ Define the content – what kind of information will be provided on your site?
- ◆ Identify the necessary resources – do you have the budget, personnel, materials, time and other resources?

UNESCO ICTLP Module 6: Lesson 1 4

What are the first steps in web page design?

- State your purpose/objective – why build a website for your library?
- Determine your audience – who are your target audience?
- Define the content – what kind of information will be provided on your site?
- Identify the essential resources – do you have the budget, personnel, materials, time and other resources?



Note

The first steps in web page design require students' awareness of their goal, purpose and objectives. Emphasize that these should be determined at this point before proceeding with the lesson.

Slide 5

What are the first steps in web page design?

State your purpose

- ◆ To publish online information about the library - collections, services, etc.
- ◆ To provide extension services – user education, reference services, tutorials
- ◆ To act as a gateway to local and external information resources on the Web – library catalog, online databases, e-journals
- ◆ To serve as a communication tool - through e-mail, instant messaging, and other similar software

UNESCO ICTLP Module 6: Lesson 1

State your purpose

There are many reasons why a library would like to establish its presence online. The following are just some:

- To publish online information about the library - collections, services, etc.
- To provide extension services – user education, reference services, tutorials, ...
- To act as a gateway to local and external information resources on the Web – library catalog, online databases, electronic journals and magazines
- To serve as a communication tool - through e-mail, instant messaging, and other similar software

Slide 6

What are the first steps in web page design?

Determine your audience

- ◆ Who is your target audience? Students? Faculty? Or staff?
- ◆ What are their interests and needs?
- ◆ Are they proficient in using technology available in the library?
- ◆ Do you have the equipment and materials necessary to meet their needs?
- ◆ What will they get from your site? Learn anything or accomplish a task?

UNESCO ICTLP Module 6: Lesson 1

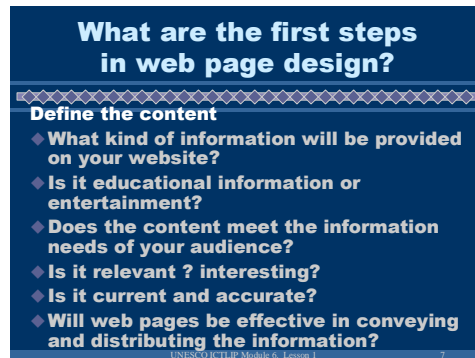
Determine your audience

Knowing more about your target audience will help in deciding what should be provided in your web page. It will help in finding a match between their needs and the information you will provide. It will also help in assessing whether you have the means to provide it. You can determine and know more about your audience by answering the following questions.

- Who is your target audience? Students? Faculty? Or staff?

- What are their interests and needs?
- Are they proficient in using technology available in the library?
- Do you have the equipment and materials necessary to meet their needs?
- What will they get from your site? Will they learn anything or accomplish a task?

Slide 7

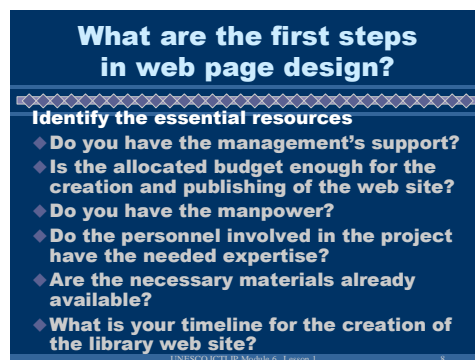


Define the content

Once you have determined your audience, you can now proceed with defining your content. Creating an outline of what you intend to provide will greatly help in creating your web page. Answering the following questions can guide you in defining your content:

- What kind of information will be provided on your website?
- Is it educational information or entertainment?
- Does the content meet the information needs of your audience?
- Is it relevant ? interesting?
- Is it current and accurate?
- Will web pages be effective in conveying and distributing the information?

Slide 8



Identify the essential resources

Identifying and preparing the essential resources before starting with web page design will help you save a lot of time, effort and money. Having them on hand will help you accomplish your task in a more effective and efficient manner. The following are just some of the things that you might need. Knowing the answers to these questions could also help build your confidence

- Do you have the management's support?
- Is the allocated budget enough for the creation and publishing of the web site?
- Do you have the manpower?
- Do the personnel involved in the project have the needed expertise?
- Are the necessary materials already available?
- What is your timeline for the creation of the web site?



Activity 2-1

Go through the first steps in web page design and answer the initial questions discussed. You can add more information as you would like. Write them down using the activity sheet provided in this module.



Tip

Read these articles:

1. Creating a Web Site for a Public Library - <http://alexia.lis.uiuc.edu/course/fall1998/lis415/projects/ehengman/lis415/LibWeb.html>
2. Suggested Public Library Web Site Guidelines - <http://www.state.sc.us/scsl/lib/guidlins.html>
3. Plan: Web Publishing - <http://www.ncte.ie/wpc/plan.htm>



Note

You can ask the students to read the articles above but only when they have finished the activity. This is to ensure that what they want to accomplish largely came from their own ideas, which the articles then can enhance.

Slide 10

What are the elements of a web page?

- ◆ **Title** – title of the document
- ◆ **Web address** – URL of the page shown at the browsers address box
- ◆ **Content** – information on the page - text, graphics and other media types
- ◆ **Design** – style of the page, font, color, background, visual elements
- ◆ **Structure** – layout of the page, title, headings, tables, frames, navigational tools, footers
- ◆ **Hyperlinks** – links to related resources

UNESCO ICTLP Module 6: Lesson 1 10

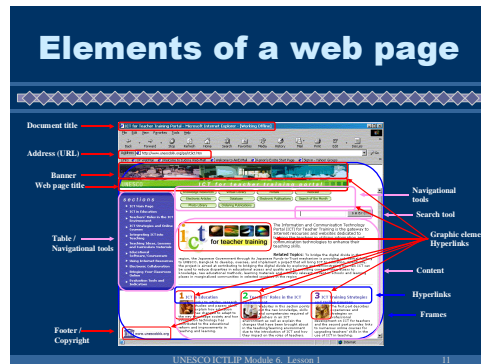
What are the elements of a web page?

The following are some of the elements of a web page:

1. Title – the title of the document is shown at the top of the browser's window. This could be different from the title of the information shown on the page.
2. Web address – the URL of the page as shown at the browser's address box.

3. Content – the information on the page - text, graphics and other media types
4. Design – the style of the page, font, color, background, visual elements
5. Structure – the layout of the page - title, headings, tables, frames, navigational tools, footers
6. Hyperlinks – the links to related resources

Slide 11



Elements of a web page

This slide shows the general elements of a web page. The elements of a page vary from page to page.



Note

Emphasize that being aware of each element and its function and effect in the overall design will serve as a guide in creating and designing the web page.



Tip

View this site that discusses page elements and explore the linked.
Page Elements -<http://terra.chemeketa.edu/faculty/bloj/design/elements.htm>

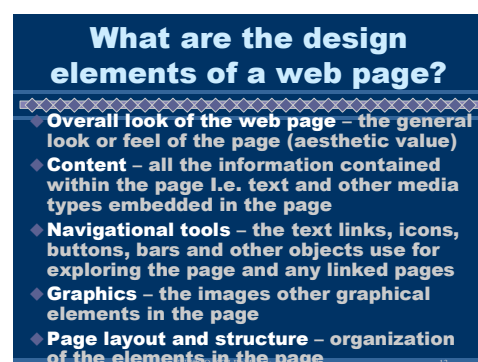


Activity 2-2

Read these articles:

1. Anatomy of a Web Page - <http://worldlinklearning.net/ei/mod010301.html/>
2. Web Page Elements - <http://www.bilk.ac.uk/college/helpweb/familiar.htm>

Slide 13



What are the design elements of a web page?

- Overall look of the web page – the general look or feel of the page (aesthetic value)
- Content – all the information contained within the page, i.e. text and other media embedded in the page
- Navigational tools – the text links, icons, buttons, bars and other objects used for exploring the page and any linked pages
- Graphics – the images and other graphical elements in the page
- Page layout and structure – organization of the elements in the page

**Note**

The following slides contain design guidelines for each page element. Discuss them with the class and show examples of their application by visiting some of the library web sites.

Slide 14

What are the design elements of a web page?

Overall look

- ◆ Match the purpose of the web site and its appropriate information to the target audience
- ◆ Maintain consistency, clarity and simplicity – uniform color scheme
- ◆ Use of colors, images, hyperlinks and web technology effectively
- ◆ Organize the design elements logically and predictably

UNESCO ICTLP Module 6: Lesson 1 14

Overall look

- Match the purpose of the web site and its appropriate information to the target audience
- Maintain consistency, clarity and simplicity – uniform color scheme
- Use colors, images, hyperlinks and web technology effectively
- Organize the design elements logically and predictably

Slide 15

What are the design elements of a web page?

Content

- ◆ Match the purpose of the web site and its appropriate information to the target audience
- ◆ Organize the information logically and predictably (text and other media)
- ◆ Ensure that information is accurate, current, relevant , useful complete, interesting, unique
- ◆ Employ a concise, easy to read writing style

UNESCO ICTLP Module 6: Lesson 1 15

Content

- Match the purpose of the web site and its appropriate information content to the target audience

- Organize the information logically and predictably (text and other media)
- Ensure that the information is accurate, current, relevant , useful complete, interesting and unique
- Employ a concise, easy to read writing style

Slide 16

What are the design elements of a web page?

Navigational tools

- ◆ Can be selected from text links, icons, buttons, bars and other graphical elements
- ◆ Organized them logically and predictably
- ◆ Provide clear, quick and consistent method to move within the site
- ◆ Provide easy to use and find links
- ◆ Should employ intuitive and descriptive pointers
- ◆ Help create the web site's identity

UNESCO ICTLP Module 6: Lesson 1 16

Navigational tools

- Can be selected from text links, icons, buttons, bars and other graphical elements
- Organize them logically and predictably
- Provide clear, quick and consistent method to move within the site
- Provide easy to use and find links
- Should employ intuitive and descriptive pointers
- Help create the web site's identity



Tip

View - Web Development Virtual Library: Nav 101. By Charlie Morris.
<http://www.wdvl.com/Location/Navigation/101/index.html>

Slide 17

What are the design elements of a web page?

Graphics

- ◆ Appropriate, essential, and relevant to the content of the page
- ◆ Functional - serve a purpose and/or provide information
- ◆ Of size, quality and file format appropriate for the page content
- ◆ Used to add value to the overall design

UNESCO ICTLP Module 6: Lesson 1 17

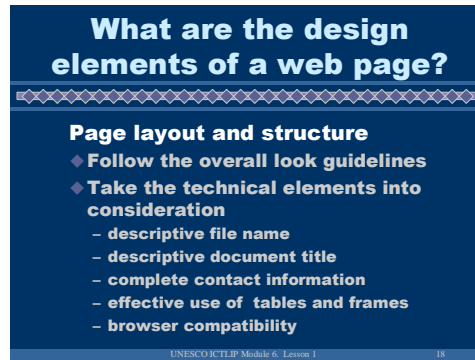
Graphics should be

- Appropriate, essential, and relevant to the content of the page
- Functional - serve a purpose and/or provide information
- Of a size, quality and file format appropriate for the page content
- Used to add value to the overall design concept

**Tip**

Read these articles:

1. Images for Web Pages -<http://www.wdvl.com/Authoring/Graphics/Images/>
2. Working with Graphics-
<http://www.learnthenet.com/english/html/48grafix.htm>

Slide 18**Page layout and structure**

- Follow the overall look guidelines
- Take the technical elements into consideration
 - descriptive file name
 - descriptive document title
 - complete contact information
 - effective use of tables and frames
 - browser compatibility

**Tip**

Read these articles:

1. Art and the Zen of Web sites: <http://www.tlc-systems.com/webtips.shtml>
2. IBM: Web design guidelines: http://www-3.ibm.com/ibm/easy/eou_ext.nsf/publish/572

**Activity 2-3**

1. Read this article:
Yale Style Manual - <http://info.med.yale.edu/caim/manual/>
2. Resources: Design Tips - <http://www.csus.edu/web/tips.html>
3. Create a storyboard for your web page, with a layout for each page
4. Organize your web site – illustrate the structure of your site showing how the pages are linked to each other

Slide 20

Some tips in web page design

Do's in web page design

- ◆ Plan the web site structure and navigation
- ◆ Keep the layout simple and intuitive
- ◆ Use the same general style throughout
- ◆ Add standard navigation tools to each page
- ◆ Include copyright and contact information on each page

UNESCO ICTLP Module 6: Lesson 1 20

Some tips in web page design**Do's in web page design**

- Plan the web site structure and navigation
- Keep the layout simple and intuitive
- Use the same general style throughout
- Add standard navigation tools to each page
- Include copyright and contact information on each page

Slide 21

Some tips in web page design

Do's in web page design

- ◆ Use original or free graphics
- ◆ Use images wisely and keep file size small for fast download
- ◆ Respect copyright and intellectual property rights
- ◆ Always state the source of all materials used
- ◆ Spell check and proofread each page

UNESCO ICTLP Module 6: Lesson 1 21

Do's in web page design

- Use original or free graphics
- Use images wisely and keep file size small for fast download
- Respect copyright and intellectual property rights
- Always state the source of all materials used
- Spell check and proofread each page

**Tip**

Read Jakob Nielsen's Alertbox: Ten Good Deeds in Web Design.
<http://www.useit.com/alertbox/991003.html>

Slide 22

Some tips in web page design

Don't's in web page design

- ◆ Don't crowd your pages – balance text, graphics and space
- ◆ Don't overuse graphics, animations and other bleeding edge technology – use them to support and enhance but not to overpower your work
- ◆ Don't use background that distracts the user or makes text unreadable

UNESCO ICTLP Module 6: Lesson 1 22

Don't's in web page design

- Don't crowd your pages – balance text, graphics and space
- Don't overuse graphics, animations and other bleeding edge technology – use them to support and enhance but not to overpower your work
- Don't use background that distracts the user or makes text unreadable

Slide 23

Some tips in web page design

Don't's in web page design

- ◆ Don't use blinking or glowing text for emphasis
- ◆ Don't use long paragraphs of text – divide them into readable chunks
- ◆ Don't create dead end pages, which have no links to any other local page in the site
- ◆ Don't design for a specific browser

UNESCO ICTLP Module 6: Lesson 1 23

Don't's in web page design

- Don't use blinking or glowing text for emphasis
- Don't use long paragraphs of text – divide them into readable chunks
- Don't create dead end pages, which have no links to any other local page in the site
- Don't design for a specific browser

**Tip**

View Jakob Nielsen's Alertbox: Top Ten Mistakes in Web Design.
<http://www.useit.com/alertbox/9605.htm>

**Activity 2-4**

1. Read the following articles:
 - Designing effective web pages
<http://www.becta.org.uk/websiteawards/effectivedesign.html>
 - Indiana University: Basics of Web Design. <http://www.indiana.edu/~iuinfo/guides/basics.html>

2. Make a checklist regarding your library's web site – what you'll need and what information you'll provide



Note

Developing the skills to evaluate web sites helps in evaluating and designing your own web sites. Good web sites can serve as models in designing your own.

Slide 25

How to evaluate web sites?

- ◆ Accuracy – free from error and alteration
- ◆ Authority – credibility of author / publishing body
- ◆ Objectivity – creator's point of view / bias
- ◆ Currency – timeliness of information
- ◆ Content – scope and depth of material
- ◆ Design – style, structure, and functionality
- ◆ Accessibility – availability of the resources

UNESCO ICTLP Module 6: Lesson 1 26

How to evaluate web sites?

The following criteria can be used in evaluating web sites:

- Accuracy – free from error and alteration
- Authority – credibility of author / publishing body
- Objectivity – creator's point of view / bias
- Currency – timeliness of information
- Content – scope and depth of material
- Design – style, structure, and functionality
- Accessibility – availability of the resources

Slide 26

How to evaluate web sites?

Accuracy

- ◆ How reliable is the information?
- ◆ Is it the original document?
- ◆ Are there any errors or alterations on the page?
- ◆ Is there a way to verify authenticity of the content?

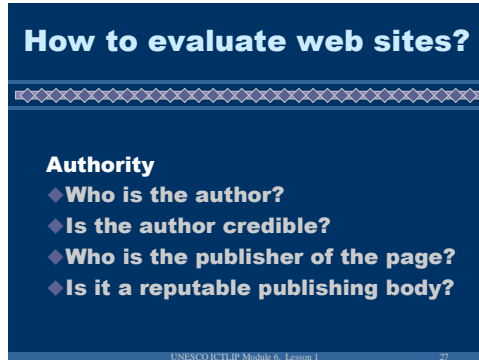
UNESCO ICTLP Module 6: Lesson 1 26

Accuracy

- How reliable is the information?

- Is it the original document?
- Are there any errors or alterations on the page?
- Is there a way to verify authenticity of the content?

Slide 27



How to evaluate web sites?

Authority

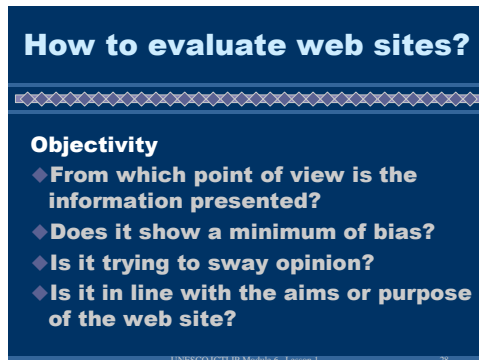
- ◆ Who is the author?
- ◆ Is the author credible?
- ◆ Who is the publisher of the page?
- ◆ Is it a reputable publishing body?

UNESCO ICTLP Module 6: Lesson 1 27

Authority

- Who is the author?
- Is the author credible?
- Who is the publisher of the page?
- Is it a reputable publishing body?

Slide 28



How to evaluate web sites?

Objectivity

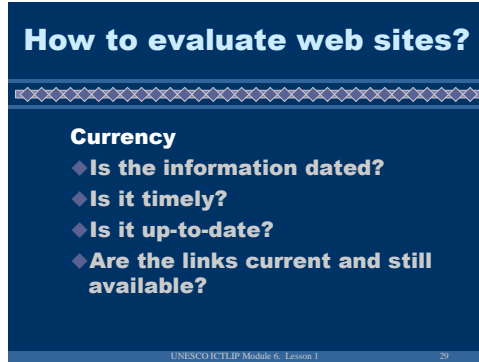
- ◆ From which point of view is the information presented?
- ◆ Does it show a minimum of bias?
- ◆ Is it trying to sway opinion?
- ◆ Is it in line with the aims or purpose of the web site?

UNESCO ICTLP Module 6: Lesson 1 28

Objectivity

- From which point of view is the information presented?
- Does it show a minimum of bias?
- Is it trying to sway opinion?
- Is it in line with the aims or purpose of the web site?

Slide 29

A blue presentation slide titled "How to evaluate web sites?". Below the title is a decorative horizontal line with a repeating diamond pattern. The main content is under the heading "Currency" and lists four evaluation points, each preceded by a diamond icon. The footer contains the text "UNESCO ICTLP Module 6: Lesson 1" and the slide number "29".

How to evaluate web sites?

Currency

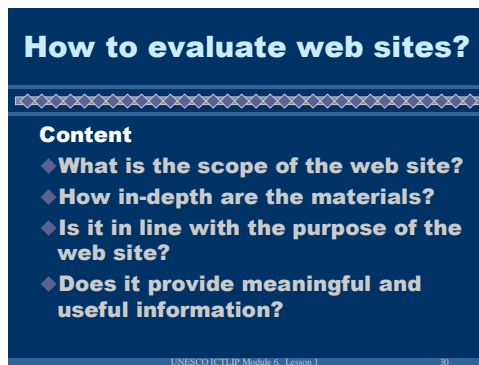
- ◆ Is the information dated?
- ◆ Is it timely?
- ◆ Is it up-to-date?
- ◆ Are the links current and still available?

UNESCO ICTLP Module 6: Lesson 1 29

Currency

- Is the information dated?
- Is it timely?
- Is it up-to-date?
- Are the links current and still available?

Slide 30

A blue presentation slide titled "How to evaluate web sites?". Below the title is a decorative horizontal line with a repeating diamond pattern. The main content is under the heading "Content" and lists four evaluation points, each preceded by a diamond icon. The footer contains the text "UNESCO ICTLP Module 6: Lesson 1" and the slide number "30".

How to evaluate web sites?

Content

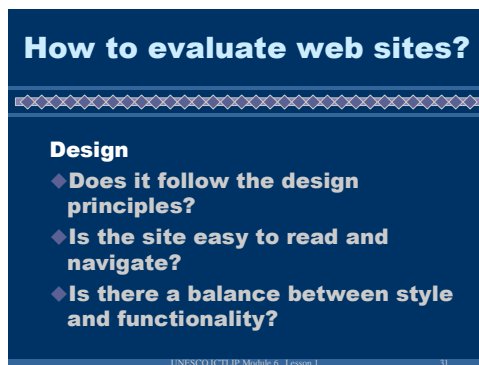
- ◆ What is the scope of the web site?
- ◆ How in-depth are the materials?
- ◆ Is it in line with the purpose of the web site?
- ◆ Does it provide meaningful and useful information?

UNESCO ICTLP Module 6: Lesson 1 30

Content

- What is the scope of the web site?
- How in-depth are the materials?
- Is it in line with the purpose of the web site?
- Does it provide meaningful and useful information?

Slide 31

A blue presentation slide titled "How to evaluate web sites?". Below the title is a decorative horizontal line with a repeating diamond pattern. The main content is under the heading "Design" and lists three evaluation points, each preceded by a diamond icon. The footer contains the text "UNESCO ICTLP Module 6: Lesson 1" and the slide number "31".

How to evaluate web sites?

Design

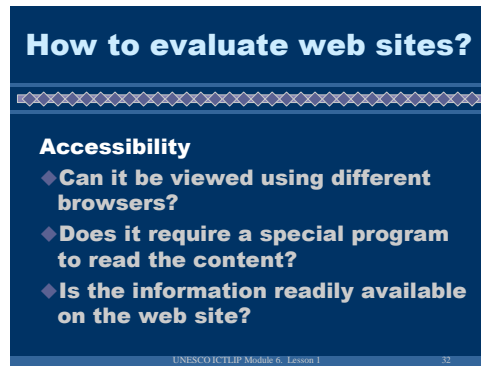
- ◆ Does it follow the design principles?
- ◆ Is the site easy to read and navigate?
- ◆ Is there a balance between style and functionality?

UNESCO ICTLP Module 6: Lesson 1 31

Design

- Does it follow the design principles?
- Is the site easy to read and navigate?
- Is there a balance between style and functionality?
- How to evaluate web sites?

Slide 32



Accessibility

- Can it be viewed using different browsers?
- Does it require a special program to read the content?
- Is the information readily available on the web site?



Activity 2-5

1. Read the following articles:
 - ALA's Selection Criteria
<http://www.ala.org/parentspage/greatsites/criteria.html>
 - What makes a great web site? <http://webreference.com/greatsite.html>
2. Visit and evaluate library web sites.
3. Choose which ones you could use as models for your web site.



Tip

Visit:

1. Evaluating Web Resources: <http://www2.widener.edu/Wolfgram-Memorial-Library/webevaluation/webeval.htm>
2. Kathy Schrock's Guide for Educators - Critical Evaluation Surveys: <http://school.discovery.com/schrockguide/eval.html>



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<http://www.wdvl.com/Authoring/Graphics/Images/>

ScoilNet: Plan Web Publishing [Online] URL
<http://www.ncte.ie/wpc/plan.htm>

Schorck, Kathleen. Kathy Schrock's Guide for Educators - Critical Evaluation Surveys. Discovery.com [Online] URL
<http://school.discovery.com/schrockguide/eval.html>

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South Carolina State Library: Suggested Public Library Web Site Guidelines [Online] URL <http://www.state.sc.us/scsl/lib/guidlins.html>

WebRef: *What Makes a Great Web Site?* INT Media Group, Inc. [Online] URL <http://webreference.com/greatsite.html>

Lesson 3

Creating web pages using HTML

Teacher's Guide

Module 6. Web Page Concept and Design: Getting a Web Site Up and Running

Lesson 3. Creating web pages using HTML



Note

The Teacher's Guide provides notes and tips for the PowerPoint presentation that you will use in conducting the course.

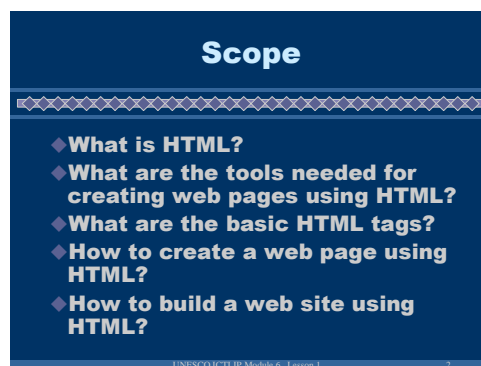
Slide 1



Tip

Learning HTML allows you to create web pages using tools already available in your computer system. It also gives you a better understanding of HTML elements, how they work and how they are used to create web pages.

Slide 2



Scope

1. What is HTML?
2. What are the tools needed for creating web pages using HTML?
3. What are the basic HTML tags?
4. How to create a web page using HTML?
5. How to build a web site using HTML?

Slide 3

Learning outcomes

- ◆ Define what is HTML
- ◆ Determine the basic tools in creating web pages using HTML
- ◆ Learn basic HTML coding and tags
- ◆ Use HTML to create web pages
- ◆ Build a web site using HTML

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Learning outcomes

At the end of the lesson, students should be able to:

1. Define what is HTML
2. Determine the basic tools for creating web pages using HTML
3. Use basic HTML coding and tags
4. Use HTML to create web pages
5. Build a web site using HTML

Slide 4

What is HTML?

HyperText Markup Language (HTML)

- ◆ the publishing language of the World Wide Web; the standard used to create web pages
- ◆ markup language that defines the structure of information by using a variety of tags and attributes, which is designed to display text and other information on a screen and provide hyperlinks to other Web documents

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HyperText Markup Language

HyperText Markup Language (HTML) is the publishing language of the World Wide Web, the standard used to create web pages. HTML is a markup language that defines the structure of information by using a variety of tags and attributes that are designed to display text and other information on a screen and provide hyperlinks to other Web documents.

**Tip**

To ensure browser compatibility with as large a number of users as possible, this lesson will cover only the basic tags that define the text and hyperlink features of HTML, supported by HTML 2.0, HTML 3.2, as well as HTML 4.01, the latest standard supported by newer browsers.

Slide 5


What is HTML?

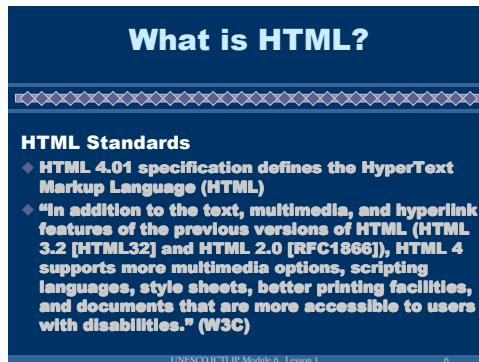
Web Standards

- ◆ The W3C (World Wide Web Consortium) develops specifications, (called "Recommendations") guidelines, as well as software and tools that enhance interoperability between web browsers, servers, and other web-enabling technologies.
- ◆ Their recommendations on Web technologies and protocols like HTML, CSS, XHTML, XML, and HTTP are considered the Web standards
- ◆ The HTML 4.01 specification from W3C is the latest standard supported by new browsers

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Web Standards

The W3C (World Wide Web Consortium) develops specifications (called "Recommendations") and guidelines, as well as software and tools that enhance interoperability between web browsers, servers, and other web-enabling technologies. Their recommendations on Web technologies and protocols like HTML, CSS, XHTML, XML, and HTTP are considered the Web standards. The HTML 4.01 specification from W3C is the latest HTML standard supported by new browsers

Slide 6


What is HTML?

HTML Standards

- ◆ HTML 4.01 specification defines the HyperText Markup Language (HTML)
- ◆ "In addition to the text, multimedia, and hyperlink features of the previous versions of HTML (HTML 3.2 [HTML32] and HTML 2.0 [RFC1866]), HTML 4 supports more multimedia options, scripting languages, style sheets, better printing facilities, and documents that are more accessible to users with disabilities." (W3C)

UNESCO ICTLP Module 6: Lesson 1 6

HTML Standards

"This specification defines the HyperText Markup Language (HTML), the publishing language of the World Wide Web... In addition to the text, multimedia, and hyperlink features of the previous versions of HTML (HTML 3.2 [HTML32] and HTML 2.0 [RFC1866]), HTML 4 supports more multimedia options, scripting languages, style sheets, better printing facilities, and documents that are more accessible to users with disabilities." (W3C: HTML 4.01 Specification)

**Tip**

Read these articles that define HTML:

1. HyperText Markup Language Home Page <http://www.w3.org/MarkUp/>
2. WDWL: Introduction to HTML
<http://wdvl.internet.com/Authoring/HTML/Intro/>
3. WebRef: HTML with Style. So what is this HTML thing?
<http://www.webreference.com/html/tutorial1/1.html>



Activity 3.1

Read these two introductions to HTML:

1. What is HTML? InterNIC 15 Minutes Series (mirrored by Netskills)
<http://www.netskills.ac.uk/mirrors/15min/html/html/sld01.html>
2. Introduction to HTML <http://wdvl.internet.com/Authoring/HTML/Intro/>

Slide 8

What are the basic tools?

- ◆ Plain text editor like NotePad – to write HTML documents
- ◆ Web browser – to test and view the created web page
- ◆ HTML reference book – to serve as guide for HTML tags
- ◆ Information and other materials about the library in electronic file

UNESCO ICTLP Module 6: Lesson 1 8

What are the basic tools?

- Plain text editor like NotePad – to write HTML documents
- Web browser – to test and view the created web page
- HTML reference book – to serve as guide for HTML tags
- Information and other materials about the library in electronic files

Slide 9

What are the basic HTML rules?

- ◆ HTML tags are enclosed by brackets < > for example <HTML>
- ◆ Most tags require a closing tag <HTML> ... </HTML>
- ◆ Tags must be nested correctly <I>My Library Web Site</I> first tag on, last tag off
- ◆ HTML treats all white space as a single blank space

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What are the basic HTML rules?

To build a web page using HTML you need a basic understanding of how it works, the rules and syntax used. HTML uses a coding system of tags and optional attributes, which are interpreted by browsers in displaying the web page on the screen. The following are some of the important things to know about HTML :

- HTML tags are enclosed by brackets < > for example <HTML>
- Most tags require a closing tag <HTML> ... </HTML>
- Tags must be nested correctly <I>My Library Web Site</I> first tag on, last tag off
- HTML treats all white space as a single blank space

Slide 10

What are the basic HTML rules?

- ◆ Tags are not case sensitive but are usually written in uppercase, with the attributes and values in small letters enclosed by quotation marks
- ◆ Most tags have optional attributes with several possible values that modify the tag's behavior

Look inside HTML element (Tag)

TAG	attribute	value	closing tag
<code><BODY</code>	<code>bgcolor=</code>	<code>"#FFFFFF"</code>	<code>> ... <BODY></code>

UNESCO ICTLP Module 6: Lesson 1 10

What are the basic HTML rules?

- Tags are not case sensitive but are usually written in uppercase, with the attributes and values in small letters enclosed by quotation marks
- Most tags have optional attributes with several possible values that modify the tag's behavior (a good HTML reference book can give you a listing of all the tags and possible attributes)

Slide 11

What are the basic HTML tags?

```

<HTML> [identifies the document as HTML]
<HEAD>
<TITLE>My Library</TITLE>  Contains information about the HTML document
</HEAD>
<BODY>
<P>Content of My Library's Web Page</P>
</BODY> Contains all information displayed on the browser
</HTML> [ closing tag ]
These tags generally define the basic structure of a web page
  
```

UNESCO ICTLP Module 6: Lesson 1 11

What are the basic HTML tags?

The following tags define the basic structure of a web page:

`<HTML> ... </HTML>` - All web pages should have this tag, with the closing tag for browsers to identify them as HTML documents.


`<HEAD> ... </HEAD>` - This tag contains all information about the HTML document. In this section, several tags can be used but they are not required. Typically HTML documents supply only the title tag, which is used by search engines in indexing the web page.

`<TITLE>My Library</TITLE>` - Aside from being used for indexing, the information supplied on this tag is displayed on top of most browsers' window, which is generally helpful in describing the content of the page. Thus ideally short but descriptive titles of a web page should be used.

`<BODY> ... </BODY>` - The content of a web page displayed by the browser is defined within this tag.

Slide 12

What are the basic HTML tags?



◆ The basic HTML tags above (written using Notepad and saved with a file extension .htm) create a simple web page shown beside it.

UNESCO ICTLP Module 6: Lesson 1 13

**Note**

Open Notepad or any text editor. Type the basic HTML tags as seen on the slide. Save them as "basic.htm" all files. View them using your browser. Do this in front of the class so they will see in action the use of HTML in creating web pages with Notepad. It might help convince them that it is not as hard as it seems.

Slide 13

What are the basic HTML tags?

◆ Header tags range from **<H1>** to **<H6>**, **<H1>** the largest and **<H6>** is the smallest.

◆ The headings' size shows the hierarchy of importance on the page's layout.

<H1> My Library **</H1>** (page title)

<H2> Mission, Vision and Goals **</H2>** (main topic)

<H3> Objectives **</H3>** (subtopic)

UNESCO ICTLP Module 6: Lesson 1 14

Header tags

Adding content to your web page follows some of the basic rules in writing and publishing documents. One of these is the use of headings to denote the main topic and subtopics within the page's layout. In HTML, **header tags** range from **<H1>** to **<H6>**, **<H1>** being the largest and **<H6>** the smallest. The heading's size shows the hierarchy of importance on the page's layout (as shown in slide 15).


Slide 15

What are the basic HTML tags?

```

<H1> My Library </H1>
<H2> Mission, Vision and Goals </H2>
<H3> Objectives</H3>

```



UNESCO ICTLP Module 6: Lesson 1 15

**Note**

Show how this is done by using Notepad to open and edit the file created earlier - "basic.htm". Type the additional information with the corresponding tags as shown on the slide. Use your browser to view and edit if needed by viewing the source. Again, do this in front of the class.

Slide 16

What are the basic HTML tags?

◆ Use <CENTER> tag to center elements on the page

```

<CENTER>
<H1> My Library </H1>
<H2> Mission, Vision and Goals </H2>
</CENTER>
<H3> Objectives</H3>

```

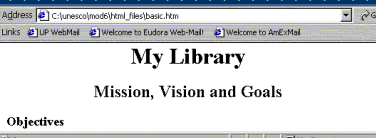
UNESCO ICTLP Module 6: Lesson 1 16

<CENTER> tag

The <CENTER> tag is used to center elements on the page. It can be used for the whole document or a specific element. The element that will be centered should be enclosed between the <CENTER> tag and the closing </CENTER> tag (as shown in slide 16).

Slide 17

What are the basic HTML tags?



```

<CENTER>
<H1> My Library </H1>
<H2> Mission, Vision and Goals </H2>
</CENTER>
<H3> Objectives</H3>

```

UNESCO ICTLP Module 6: Lesson 1 17

**Note**

Show how this is done, in front of the class, by using Notepad to open and edit the file created earlier - "basic.htm". Type the additional information with the corresponding tags as shown on the slide. Use your browser to view and edit if needed by viewing the source.

**Tip**

Let the students try it on their own by using the computers in front of them. Provide them with a copy of the basic HTML tags for creating a web page. One good article is: Webmonkey: Reference.HTML Cheatsheet. [Online] URL http://hotwired.lycos.com/webmonkey/reference/html_cheatsheet/

Slide 18

What are the basic HTML tags?

◆ The <P> tag breaks the textual information on a page and inserts a single line space, which is useful for defining and separating paragraphs.

<H2> Mission, Vision and Goals </H2>

<P> MyLibrary aims to be the country's public virtual library with state-of-the art resources and associated services, accessible to anyone, anytime, anywhere. </P>

UNESCO ICTLP Module 6: Lesson 1 18

Paragraph tag <P>

Textual information on a web page is written directly using text editors or making use of the copy and paste features of Windows- based programs. The <P> tag breaks the textual information on a page and inserts a single line space, which is useful for defining and separating paragraphs. <P> tags are also used to separate elements of a page using line breaks that are automatically provided when the tag is used.

Slide 19

What are the basic HTML tags?

<P> MyLibrary aims to be the country's public virtual library with state-of-the art resources and associated services, available to anyone, anytime, anywhere. </P>

My Library

Mission, Vision and Goals

MyLibrary aims to be the country's public virtual library with state-of-the art resources and associated services, available to anyone, anytime, anywhere.

UNESCO ICTLP Module 6: Lesson 1 19

**Note**

Without showing them how, but using just the PowerPoint slide as a guide, ask the students to add more textual information on the basic HTML document they are working on. Spend some time to go around and look at what they are doing.

Satisfy yourself that they are grasping the concept, and reinforce it by showing them how.

Slide 20

What are the basic HTML tags?

My Library

Mission, Vision and Goals

MyLibrary aims to be the country's public virtual library with state-of-the art resources and associated services, available to anyone, anytime, anywhere.

Use the align attribute of the <P> tag to justify the paragraph: center, right or left. (left is the default)

<P align=center> MyLibrary aims to be the country's public virtual library with state-of-the art resources and associated services, available to anyone, anytime, anywhere. </P>

UNESCO ICTLP Module 6: Lesson 1 20

Use the *align* attribute of the <P> tag to justify the paragraph: center, right or left. By default paragraphs are aligned to the left.

Slide 21

HTML basic tags

◆ Format text with tags that make the text bold and/or italic <I> to put emphasis on some points

<P> MyLibrary aims to be the country's <I> public virtual library </I> with state-of-the art resources and associated services, available to anyone, anytime, anywhere. </P>

MyLibrary aims to be the country's public virtual library with state-of-the art resources and associated services, available to anyone, anytime, anywhere.

UNESCO ICTLP Module 6: Lesson 1 21

Physical tags

Physical tags like bold and italic <I> put emphasis on certain textual information. Use them judiciously. The significance will be lost if a lot of emphasis is used on a page. These tags can also be nested, as the first tag open is the last tag closed with an end tag (shown in slide 22).

Slide 22

HTML basic tags

◆ Tags can be nested as long as the first tag open is the last tag closed with and end tag.

<P> MyLibrary aims to be the country's <I> public virtual library </I> with state-of-the art resources and associated services, available to anyone, anytime, anywhere. </P>

MyLibrary aims to be the country's public virtual library with state-of-the art resources and associated services, available to anyone, anytime, anywhere.

UNESCO ICTLP Module 6: Lesson 1 22

Slide 23

What are the basic HTML tags?

- ◆ Break tag **
** forces line breaks without creating a vertical space, which should be used only for reasons of design or content

```
<H3> Library Hours </H3>
<P> Monday – Friday </BR>
      8:00 a.m. – 5:00 p.m. <P>
<P> *Open on Holidays </P>
```


UNESCO ICTLP Module 6: Lesson 1 23

**The Break
 tag** forces line breaks without creating a vertical space, which should be used only for reasons of design or content (shown in slide 24)

Slide 24

What are the basic HTML tags?

```
<H3> Library Hours </H3>
<P> Monday – Friday </BR>
      8:00 a.m. – 5:00 p.m. <P>
<P> *Open on Holidays </P>
```




UNESCO ICTLP Module 6: Lesson 1 24

Slide 25

What are the basic HTML tags?

- ◆ Horizontal rule **<HR>** tag separate major sections of the page is by inserting a bar in between paragraphs or sections
- ◆ Using one or more of its attributes could vary its appearance



```
<HR width=50% size=3 align=center>
```

UNESCO ICTLP Module 6: Lesson 1 25

The Horizontal rule <HR> tag separates major sections of the page by inserting a bar between paragraphs or sections. Using one or more of its attributes could vary its appearance.

**Note**

At this point it is assumed that the students are working on their own web page. It is now time to ask them to do a guided exercise, which should help them gain a working knowledge of HTML.



Exercise 1

Ask the students to do Exercise 1. Explain clearly and check on their work. Provide tips and guidelines that will help them produce the desired page. Remind them of the activities in the previous lesson, which should help them define the design and content of their web page.



Tip

Visit this Web site and read the articles that deal with the creation of web pages using HTML:

HTML Clinic [Online] URL <http://www.htmlclinic.com>

Slide 26

What are other HTML formatting tags?

- ◆ HTML also supports lists; unordered lists, ordered lists and, definition list, which is sometimes the best way to present information
- ◆ Unordered list is a bulleted list that uses `` and `` tags

```
<H3> Objectives </H3>
<UL><LI> Acquire a comprehensive collection of multimedia materials</LI>
<LI> Develop appropriate user education and training packages</LI>
</UL>
```

UNESCO ICTLP Module 6: Lesson 1 26

Lists

HTML also supports lists: unordered lists, ordered lists, and definition lists, which are sometimes the best way to present information. An **Unordered list** is a bulleted list that uses `` and `` tags (shown in slide 27)

Slide 27

What are other HTML formatting tags?

```
<H3> Objectives </H3>
<UL><LI> Acquire a comprehensive collection of multimedia materials</LI>
<LI> Develop appropriate user education and training packages</LI>
</UL>
```

UNESCO ICTLP Module 6: Lesson 1 27

Slide 28

What are other HTML formatting tags?

- ♦ **Ordered list** is a numbered list that uses `` and `` tags

```
<H3> Library Resources </H3>
<OL> <LI> Library Collections </LI>
      <LI> Library Catalog </LI>
      <LI> Electronic Resources </LI> </OL>
```


UNESCO ICTLP Module 6: Lesson 1 28

An **Ordered list** is a numbered list that uses `` and `` tags as shown in slide 29.

Slide 29

What are other HTML formatting tags?

```
<H3> Library Resources </H3>
<OL> <LI> Library Collections </LI>
      <LI> Library Catalog </LI>
      <LI> Electronic Resources </LI> </OL>
```



UNESCO ICTLP Module 6: Lesson 1 29

**Note**

Let the students try the tags on their own using Notepad and the browser on their computer system.

Slide 30

What are other HTML formatting tags?

- ♦ **Lists can be nested, one within another**

```
<OL>
  <LI> Library Collections </LI>
    <UL> <LI> Books </LI>
          <LI> Journals </LI>
    </UL>
  <LI> Library Catalog </LI>
  <LI> Electronic Resources </LI>
    <UL> <LI> CD-ROMs </LI>
          <LI> Abstracts & Indexes </LI>
    </UL>
</OL>
```

UNESCO ICTLP Module 6: Lesson 1 30

Lists can be nested, one within another, as shown in slide 31.


Slide 31

What are other HTML formatting tags?

```

<OL>
<LI> Library Collections </LI>
<UL><LI> Books </LI>
<LI> Journals </LI>
</UL>
<LI> Library Catalog </LI>
<LI> Electronic Resources
</LI>
<UL><LI> CD-ROMs </LI>
<LI> Abstracts &
Indexes </LI>
</UL>
</OL>

```



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Slide 32

What are other HTML formatting tags?

♦ The list item type attribute can be used to change the bullets in disc, square or circle, and in from number 1 to lowercase (a) or uppercase (A) letters, or lowercase (i) or uppercase (I) roman numerals

```

<OL type=I>
<LI> Library Collections </LI>
<UL type=square><LI> Books </LI>
<LI> Journals </LI> </UL>
<LI> Library Catalog </LI>
<LI> Electronic Resources </LI>
<UL type=disc><LI> CD-ROMs </LI>
<LI> Abstracts & Indexes </LI> </UL>
</OL>

```

UNESCO ICTLP Module 6: Lesson 1 32

The ** list item type attribute** can be used to change the bullets in disc, square or circle, and in from number 1 to lowercase (a) or uppercase (A) letters, or lowercase (i) or uppercase (I) roman numerals (shown in slide 33).

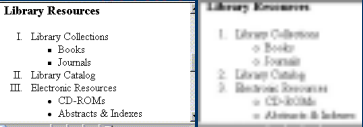
Slide 33

What are other HTML formatting tags?

```

<OL type=I>
<LI> Library Collections </LI>
<UL type=square><LI> Books </LI>
<LI> Journals </LI> </UL>
<LI> Library Catalog </LI>
<LI> Electronic Resources </LI>
<UL type=disc><LI> CD-ROMs </LI>
<LI> Abstracts & Indexes </LI> </UL>
</OL>

```



UNESCO ICTLP Module 6: Lesson 1 33

**Note**

Ask the students to play with the tags to gain more practice in HTML coding and help them decide what type to use if they are going to use “list” on their web page.

Slide 34

What are other HTML formatting tags?

- ◆ Definition list allows listing of terms and definitions. Uses <DL>, <DT> for the term and <DD> for definition.

```
<DL>
  <DT> Definition Term </DT>
  <DD> Definition </DD>
  <DT> Membership Card </DT>
  <DD> Users of the library must present their membership
card to avail of the library services and privileges. </DD>
</DL>
```


UNESCO ICTLP Module 6: Lesson 1 34

The **Definition list** allows listing of terms and definitions. Uses <DL>, <DT> for the term and <DD> for the definition. An example is shown in slide 35.

Slide 35

What are other HTML formatting tags?

```
<DL>
  <DT> Definition Term </DT>
  <DD> Definition </DD>
  <DT> Membership Card </DT>
  <DD> Users of the library must present their membership
card to avail of the library services and privileges. </DD>
</DL>
```



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**Exercise 2**

Ask the students to do Exercise 2. Explain clearly and check on their work. Provide tips and guidelines that will help them produce the desired page. Remind them of the activities in the previous lesson, which should help them define the design and content of their web pages. The pages created on this exercise ("collection.htm" and "services.htm") and the one created in exercise 1 ("about.htm") will be used in the hyperlinking part of this lesson.

Slide 37

How to add color

- ◆ The color of the background and text elements of the web page can vary using attributes of the <BODY> and tag
- ◆ To specify color, HTML uses the color names (16 colors supported by most browsers), or the numerical equivalent in RGB hexadecimal codes that correspond to over 14 million possible color, shades, hues and tints

White	#ffffff	Black	#000000	Blue	#0000ff
Red	#ff0000	Yellow	#ffff00	Green	#008000

UNESCO ICTLP Module 6: Lesson 1 37

How to add color

The color of the background and text elements of the web page can vary using attributes of the <BODY> and tag. To specify color, HTML uses the color names (16 colors supported by most browsers), or the numerical equivalent in RGB hexadecimal codes that correspond to over 14 million possible colors, shades, hues and tints. Example of colors names and hexadecimal codes: White #ffffff, Black #000000, Blue #0000ff, Red #ff0000, Yellow #ffff00, Green #008000.

Slide 38

How to add color

```
< BODY bgcolor="#ffffff" text="#000000"
link="#0000cc" vlink="#0000ff" alink="#ff0000" >
```

- ◆ **bgcolor** sets the background color of the whole page
- ◆ **text** defines the text color for the page
- ◆ **link** - unvisited link color
- ◆ **vlink** - visited link color
- ◆ **alink** - activated link color

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How to add color

The following are the <BODY> attributes that define the background color and text elements of a web page (shown in slide 39; note that both hexadecimal code and the color name is used) :

- bgcolor sets the background color of the whole page
- text defines the text color for the page
- link - unvisited link color
- vlink - visited link color
- alink - activated link color

Slide 39

How to add color

```
< BODY bgcolor="#8A2BE2"
text="#ffffff"
link="#0000ff"
vlink="#0000ff"
alink="#ff0000" >
```

```
< BODY
bgcolor="green"
text="white"
link="black"
vlink="black"
alink="red" >
```

My Library
Mission, Vision and Goals
MyLibrary aims to be the country's public virtual library with state-of-the-art resources and associated services, available to anyone, anytime, anywhere.

Objectives

- Acquire a comprehensive collection of digital libraries materials
- Develop appropriate user education and training packages

My Library
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Tip

Make use of several hexadecimal color code charts available on the Web. One good chart can be found at HTML Clinic (<http://www.htmlclinic.com/colorchart.php>) with a useful utility that allows you to define your own color. Use colors wisely,

and as much as possible use only colors supported by most browsers.

Slide 40

How to add color

◆ Color attribute of tag sets the color of selected text within the page overriding the text attribute on the <BODY> tag.

```
<CENTER>
<FONT color="#000000"><H1> My Library </H1>
</FONT>
<H2> Mission, Vision and Goals </H2></CENTER>
<FONT color="#FF0000">
<P> <B> MyLibrary </B> aims to be the country's
<B> <I> public virtual library </I> </B> with state-of-
the art resources and associated services,
available to anyone, anytime, anywhere. </P>
</FONT>
```

UNESCO ICTLP Module 6: Lesson 1 40

How to add color

The Color attribute of the tag sets the color of selected text within the page, overriding the text attribute on the <BODY> tag (shown in slide 41).

Slide 41

How to add color

```
<CENTER>
<FONT color="#000000"><H1> My Library </H1> </FONT>
<H2> Mission, Vision and Goals </H2></CENTER>
<FONT color="#FF0000">
<P> <B> MyLibrary </B> aims to be the country's <B> <I> public
virtual library </I> </B> with state-of-the art resources and
associated services, available to anyone, anytime, anywhere. </P>
</FONT>
```

My Library

Mission, Vision and Goals

MyLibrary aims to be the country's *public virtual library* with state-of-the art resources and associated services, available to anyone, anytime, anywhere.

Objectives

- Acquire a comprehensive collection of multimedia materials

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Exercise 3


Ask the students to do Exercise 3. Provide them with a copy of the Hexadecimal color codes and let them figure out the color they want to use by trying out the color codes.

Slide 43

How to add images

◆ Image and other graphical elements can be added on the web page through the tag using the src (source) attribute that points to the image / graphics

```
< IMG src="mylogo.gif" >
```



UNESCO ICTLP Module 6: Lesson 1 43

How to add images

Image and other graphical elements can be added to the web page through the tag, using the src (source) attribute that points to the image / graphics. For example, the image of a logo is used in showing how the tag and its attributes place graphical elements on a web page (as shown in slide 44).


Slide 44

How to add images

```

<IMG src="mylogo.gif">
<CENTER>
<H1> My Library </H1>
<H2> Mission, Vision and
Goals </H2> </CENTER>

```



My Library

Mission, Vision and Goals

MyLibrary aims to be the country's public virtual library with state-of-the-art resources and associated services, available to anyone, anytime, anywhere.

Objectives

UNESCO ICTLP Module 6: Lesson 1
44


Slide 45

How to add images

```

<CENTER>
<IMG src="mylogo.gif">
<H1> My Library </H1>
<H2> Mission, Vision and
Goals </H2>
</CENTER>

```



My Library

Mission, Vision and Goals

MyLibrary aims to be the country's public virtual library with state-of-the-art resources and associated services, available to anyone, anytime, anywhere.

Objectives

UNESCO ICTLP Module 6: Lesson 1
45

The <CENTER> tag is used with the tag to center the graphical element of the web page (as seen on slide 45).


Slide 46

How to add images

```

<IMG src="mylogo.gif" align="left">

```



My Library

Mission, Vision and Goals

MyLibrary aims to be the country's public virtual library with state-of-the-art resources and associated services, available to anyone, anytime, anywhere.

Objectives

- Acquire a comprehensive collection of multimedia materials
- Develop appropriate user education and training packages

Library Resources

I Library Collections

UNESCO ICTLP Module 6: Lesson 1
46

The **align** attribute of the **** tag is used to align the image in relation to the textual information near it (shown in slide 46)

Slide 47



Other attributes of the **** tag are used in slide 47. The **height** and **width** defines the size of the graphical element, and the **alt** attribute provides alternative textual information about the graphical element. The information supplied here is used by text-based browsers or browsers with images turned off; it can be briefly seen by placing the mouse over the image as shown in slide 47.

Slide 48

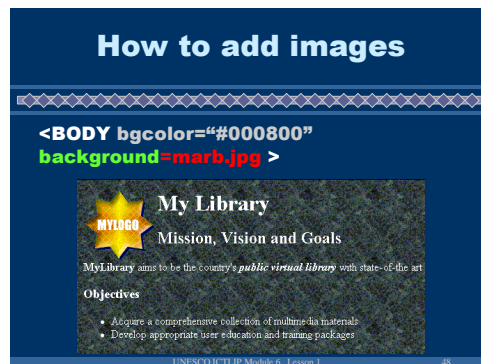


Image and other graphical elements can also be used as background for a page by using the **background** attribute of the **<BODY>** tag. For example, an image with a marbled texture is used as the background overriding the background color also defined in the **<BODY>** tag.



Exercise 4

Ask the students to do Exercise 4. Remind them of the need to observe and respect copyrighted materials.



Tip

Read this article on graphics for the Web - WDVl: Images for Web Pages
<http://www.wdvl.com/Authoring/Graphics/Images/>

Slide 50

How to create hyperlinks

- ◆ Hypertext links are created on web pages using the <A> anchor tag with the HREF (Hypertext Reference) attribute
- ◆ Hyperlinks connect your web pages together and point to other web documents (build your web site)

```
<A HREF="collection.htm">Library Collection</A>
```

```
<A HREF="http://www.unesco.org/webworld/portal_bib/">
UNESCO Libraries Portal </A>
```

UNESCO ICTLP Module 6: Lesson 1 50

How to create hyperlinks

Hypertext is one of the underlying technologies that make the World Wide Web work. Hypertext links are created on web pages using the <A> anchor tag with the HREF (Hypertext Reference) attribute. Hyperlinks connect your web pages together and point to other web documents. In other words, they build your web site. Text or graphical elements are used as the "trigger" (the object embedded invisibly with the target URL) that users click on to go to the linked document.

Shown in slide 51 are two different hyperlinks using text as the "trigger" highlighted with a color defined in the link attribute of the <BODY> tag. The first link uses a relative URL that points to a document within the same directory where the present HTML document is located. The second uses an absolute URL to point to an external resource that can be found on the Internet.

Slide 51

How to create hyperlinks

```
<A HREF="collection.htm">
Library Collection</A>
```

Library Resources

- I. [Library Resources](#)
 - Books
 - Journals
- II. Library Catalog

Links to Internet Resources

[UNESCO Libraries Portal](#)
Gateway the Web sites of libraries and information centres around the world

```
<A HREF="http://www.unesco.org/webworld/portal_bib/">
UNESCO Libraries Portal</A>
```

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Slide 52

How to create hyperlinks

- ◆ Hyperlinks are also used to connect to graphic and other media
- ◆ Icons and other graphic elements can be used as the "trigger" (object) users click on to jump to the referred document

```
<A HREF="mylibrary.jpg"> MyLibrary </A>
```

```
<A HREF "mylibrary.jpg"> <IMG src
"mylibrary_sm.jpg"> </A>
```

```
<A HREF "mylibrary.jpg" border=0>
<IMG src "mylibrary_sm.jpg"> </A>
```

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How to create hyperlinks


Hyperlinks are also used to point to graphic and other media like audio, video and animation. At the same time, icons and other graphic elements can also be used as the “trigger” (object) users click on to jump to the referred document. Slide 53 shows the highlighted text and the thumbnail of a building used to provide a link to a bigger picture. Graphical elements display a border around them if it is embedded with a link. The border also uses the link color, vlink and alink attribute in the <BODY> tag. To prevent the border from being displayed, with a link or not, use the border attribute of tag.

Slide 53


How to create hyperlinks

 MyLibrary





border=0



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Slide 54

How to create hyperlinks

◆ Link to e-mail address can be created to automatically open the e-mail program on the system supplying the address

Contact
me@mylibrary.edu



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Links to e-mail addresses can be created to automatically open the e-mail program on the system supplying the address



Exercise 5

Ask the students to do Exercise 5. Help them get hold of the materials listed for further readings, and guide them in order to accomplish the assigned task



Activity 3.2

- Read the following articles:
 - Dave Raggett. Getting started with HTML
<http://www.w3.org/MarkUp/Guide/>
 - Selena Sol. Introduction to Web Design
<http://www.wdvl.com/Authoring/HTML/Tutorial/>

- NCSA: A Beginner's Guide to HTML
<http://archive.ncsa.uiuc.edu/General/Internet/WWW/HTMLPrimerAll.html>
 - Writing for the Web: A Primer for Librarians <http://bones.med.ohio-state.edu/eric/papers/primer/toc.html>
2. Submit electronic copies of the web pages created using the lesson: about.htm, collections.htm, services.htm and index.htm. The links on the web pages should be working.



Note

Make use of quick start guides available on the Net and adjust them to the specific needs of the students.



References

_____(1997) HTML 3.2: quick reference. Que; Indianapolis, IN.

Aronson, Larry. (1994) HTML manual of style. Ziff-Davis; Emeryville, California.

Nielsen, Jakob. (1995) Multimedia and hypertext: the internet and beyond. AP Professional; Boston.

Powell, Thomas. (1999A) HTML : the complete reference. McGraw-Hill; Osborne.

Stanek, William Robert. (1996) HTML, JAVA, CGI, VRML, SGML: web publishing. Sams.net; Indiana.

Electronic Resources

HTML Clinic [Online] URL <http://www.htmlclinic.com>

NCSA: *A Beginner's Guide to HTML* [Online] URL
<http://archive.ncsa.uiuc.edu/General/Internet/WWW/HTMLPrimerAll.html>

Raggett, Dave. *Getting started with HTML*. [Online] URL
<http://www.w3.org/MarkUp/Guide/>

Richmond, Alan. Web Developer's Virtual Library: *Images for Web Pages*.
INT Media Group [Online] URL
<http://www.wdvl.com/Authoring/Graphics/Images/>

Richmond, Alan. Web Developer's Virtual Library: *Introduction to HTML*.
INT Media Group [Online] URL
<http://wdvl.internet.com/Authoring/HTML/Intro/>

Schnell, Eric H. *Writing for the Web: A Primer for Librarians*. [Online] URL <http://bones.med.ohio-state.edu/eric/papers/primer/toc.html>

Sol, Selena. *Introduction to Web Design*. [Online] URL <http://www.wdvl.com/Authoring/HTML/Tutorial/>

Stephanos, Piperoglou. WebRef: HTML with Style. *So what is this HTML thing?* INT Media Group, Incorporated [Online] URL <http://www.webreference.com/html/tutorial1/1.html>

W3C: HTML 4.01 Specification. [Online] URL <http://www.w3.org/TR/html401/>

W3C: *HyperText Markup Language Home Page*. [Online] URL <http://www.w3.org/MarkUp/>

What is HTML? InterNIC 15 Minutes Series. (mirrored by Netskills) [Online] URL <http://www.netskills.ac.uk/mirrors/15min/html/html/sld01.html>

Webmonkey: Reference. *HTML Cheatsheet*. [Online] URL http://hotwired.lycos.com/webmonkey/reference/html_cheatsheet/

Lesson 4

Web site publishing and maintenance

Teacher's Guide

Module 6. Web Page Concept and Design: Getting a Web Site Up and Running

Lesson 4. Web Site Publishing and Maintenance



Note

The Teacher's Guide provides notes and tips for the PowerPoint presentation that you will use in conducting the course.

Slide 1



Tip

Now that you are finished with the design and creation of your web site, the last step is to publish and make it available on the Web. However, the process doesn't stop there. Because of the dynamic nature of the Web and its content, person(s) responsible must continuously manage, maintain and update the information published on the web site. To do this requires you to upload the web pages to a web server that is connected to the Internet.

Slide 2



Scope

1. What are the steps in publishing a web site?
2. Why is it important to secure a domain name?

3. What web hosting services are available?
4. What do you need to upload the web pages to a web host?
5. What are the steps in updating and maintaining a web site?
6. How do you promote and market your web site?
7. What are the ethical, legal and other issues related to web publishing?

Slide 3

Learning outcomes

- ◆ Identify the steps in web publishing, update and maintenance
- ◆ Realize the importance of a domain name
- ◆ Differentiate between web hosting services
- ◆ Upload web pages to a web host
- ◆ Demonstrate the ability to promote and market a library's web site
- ◆ Address ethical, legal issues and other concerns in web publishing

UNESCO ICTLP Module 6: Lesson 1

Learning outcomes

At the end of the lesson, students should be able to:

1. Identify the steps in web publishing, update and maintenance
2. Realize the importance of a domain name
3. Differentiate between web hosting services
4. Upload web pages to a web host
5. Demonstrate an ability to promote and market a library's web site
6. Address ethical, legal and other issues related to web publishing

Slide 4

What are the steps in publishing a web site

- ◆ Secure a domain name
- ◆ Acquire web hosting services
- ◆ Test the website
- ◆ Upload the web pages
- ◆ Update the information
- ◆ Validate the links
- ◆ Promote the site
- ◆ Address issues and concerns in web publishing

UNESCO ICTLP Module 6: Lesson 1

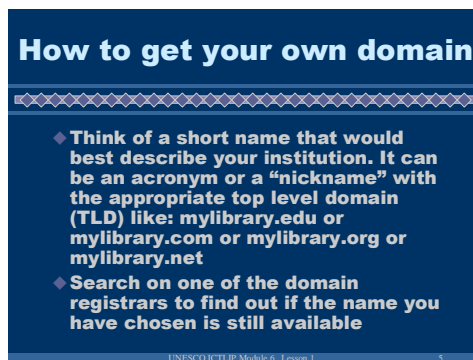
What are the steps in publishing a web site?

1. Secure a domain name - a domain name is required to establish presence on the Internet. It is a unique name that serves as the address of a web site. Several Domain Name Servers (DNS) operating on the Internet transform this name into an Internet protocol (IP) address. IP address is a set of unique numbers, usually shown in groups separated by periods like this:

201.128.32.1 that identifies a computer on the Internet. Each set corresponds to a single machine connected to the Internet.

2. Acquire web hosting services - web pages should be uploaded to a web server that will work as the host for the web site. Generally, either you can set up your own web server or you can use a web hosting service offered by a commercial information solution provider.
3. Test the website - the web site must be tested before uploading it to the web server to ensure that everything will work, and especially the links between and among the web pages.
4. Upload the web pages - putting the web site onto a live host, a web server connected to the Internet, usually requires the use of FTP client software (unless you have access to your own web server)
5. Update the information - the timeliness, currency and accuracy of information on a web site is important; it is imperative that periodical updates are carried out on the web site's content.
6. Validate the links - due to the dynamic nature of the Web, links on the web site must be validated to eliminate or at least minimize dead links and outdated information
7. Promote the site - a web site's success largely depends on the type and quality of information and services it provides. However, to attract and reach a broader base of clients and customers, these services should be publicized using various marketing and promotional techniques.
8. Address issues and concerns in web publishing - in web publishing one must be aware of and address various ethical, legal and other issues.

Slide 5



How to get your own domain

Think of a short name that would best describe your institution. It can be an acronym or a “nickname” of your institution or library, with a top level domain (TLD) like, mylibrary.edu or mylibrary.com or mylibrary.org or mylibrary.net that correctly applies to your institution. Search in one of the domain registrars to find out if the name you have chosen is still available.

Slide 6

How to get your own domain

- ◆ Try it on Network Solutions at <http://www.networksolutions.com> for .com, .org, and .net TLDs
- ◆ You can also search at InterNIC whois search <http://www.internic.net/whois.html>
- ◆ You can also search for other domain registrars at the InterNIC site

UNESCO ICTLP Module 6: Lesson 1 6

How to get your own domain

Try searching the domain registrars for the name you have chosen:

- Try it on Network Solutions at <http://www.networksolutions.com> for .com, .org, and .net TLD's
- You can also search at InterNIC Whois search at <http://www.internic.net/whois.html>
- You can also search for other domain registrars at the InterNIC site

Slide 7

How to get your own domain

- ◆ Look for accredited registrars in your country if you want to use your country code TLD
- ◆ Find out if the domain you want with your country code TLD is available by searching at <http://www.uwhois.com>
- ◆ Register your domain name in any of the domain registrars by providing the needed information and pay the necessary fees

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How to get your own domain

Look for accredited registrars in your country if you want to use your country code TLD. Find out if the domain you want with your country code TLD is available by searching at <http://www.uwhois.com>. Register your domain name in any of the domain registrars by providing the needed information and paying the necessary fees.

Slide 8

How to get your own domain

- ◆ If you are part of an organization like a university, check with your IT department. It is possible that your organization already have a domain name.
- ◆ The person or group responsible can give you a subdomain name like mylibrary.univ.edu or mylibrary.digital.com

UNESCO ICTLP Module 6: Lesson 1 8

How to get your own domain

If you are part of an organization like a university, check with your IT department. It is possible that your organization already has a domain name. The person or group responsible can give you a subdomain name like mylibrary.univ.edu or mylibrary.digital.com

**Activity 4-1**

1. Read:
 - *InterNIC FAQs on the Domain Names, Registrars, and Registration.* [Online] URL <http://www.internic.net/faqs/domain-names.html>
 - Mickiewicz, Matt. *Your Own Domain Name.* SitePoint. [Online] URL <http://www.webmasterbase.com/article/6>
 - Heng, Christopher. *How to Register Your Own Domain Name.* Thesitewizard.com [Online] URL <http://www.thesitewizard.com/archive/registerdomain.shtml>
2. Choose your own domain name, then search it through one of the domain registrars

**Tip**

Read this for more information:

Learn2 Register a Domain Name. <http://www.learn2.com/08/0811/0811.asp>

Slide 10

Where to host your web site?

- ◆ There are three ways to host your web site:
 - Have your own web server
 - Host it on commercial web hosting sites for free
 - Host in on commercial web hosting sites for a fee
- ◆ Each option has its advantages and disadvantages

UNESCO ICTLP Module 6: Lesson 1 10

Where to host your web site?

There are three ways to host your web site:

- Have your own web server
- Host it on commercial web hosting sites for free
- Host in on commercial web hosting sites for a fee

Each option has its advantages and disadvantages

Slide 11

Where to host your web site?

- ◆ Having your own web server gives you greater control over the application programs running on your server and access to your web site for updating, troubleshooting and maintenance
- ◆ Must meet the the hardware and software requirements with adequate bandwidth Internet connection
- ◆ Personnel must have expertise in setting up, updating, managing and maintaining servers

UNESCO ICTLP Module 6: Lesson 1 11

Where to host your web site?

Having your own web server gives you greater control over the application programs running on your server and access to your web site for updating, troubleshooting and maintenance.

However, the system must meet the necessary hardware and software requirements, and have an adequate bandwidth Internet connection. Moreover, key personnel must have expertise in setting up, updating, managing and maintaining servers.

Slide 12

Where to host your web site?

- ◆ Free web hosting sites mean that you need not incur the cost of buying the necessary hardware and software, pay for Internet connection bandwidth, or hire personnel
- ◆ Downside: loaded with advertisements, limited file storage size, and will be restricted to certain applications that will run on your web site
- ◆ Typically have a slow download capability and weak file security

UNESCO ICTLP Module 6: Lesson 1 12

Where to host your web site?

Free web hosting sites mean that you need not incur the cost of buying the necessary hardware and software, pay for Internet connection bandwidth, or hire personnel. The down side is that your web site will be loaded with advertisements, will have limited file storage size, and will be restricted to certain applications that will run on your web site. Free web hosting sites typically have a slow download capability and weak file security.

Slide 13

Where to host your web site?

- ◆ Commercial web hosting companies usually offer two options:
- ◆ file storage space for hosting your web site with support for some application tools like flash or cgi-bin
- ◆ or all these features plus services such as the development and design of your web site

UNESCO ICTLP Module 6: Lesson 1 13

Where to host your web site?

Commercial web hosting companies usually offer two options: file storage space for hosting your web site with support for some application tools like flash or cgi-bin; or all these features plus services such as the development and design of your web site.

Slide 14

Where to host your web site?

- ◆ High cost relative to the amount of services being provided
- ◆ Weak file security and confidentiality having to trust someone to have full access to your web site even with a non-disclosure agreement
- ◆ Will become dependent to the company providing services and its stability and capability to continue doing business

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Where to host your web site?

Commercial web hosting services are also known for demanding large fees relative to the amount of services being provided. There is also a big danger of weak file security and confidentiality; you must trust an outside organization with full access to your web site, and this can be risky even with a non-disclosure agreement. Lastly, there is the risk of becoming overly dependent on the company providing services, and its stability and capability to continue doing business.

Slide 15

Where to host your web site?

- ◆ Your choice should be based on the purpose of the web site, the target audience, the information and services to be provided, and your organizations human, material and financial resources
- ◆ Provisions should be allotted for the continuous growth of your institution's web site

UNESCO ICTLP Module 6: Lesson 1

15

Where to host your web site?

Your choice should be based on the purpose of the web site, the target audience, the information and services to be provided, and your institution's human, material and financial resources. Provisions and considerations should be made for the continuous growth of your institution's web site.

**Activity 4-2**

1. Read the following articles:
 - Learn the Net: *Finding a Home for Your Site*. Michael Lerner Productions. [Online] URL <http://www.learnthenet.com/english/html/51server.htm>
 - Mickiewicz, Matt. Choosing a Webhosting Company. SitePoint. [Online] URL <http://www.webmasterbase.com/article/5>
 - Heng, Christopher. How to Choose a Web Host. Thesitewizard.com [Online] URL <http://www.thesitewizard.com/archive/findhost.shtml>
2. Visit some of the web hosting sites offering free or commercial hosting and compare the cost, file storage space, features and added value services
3. Register at one of the free web hosting site for example Netfirm <http://www.netfirms.com> to be able to complete the activities for this lesson
4. You may opt to use your own web server for the activities

**Tip**

Read this for more information:

Bouton, Barbara. Getting your site on-line e-fuse.com [Online] URL http://www.efuse.com/Grow/your_site_s_home.html

Slide 18

How to upload your web site

- ◆ Your web site must be uploaded to a web server connected to the Internet in order to be accessed on the Web, the host for your web site
- ◆ Use a FTP client program to connect to your host in order to upload (transfer) your web site (files and other documents) to the server

UNESCO ICTLP Module 6, Lesson 1 18

How to upload your web site

Your web site must be uploaded to a web server, the host for your web site, connected to the Internet in order to be accessed on the Web. Use a FTP client program to connect to your host in order to upload (transfer) your web site (files and other documents) to the server.

Slide 19

How to upload your web site

- ◆ One of the most popular FTP program for PC is WS_FTP LE downloadable at FTPplanet.com and free for personal and educational use
- ◆ Test you web site before uploading to the server, then test it again once it has been uploaded

UNESCO ICTLP Module 6, Lesson 1 19

How to upload your web site

One of the most popular FTP programs for PCs is WS_FTP LE downloadable at FTPplanet.com and it is free for personal and educational use. Test you web site before uploading to the server, then test it again once it has been uploaded.

**Activity 4-3**

1. Read these tutorials on how to upload web pages:
 - Uploading Your Pages [Online] URL
http://html.about.com/library/beginning/bl_begin122298.htm
 - Uploading Web Pages to Your Host [Online] URL
<http://www.ftpplanet.com/ftpresources/webpage.htm>
2. Download WS_FTP LE or get hold of an FTP program that will work with your system
3. WS_FTP is supported at Netfirms.com and has its own help file on how to use WS_FTP
4. Connect to the web server of your host and upload your web pages

5. Test your web site and submit your URL to your course coordinator/instructor



Tip

Read this for more information:

FTP 101 - A Beginner's Guide [Online] URL

<http://www.ftpplanet.com/ftpresources/basics.htm>

Slide 22

How to manage your web site

- ◆ The information in your web site should be updated for timeliness and accuracy
- ◆ Due to the Internet's dynamic nature, links on you site should be validated periodically to eliminate or at least minimize dead links - links to unavailable information
- ◆ Make use of your Web site to provide where needed new information and services

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How to manage your web site

The information in your web site should be updated for timeliness and accuracy. Due to the Internet's dynamic nature, links on your site should be validated periodically to eliminate or at least minimize dead links - links to unavailable information. Furthermore, you should make use of your Web site to provide where needed new information and services

Slide 23

How to manage your web site

- ◆ Provide for user feedback through email and/or forms
- ◆ Measure and analyze the web site traffic
- ◆ Use the resources available on the Web for maintaining web sites: HTML validator, Netmechanic, etc.

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How to manage your web site

- Provide for user feedback through email and/or forms
- Measure and analyze the web site traffic
- Use the resources available on the Web for maintaining web sites: HTML validator, Netmechanic, etc.



Activity 4-4

Read the following:

- Learn the Net: Maintenance and Updating Michael Lerner Productions [Online] URL <http://www.learnthenet.com/english/html/52publiz.htm>
- Learn the Net: Getting Feedback Michael Lerner Productions [Online] URL <http://www.learnthenet.com/english/html/54feedbk.htm>
- Learn the Net: Measuring Traffic Michael Lerner Productions [Online] URL <http://www.learnthenet.com/english/html/55measur.htm>

Slide 25

How to promote your web site

- ◆ Your web site promotion should be done using all the available resources at your disposal, tri media, on the Net, by word of mouth, demos on trainings and workshops etc...
- ◆ Aside from press releases and advertisements on newspapers, radio and television, you can submit your web site to search engines to establish your presence online

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How to promote your web site

Your web site promotion should be done using all the available resources at your disposal: tri media, on the Net, by word of mouth, demonstrations, training sessions, workshops, etc. Aside from press releases and advertisements in newspapers, radio and television, you can submit your web site to search engines to establish your presence online.

Slide 26

How to promote your web site

- ◆ Search engines would require you to submit a description of your web site, what information, services or products are available, who is responsible and other related information
- ◆ You can also make posters, flyers and leaflets with a description of your web site and its URL
- ◆ Promote it during workshops and training sessions

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How to promote your web site

Search engines require you to submit a description of your web site, what information, services or products are available, who is responsible, and other related information. You can also make posters, flyers and leaflets with a description of your web site and its URL. In addition, you can promote it during workshops and training sessions.



Activity 4-5

1. Write a short description of your web site
2. Submit it to different search engines.
3. Submit a copy to your course instructor/coordinator

Slide 28

Ethics, legal, and other issues in Web publishing

- ◆ **Netiquettes - accepted behavior on the Net**
- ◆ **Privacy and confidentiality - protect your privacy and respect confidentiality of records**
- ◆ **File security - from viruses and hackers; provision for file back up and disaster recovery**

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Ethics, legal, and other issues in Web publishing

- Netiquettes - accepted behavior on the Net
- Privacy and confidentiality - protect your privacy and respect confidentiality of records
- File security - from viruses and hackers; provision for back up and disaster recovery

Slide 29

Ethics, legal, and other issues in Web publishing

- ◆ **Copyright and Intellectual Property Rights**
- ◆ **Fair Use of copyrighted works for educational and research purposes**
- ◆ **Reference citation of electronic resources**
- ◆ **Obtaining permission to link to web sites before making the link**

UNESCO ICTLP Module 6: Lesson 1 29

Ethics, legal, and other issues in Web publishing

- Copyright and Intellectual Property Rights
- Fair Use of copyrighted works for educational and research purposes
- Reference citation of electronic resources
- Obtaining permission to link to web sites before making the link



Ethics, legal, and other issues in Web publishing

- Web site evaluation – quality, accuracy, timeliness of information, design effectiveness
- Accessibility design – provisions for the physically handicapped, especially the visually challenged who uses the Internet



Activity 4-6

Read these articles:

1. Copyright Law and Fair Use. Stanford. [Online] URL <http://www-sul.stanford.edu/copyright.html>
2. Copyright Basics. Copyright Office. Library of Congress. [Online] URL <http://www.loc.gov/copyright/circs/circ1.html>
3. Rinaldi, Arlene H. The Net: User Guidelines and Netiquette. [Online] URL <http://www.fau.edu/netiquette/net/>
4. WebRef: What Makes a Great Web Site? INT Media Group. [Online] URL <http://webreference.com/greatsite.html> /



References

Franks, Mike. (1995) The Internet publishing handbook: for World Wide Web, Gopher and WAIS. Addison-Wesley; Reading Massachusetts.

Nielsen, Jakob. (1995) Multimedia and hypertext: the internet and beyond. AP Professional; Boston.

Stanek, William Robert. (1996) HTML, JAVA, CGI, VRML, SGML: web publishing. Sams.net; Indiana.

Electronic Resources

Bouton, Barbara. Getting your site on-line e-fuse.com [Online] URL http://www.efuse.com/Grow/your_site_s_home.html

Copyright Basics. Copyright Office. Library of Congress. [Online] URL <http://www.loc.gov/copyright/circs/circ1.html>

FTP 101 - A Beginner's Guide [Online] URL
<http://www.ftpplanet.com/ftpresources/basics.htm>

Heng, Christopher. How to Choose a Web Host. Thesitewizard.com [Online]
URL <http://www.thesitewizard.com/archive/findhost.shtml>

Heng, Christopher. *How to Register Your Own Domain Name*.
Thesitewizard.com [Online] URL
<http://www.thesitewizard.com/archive/registerdomain.shtml>

Learn2 Register a Domain Name. [Online] URL
<http://www.learn2.com/08/0811/0811.asp>

Learn the Net: *Finding a Home for Your Site*. Michael Lerner Productions
[Online] URL <http://www.learnthenet.com/english/html/51server.htm>

Learn the Net: *Getting Feedback*. Michael Lerner Productions [Online] URL
<http://www.learnthenet.com/english/html/54feedbk.htm>

Learn the Net: *Maintenance and Updating*. Michael Lerner Productions
[Online] URL <http://www.learnthenet.com/english/html/52publiz.htm>

Learn the Net: *Measuring Traffic*. Michael Lerner Productions [Online] URL
<http://www.learnthenet.com/english/html/55measur.htm>

Learn the Net: *Publicizing Your Site*. Michael Lerner Productions [Online]
URL <http://www.learnthenet.com/english/html/52publiz.htm>

Learn the Net: *Understanding Copyrights*. Michael Lerner Productions
[Online] URL <http://www.learnthenet.com/english/html/44copyr.htm>

Mickiewicz, Matt. *Your Own Domain Name*. SitePoint. [Online] URL
<http://www.webmasterbase.com/article/6>

Mickiewicz, Matt. *Choosing a Webhosting Company*. SitePoint. [Online]
URL <http://www.webmasterbase.com/article/5>

Myers, Richard. *Maintenance Tutorial*. HTMLCenter. [Online] URL
<http://www.htmlcenter.com/tutorials/tutorials.cfm?ID=113&type=general>

Rinaldi, Arlene H. The Net: User Guidelines and Netiquette. [Online] URL
<http://www.fau.edu/netiquette/net/>

Uploading Your Pages [Online] URL
http://html.about.com/library/beginning/bl_begin122298.htm

Uploading Web Pages to Your Host [Online] URL
<http://www.ftpplanet.com/ftpresources/webpage.htm>

WebRef: What Makes a Great Web Site? INT Media Group. [Online] URL
<http://webreference.com/greatsite.html>



Glossary of terms used in Module 6

- ◆ **Access.** Refers to the ability of the user to connect to a database, or Internet service.
- ◆ **Accessibility.** Guidelines for designing web contents accessible to people with disabilities and more available to all users whatever software, hardware and platform they are using to access the Web and for making it easier to find information on the Web.
- ◆ **Anchor.** Text and graphical elements embedded with hyperlinks and other objects users click on to jump to a web document pointed by the browser.
- ◆ **Applications software.** A program that is designed to perform a specific task.
- ◆ **ASCII.** The encoding system called American Standard Code for Information Interchange
- ◆ **Backup.** Pertains to a procedure or device to make a duplicate of a system or data for future use in the event of loss from the server or hard disk due to various factors
- ◆ **Client** - Computers that requests information on a web server.
- ◆ **Client / server** - The computing architecture that designates computers as servers or clients dividing the workload.
- ◆ **Content.** Textual, graphic elements, and other information in several media types that comprises a web page.
- ◆ **Design.** Overall style, structure, and presentation of a web page.
- ◆ **Domain name.** The familiar name of the computer hosting the web site of an individual or organization that correspond to a series of numbers (IP address) that serve as routing addresses on the Internet.
- ◆ **Domain Name System (DNS).** An Internet service that translates domain names into IP addresses.
- ◆ **DNS Servers.** Servers on the Internet that acts as Internet Directory transforming domain names into IP addresses. Points to the location of a web host by providing their IP address transformed from their domain names.
- ◆ **Domain Name Registrars.** Companies accredited by ICANN (The Internet Corporation for Assigned Names and Numbers) that offers registration services for the domain names of organizations and individuals.
- ◆ **Electronic mail.** A communications tool used to send messages to and from computers. Also called e-mail.
- ◆ **End user.** Same as user. The individual providing input or using output from the computer.
- ◆ **FTP.** File Transfer protocol. Refers to the protocol and the program used to transfer files from one computer to another.
- ◆ **Graphics.** Images, Icons, and other graphical elements found on a web page.
- ◆ **Home page.** The main page of a Web site that typically serve as an index or table of contents to other web pages.
- ◆ **Hyperlinks.** The embedded hypertext links that points to other web pages and other related resources.

- ◆ **Hypertext.** Presents and relates information in a non-linear and non-hierarchical organization allowing the user to view related information through a system of hypertext links (hyperlinks).
- ◆ **HyperText Markup Language (HTML).** The standard language used to create web pages. Markup language that uses tags and attributes that web browsers interpret to display web pages on the screen.
- ◆ **HyperText Transfer Protocol (HTTP).** The underlying protocol behind the World Wide Web.
- ◆ **ICANN.** The Internet Corporation for Assigned Names and Numbers (ICANN) is the non-profit corporation that was formed to assume responsibility for the IP address space allocation, protocol parameter assignment, domain name system management, and root server system management functions previously performed under U.S. Government contract by IANA and other entities
- ◆ **Icons.** Pictographs that are used in a Windows environment to indicate operations such as copy, save, delete, etc.
- ◆ **Information.** The output of information processing. Useful data
- ◆ **Information system.** Generally a computer based system for storing and retrieving data and information.
- ◆ **Intellectual property rights.** Recognized legal claim to ownership of recorded or manifested ideas.
- ◆ **Interactive.** Pertaining to online where there is immediate interaction between user and the computer.
- ◆ **InterNIC.** The Internet's Network Information Center has been established to provide the public information regarding Internet domain name registration services.
- ◆ **Internet.** A global network of computers communicating under one set of guidelines formally called the TCP/IP.
- ◆ **Intranet.** An internal network belonging to an organization that uses TCP/IP with access limited only to members of the organization.
- ◆ **IP address.** A series of numbers called Internet Protocol numbers that serve as routing addresses on the Internet used to locate and communicate information on the Internet.
- ◆ **Navigation.** The system used to explore and view the set of information and related information on a web site.
- ◆ **Netiquette.** The accepted behavior online on the Net.
- ◆ **Program.** A set of instructions for the computer to perform a particular function. Also called software.
- ◆ **Protocols.** The set of rules and standards computers used to communicate with each other.
- ◆ **Site structure.** The overall layout of the web site, the connection and relationship of web documents on a web site.
- ◆ **Simple Mail Transfer Protocol (SMTP).** The protocol used for sending and receiving electronic mail.
- ◆ **Text editor.** Applications programs used to edit ASCII files like Notepad.
- ◆ **Top-level domains.** Limited number of predefined suffixes attached to Internet domain names. Some of these are: .com, .net, .org, .edu, and .mil.

- ◆ **Uniform Resource Locator (URL).** Is the uniform naming scheme that specifies unique addresses for web servers, documents and other resources, no matter what its access protocol.
- ◆ **Upload.** The process of transferring files from a client computer to a server through the Internet.
- ◆ **User friendly.** Used to describe a user interface that enables the inexperienced user to interact successfully with the computer
- ◆ **Web browser.** Application software used to search and display web pages. The client software used to access the Web.
- ◆ **Web host.** The machine that hosts web sites and applications programs needed to serve documents on the Internet. See web server
- ◆ **Web page.** An electronic document on the World Wide Web formatted using HTML and displayed using a web browser.
- ◆ **Web server.** The computer running application software that listens and respond to a client computer's request made through a web browser.
- ◆ **Web site.** A collection of related web pages of a certain individual, group, or organization connected through a system of hyperlinks, hosted in a particular domain.
- ◆ **World Wide Web.** A global hypertext information system that serve as a way to access and provide information in various media via the Internet.

Evaluation Form

To help us enhance the quality and effectiveness of this module, complete and return this evaluation form.

Module: _____

Date: _____

Teacher: _____

Please rate the module on the following categories using the scales below by drawing a circle around the appropriate number.

5=Strongly Agree [SA] 4=Agree [A] 3=Neutral [N] 2=Disagree [D] 1=Strongly Disagree [SD]

Objectives and Content	SA	A	N	D	SD
Were the course objectives clearly stated?	5	4	3	2	1
Were the objectives achieved?	5	4	3	2	1
Were the topics presented relevant to your work?	5	4	3	2	1
Was the course structured in a logical way?	5	4	3	2	1
Were the activities appropriate to the content of this course?	5	4	3	2	1
Was the course easy to follow?	5	4	3	2	1
Was the course interesting and enjoyable?	5	4	3	2	1
Were your expectations met?	5	4	3	2	1

Presentation	SA	A	N	D	SD
Were the concepts and techniques explained clearly?	5	4	3	2	1
Were you encouraged to actively participate during the course?	5	4	3	2	1
Were your individual questions/problems discussed to your satisfaction?	5	4	3	2	1
Was the course well paced?	5	4	3	2	1
Were the lessons presented in a clear and well organized manner?	5	4	3	2	1

Teacher	SA	A	N	D	SD
Was the teacher knowledgeable in the subject matter?	5	4	3	2	1
Did the teacher present the material effectively?	5	4	3	2	1
Did the teacher show interest in and enthusiasm for the subject?	5	4	3	2	1
Was the teacher effective in answering questions clearly and constructively?	5	4	3	2	1

Learning Environment

SA A N D SD

Are the course materials easy to read?

5 4 3 2 1

Were the manual and the other handouts useful?

5 4 3 2 1

Were the visual aids useful?

5 4 3 2 1

Was the venue suitable for the course?

5 4 3 2 1

Was the time frame appropriate for the course?

5 4 3 2 1

The Training in General

Before the training began, how experienced were you with the subject of training?

1 (Novice) 2 (Intermediate) 3 (Advanced) 4 (Expert)

How useful was the training for your level of experience?

1 (Not Useful) 2 (Fairly Useful) 3 (Useful) 4 (Very Useful)

Do you feel you have gained new skills and knowledge?

Yes

No

What is the most important concept or skill conveyed in this training?

What is the least important concept or skill conveyed in this training?

What additional information should be included in the training?

What did you like most about the training materials?

What did you like least about the training materials?

Other comments or suggestions:

THANK YOU!

Student's Guide

Module 6. Web Page Concept and Design: Getting a Web Site Up and Running

Introductory note

This is Module 6 of the *ICT for Library and Information Professionals (ICTLIP) Training Package for Developing Countries*. This Package is intended to provide the knowledge and skills required to deal with the application of ICT to library and information services. It is meant for library and information personnel who may become trainers in the area. The Package has been developed by the UNESCO Asia & Pacific Regional Office with funding from the Japanese Fund in Trust for Communication and Information. It contains six modules:

Module 1 - Introduction to Information and Communication Technologies

Module 2 - Introduction to Integrated Library Systems

Module 3 - Information Seeking in an Electronic Environment

Module 4 - Database Design, and Information Storage and Retrieval

Module 5 - The Internet as an Information Resource

Module 6 - Web Page Concept and Design: Getting a Web Page Up and Running

All the modules have a Teacher's Guide and a Student's Guide. The Student's Guide may be copied by the students in electronic format. The Teacher's Guide should not be distributed to the students.

The Student's Guide contains the following:

- Module Introduction
 - Introductory note
 - Learning outcomes
 - Course outline
 - Learning environment
 - Duration
 - Course content and schedule
 - Typographical conventions
- Handouts: Lessons 1-7
- Glossary
- Activities
- List of references

Learning outcomes

Module 6 discusses the principles of web page creation and design, and the concepts involved, and introduces the basic steps in setting up and maintaining a web site.

By the end of the course, students should be able to:

1. Define concepts and terms, as well as understand the technology of web page creation and design
2. Identify the principles and standards followed in web page creation and design
3. Create web pages using HTML and other tools
4. Develop a simple web site ready for uploading to the World Wide Web
5. Evaluate web pages and web sites
6. Address ethical, legal and other issues related to web publishing

Note: The content of Module 1 must be understood by all students (either by students first completing Module 1, or as a result of prior knowledge of ICT) before they proceed with the remaining five modules in the *ICTLIP Training Package*.

Course Outline

Lesson 1. How the World Wide Web works

Scope

- What is the World Wide Web?
- What makes the Web work?
- How does the World Wide Web work?
- What is a web server?
- What is a web browser?
- What is a web page?
- How does a web page work?
- What is a home page?
- What is a web site?

Objectives

At the end of this lesson, students should be able to:

- Demonstrate an understanding of the concepts, terms, and technology behind the World Wide Web
- Describe how the World Wide Web works
- List several web servers
- Identify different web browsers
- Define what is a web page
- Differentiate a home page from a web site
- Understand how a web page works

Lesson 2. Principles of Web Page Design

Scope

- What are the first steps in web page design?
- What are the elements of a web page?

- What are the do's and don't's of web page design?
- What are the guidelines in creating library websites?

Objectives

At the end of the lesson, students should be able to:

- Identify the first steps in web page design
- Recognize the elements of a web page
- Realize the do's and don't's in web page creation and design
- Apply guidelines in designing library websites

Lesson 3. Creating web pages using HTML

Scope

- What is HTML?
- What are the tools needed for creating web pages using HTML?
- What are the basic HTML tags?
- How to create a web page using HTML?
- How to build a web site using HTML?

Objectives

At the end of this lesson, students should be able to:

- Define what is HTML
- Determine the basic tools for creating web pages using HTML
- Learn basic HTML coding and tags
- Use HTML to create web pages
- Build a web site using HTML

Lesson 4. Web Site Publishing and Maintenance

Scope

- What are the steps in publishing a web site?
- Why is it important to secure a domain name?
- What are the web hosting services available?
- What do you need to upload web pages to a web host?
- What are the steps in updating and maintaining a web site?
- How do you promote and market your web site?
- What are the ethical, legal issues and other concerns in web publishing?

Objectives

At the end of this lesson, students should be able to:

- Identify the steps in web publishing, update and maintenance

- Realize the importance of a domain name
- Differentiate between web hosting services
- Upload web pages to a web host
- Demonstrate the ability to promote and market a library's web site
- Address ethical, legal and other issues in web publishing

Learning Environment

The training room must have the facilities and technical support required to support the course. It should have computers with CD-ROM drives and online access to the Internet and other resources such as OPACs and CD-ROM databases. The Module should be conducted by a teacher who is knowledgeable and skilled in using computers, the Internet, CD-ROMs and a variety of electronic resources, and who is skilled in teaching courses of this nature.

Duration

The Module is designed for a one-week course of 40 hours: eight hours per day for five days.

Course content and schedule.

Day	Lessons
Day 1	Lesson 1. How the World Wide Web works
Day 2	Lesson 2. Principles of Web Design
Day 3 & 4	Lesson 3. Creating Web Pages Using HTML
Day 5	Lesson 4. Web Publishing and Maintenance

Typographical conventions



Activity

Activity for the students



Reference

Reference and further reading materials



Glossary

Glossary of terms used in the module

Lesson 1

How the World Wide Web works

Web Page Concept and Design :

Getting a Web Site Up and Running



Lesson 1. How the World Wide Web works

UNESCO ICTLP Module 6, Lesson 1

Scope

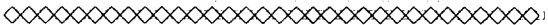


- ◆ What is the World Wide Web?
- ◆ What makes the Web work?
- ◆ How does the World Wide Web work?
- ◆ What is a web server?
- ◆ What is a web browser?
- ◆ What is a web page?
- ◆ How does a web page work?
- ◆ What is a home page?
- ◆ What is a web site?

UNESCO ICTLP Module 6, Lesson 1

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Learning outcomes



- ◆ Demonstrate an understanding of the concepts, terms, and technology behind the World Wide Web
- ◆ Describe how the World Wide Web works
- ◆ List several web servers
- ◆ Identify different web browsers
- ◆ Define what is a web page
- ◆ Differentiate a home page from a web site
- ◆ Understand how a web page works

UNESCO ICTLP Module 6, Lesson 1

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What is the World Wide Web?

World Wide Web

- ◆ a way to access and provide information in various media via the Internet
- ◆ a hypertext based system for providing, organizing and accessing information that allows users to jump from one information space to another
- ◆ comprises servers and client computers on the Internet that communicate using the hypertext transfer protocol (http)

UNESCO ICTLP Module 6, Lesson 1

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What is the World Wide Web?

World Wide Web

- ◆ information resource consisting of web pages that organize and present vast amount of information (mostly text embedded with images, audio, video, or animation), and other resources (databases, interactive multimedia, virtual environments, etc.)
- ◆ body of information available on the Web

UNESCO ICTLP Module 6, Lesson 1

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Activity 1.1

- ◆ Visit the following to know more about the World Wide Web
- ◆ How the Web Works
 - <http://www.learnthenet.com/english/html/13wworks.htm>
- ◆ The Web At-a-glance
 - <http://www.learnthenet.com/english/web/000www.htm>

UNESCO ICTLP Module 6, Lesson 1

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What makes the Web work?

The Web relies on these mechanisms:

- ◆ **Hypertext** - provides easy navigation among documents and resources
- ◆ **Protocols** - set of standards used to access resources via the Web
- ◆ **Universal Resource Locator (URL)** - uniform naming scheme for Internet resources
- ◆ **Client and server computers** - Web access is based on client/server technology

UNESCO ICTLP Module 6 Lesson 1

What makes the Web work?

Hypertext

- presents and relates information as hyperlinked documents that point to other documents or resources
- hyperlink is usually embedded in the text, on a highlighted word or phrase, or on a symbol, an icon, or other graphic elements
- web pages are hypertext documents on the Internet mostly created using HTML

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What makes the Web work?

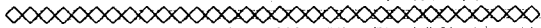
HyperText Markup Language (HTML)

- ◆ the publishing language of the World Wide Web; the standard used to create web pages.
- ◆ markup language that defines the structure of information by using a variety of tags and attributes, which is designed to display text and other information on a screen and provide hyperlinks to other Web documents.

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What makes the Web work?



Protocols

- ◆ standard set of rules that governs how computers communicate with each other, i.e. SMTP, FTP, HTTP
- ◆ HTTP is the underlying protocol used to transmit information over the Web
- ◆ the Web supports several Internet protocols aside from HTTP such as SMTP, FTP, allowing access to huge collection of information and services

UNESCO ICTLP Module 6, Lesson 1

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What makes the Web work?



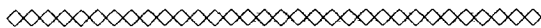
Uniform Resource Locator (URL)

- ◆ uniform naming scheme that specifies unique addresses for web servers, documents, and other resources, no matter what its access protocol
- ◆ the URL points to where the data or service is located (the host computer and the directory in which it resides) on the Internet
- ◆ web documents and resources are located and linked through their URL's

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What makes the Web work?




Anatomy of a URL

Address:  http://www.unesco.org/webworld/portal_bib/index.shtml

protocol host computer directory path file name

Note: Not all URLs will have the directory and filename

Address:  http://www.unesco.org

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What makes the Web work?

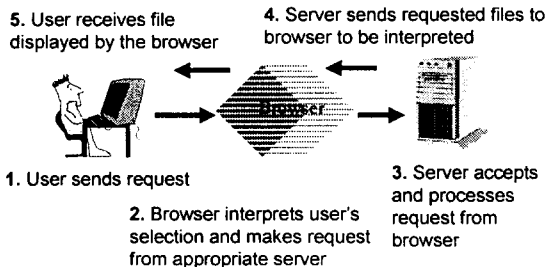
Client and server computers

- ◆ computers on the Internet communicate and share resources
- ◆ servers are computers that host web documents and provide information through a web server program
- ◆ client computers access web documents using an application program called web browsers

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How the Web works



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How the Web works

- ◆ A user runs a Web browser on a client computer that makes requests to a server machine, which is running a web server program that sends the requested item or an appropriate error message back to the browser, which displays the item or error sent back by the server to the user.

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Activity 1.2

- ◆ Visit the following to know more about how the World Wide Web works
- ◆ Client/Server, the Internet, and WWW
 - <http://www.robelle.com/www-paper/paper.html>
- ◆ How Web servers and the Internet Work
 - <http://www.howstuffworks.com/web-server.htm>
- ◆ The Web At-a-glance
 - <http://www.learnthenet.com/english/web/000www.htm>

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What is a web server?

Web server

- ◆ computer running application software that listens and responds to a client computer's request made through a web browser
- ◆ machine that hosts web pages and other web documents
- ◆ provides web documents and other online services using HTTP

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Web servers

- ◆ Apache - most popular open source server software on the Web
- ◆ iServer - application / web server written entirely in Java
- ◆ Microsoft Internet Information Server - IIS is fully integrated into the Windows NT / 2000 server package
- ◆ Macromedia ColdFusion - application / web server focuses on serving dynamic pages supporting other Macromedia products like Flash and Ultradev
- ◆ IBM Web Sphere Studio - combination of content creation software with web application
- ◆ Apple Webobject - application / web server for Mac



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What is a web browser?

Web browser

- ◆ application software that is used to locate and issue a request for the page on the web server that hosts the document
- ◆ It also interpret the page sent back by the web server and display it on the monitor of the client computer
- ◆ computer program that lets you view and explore information on the World Wide Web

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Web browsers



- ◆ Microsoft Internet Explorer – browser integrated with the Windows operating system. Mac versions are available.
- ◆ Netscape Navigator - available for Windows, Mac, and Unix platforms.
- ◆ Opera – one of the alternatives to the two most popular browser mentioned above
- ◆ Mozilla – open source web browser software
- ◆ Lynx - popular Unix text-based browser



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Activity 1.3

Explore these pages that contain links to several web servers and browsers :

- ◆ World Wide Web Server Software
 - <http://www.w3.org/Servers.html>
- ◆ Browsers
 - <http://www.webreference.com/internet/software/browsers/>

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What is a Web page?

Web page

- ◆ electronic document that typically contains several types of information accessible via the World Wide Web
- ◆ set of information created, and organized, using HTML and/or other web page authoring and development tools
- ◆ Interpreted and displayed on the screen according to the instructions of the web page authoring tool

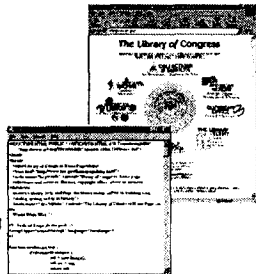
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How web page works

Sample web page and its source.

- ◆ The source contains the instructions that define the contents, layout, and structure of a web page.
- ◆ The instructions are written in HTML or another web authoring tool used in creating the page.
- ◆ The browser uses these instructions to interpret and display the web page on the screen.

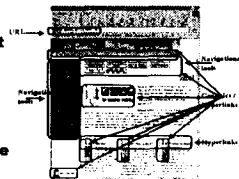


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How web page works

- ◆ The user requests a web page by entering its URL on the address location bar of a web browser.
- ◆ The browser transmits the request to a web server through http.
- ◆ The web server processes the request, locates and sends back the requested web document also using http.
- ◆ The web browser interprets the file sent by the server and displays it on the monitor.
- ◆ The same process happens when the user selects any of the hyperlinks or navigational tools on the page.



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What is a web site?

Web site

- ◆ a collection of related web pages of a certain individual, group, or organization, connected through a system of hyperlinks, hosted in a particular domain
- ◆ can be a single web page that contains links to related information located on several web sites

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What is a home page?

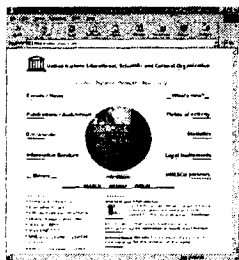
Home page

- ◆ the main page of a web site that typically serves as an index or table of contents to other web pages
- ◆ usually the first web page or the welcome page the users see when they visit a web site

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Web page? Web site? Home page?



- ◆ This web page is the home page of the UNESCO web site

UNESCO ICTLP Module 6, Lesson 1

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Activity 1.4

Read these articles:

- ◆ **Dreamlink: What is a web page?**
 - <http://www.dreamlink.com/beginners/b2.html>
- ◆ **How web pages work**
 - <http://www.howstuffworks.com/web-page.htm>
- ◆ **How Web Sites Work**
 - <http://www.workz.com/content/629.asp>

Lesson 2

Principles of Web Page Design

Web Page Concept and Design :

Getting a Web Site Up and Running



Lesson 2. Principles of Web Page Design

UNESCO ICTLP Module 6 Lesson 1

Scope



- ◆ What are the first steps in web page design?
- ◆ What are the elements of a web page?
- ◆ What are the guidelines for the design elements of a web page?
- ◆ What are some tips in web page creation and design?
- ◆ What are the guidelines for creating library websites?
- ◆ How to evaluate web sites?

UNESCO ICTLP Module 6 Lesson 1

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Learning outcomes



- ◆ Identify the first steps in web page design
- ◆ Recognize the elements of a web page
- ◆ Realize the do's and don't's in web page design
- ◆ Apply guidelines in designing library web sites
- ◆ Evaluate web sites

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3

What are the first steps in web page design?

- ◆ State your purpose/objective – why build a website for your library?
- ◆ Determine your audience – who are your target audience?
- ◆ Define the content – what kind of information will be provided on your site?
- ◆ Identify the essential resources – do you have the budget, personnel, materials, time and other resources?

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What are the first steps in web page design?

State your purpose

- ◆ To publish online information about the library - collections, services
- ◆ To provide extension services – user education, reference services, tutorials
- ◆ To act as a gateway to local and external information resources on the Web – library catalog, online databases, e-journals
- ◆ To serve as a communication tool – through e-mail, instant messaging, and other similar software

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What are the first steps in web page design?

Determine your audience

- ◆ Who is your target audience? Students? Faculty? Or staff?
- ◆ What are their interests and needs?
- ◆ Are they proficient in using technology available in the library?
- ◆ Do you have the equipment and materials necessary to meet their needs?
- ◆ What will they get from your site? Learn anything or accomplish a task?

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What are the first steps in web page design?

Define the content

- ◆ What kind of information will be provided on your website?
- ◆ Is it educational information or entertainment?
- ◆ Does the content meet the information needs of your audience?
- ◆ Is it relevant ? interesting?
- ◆ Is it current and accurate?
- ◆ Will web pages be effective in conveying and distributing the information?

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What are the first steps in web page design?

Identify the essential resources

- ◆ Do you have the management's support?
- ◆ Is the allocated budget enough for the creation and publishing of the web site?
- ◆ Do you have the manpower?
- ◆ Do the personnel involved in the project have the needed expertise?
- ◆ Are the necessary materials already available?
- ◆ What is your timeline for the creation of the library web site?

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Activity 2.1

- ◆ Go through the first steps in web page design and answer the initial questions discussed. You can add more information as you would like. Write them down using the activity sheet provided in this module.

UNESCO ICTLP Module 6 Lesson 1

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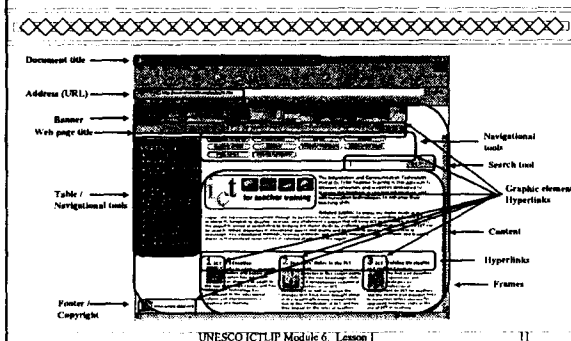
What are the elements of a web page?

- ◆ **Title** – title of the web page
- ◆ **Web address** – URL of the page shown at the browsers address box
- ◆ **Content** – information on the page - text, graphics and other media types
- ◆ **Design** – style of the page, font, color, background, visual elements
- ◆ **Structure** – layout of the page, title, headings, tables, frames, navigational tools, footers
- ◆ **Hyperlinks** – links to related resources

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Elements of a web page



UNESCO ICTLP Module 6: Lesson 1

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Activity 2.2

Read these articles:

◆ **Anatomy of a Web Page**

– <http://worldlinklearning.net/ei/mod010301.html/>

◆ **Web Page Elements**

– <http://www.bilk.ac.uk/college/helpweb/familiar.htm>

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What are the design elements of a web page?

- ◆ Overall look of the web page – the general look or feel of the page (aesthetic value)
- ◆ Content – all the information contained within the page i.e. text and other media types embedded in the page
- ◆ Navigational tools – the text links, icons, buttons, bars and other objects use for exploring the page and any linked pages
- ◆ Graphics – the images other graphical elements in the page
- ◆ Page layout and structure – organization of the elements in the page

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What are the design elements of a web page?

Overall look

- ◆ Match the purpose of the web site and its appropriate information to the target audience
- ◆ Maintain consistency, clarity and simplicity – uniform color scheme
- ◆ Use of colors, images, hyperlinks and web technology effectively
- ◆ Organize the design elements logically and predictably

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What are the design elements of a web page?

Content

- ◆ Match the purpose of the web site and its appropriate information to the target audience
- ◆ Information organized logically and predictably (text and other media types)
- ◆ Ensure information is accurate, current, relevant , useful complete, interesting, unique
- ◆ Employ a concise, easy to read writing style

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What are the design elements of a web page?

Navigational tools

- ◆ Can be selected from text links, icons, buttons, bars and other graphical elements
- ◆ Organized them logically and predictably
- ◆ Provide clear, quick and consistent method to move within the site
- ◆ Provide easy to use and find links
- ◆ Should employ intuitive and descriptive pointers
- ◆ Help create the web site's identity

UNESCO ICTIIP Module 6, Lesson 1

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What are the design elements of a web page?

Graphics

- ◆ Appropriate, essential, and relevant to the content of the page
- ◆ Functional - serve a purpose and/or provide information
- ◆ Of size, quality and file format appropriate for the page content
- ◆ Used to add value to the overall design

UNESCO ICTIIP Module 6, Lesson 1

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What are the design elements of a web page?

Page layout and structure

- ◆ Follow the overall look guidelines
- ◆ Take the technical elements into consideration
 - descriptive file name
 - descriptive document title
 - complete contact information
 - effective use of tables and frames
 - browser compatibility

UNESCO ICTIIP Module 6, Lesson 1

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Activity 2.3

Read this article:

◆ **Yale Style Manual**

– <http://info.med.yale.edu/caim/manual/>

◆ **Create a storyboard for your web page, with a layout for each web page**

◆ **Organize your web site – illustrate the structure of your site showing how the pages are linked to each other**

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Some tips in web page design

Do's in web page design

◆ **Plan the web site structure and navigation**

◆ **Keep the layout simple and intuitive**

◆ **Use the same general style throughout**

◆ **Add standard navigation tools to each page**

◆ **Include copyright and contact information on each page**

UNESCO ICTLP Module 6: Lesson 1

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Some tips in web page design

Do's in web page design

◆ **Use original or free graphics**

◆ **Use images wisely and keep file size small for fast download**

◆ **Respect copyright and intellectual property rights**

◆ **Always state the source of all materials used**

◆ **Spell check and proofread each page**

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Some tips in web page design

Don't's in web page design

- ◆ Don't crowd your pages – balance text, graphics and space
- ◆ Don't overuse graphics, animations and other bleeding edge technology – use them to support and enhance but not to overpower your work
- ◆ Don't use background that distracts the user or makes text unreadable

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Some tips in web page design

Don't's in web page design

- ◆ Don't use blinking or glowing text for emphasis
- ◆ Don't use long paragraphs of text – divide them into readable chunks
- ◆ Don't create dead end pages, which have no links to any other local page in the site
- ◆ Don't design for a specific browser

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Activity 2.4

◆ Read the following articles:

- Designing effective web pages
<http://www.becta.org.uk/websiteawards/effectivedesign.html>
- Indiana University: Basics of Web Design.
<http://www.indiana.edu/~iuinfo/guides/basics.html>

- ◆ Make a checklist regarding your library's web site – what you'll need and what information you'll provide

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How to evaluate web sites?

- ◆ **Accuracy** – free from error and alteration
- ◆ **Authority** – credibility of author / publishing body
- ◆ **Objectivity** – creator's point of view / bias
- ◆ **Currency** – timeliness of information
- ◆ **Content** – scope and depth of material
- ◆ **Design** – style, structure, and functionality
- ◆ **Accessibility** – availability of the resources

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How to evaluate web sites?

Accuracy

- ◆ **How reliable is the information?**
- ◆ **Is it the original document?**
- ◆ **Are there any errors or alterations on the page?**
- ◆ **Is there a way to verify authenticity of the content?**

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How to evaluate web sites?

Authority

- ◆ **Who is the author?**
- ◆ **Is the author credible?**
- ◆ **Who is the publisher of the page?**
- ◆ **Is it a reputable publishing body?**

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How to evaluate web sites?

Objectivity

- ◆ From which point of view is the information presented?
- ◆ Does it show a minimum of bias?
- ◆ Is it trying to sway opinion?
- ◆ Is it in line with the aims or purpose of the web site?

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How to evaluate web sites?

Currency

- ◆ Is the information dated?
- ◆ Is it timely?
- ◆ Is it up-to-date?
- ◆ Are the links current and still available?

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How to evaluate web sites?

Content

- ◆ What is the scope of the web site?
- ◆ How in-depth are the materials?
- ◆ Is it in line with the purpose of the web site?
- ◆ Does it provide meaningful and useful information?

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How to evaluate web sites?

Design

- ◆ Does it follow the design principles?
- ◆ Is the site easy to read and navigate?
- ◆ Is there a balance between style and functionality?

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How to evaluate web sites?

Accessibility

- ◆ Can it be viewed using different browsers?
- ◆ Does it require a special program to read the content?
- ◆ Is the information readily available on the web site?

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Activity 2.5

◆ Read the following articles:

- ALA's Selection Criteria
<http://www.ala.org/parentspage/greatsites/criteria.html>
- What makes a great web site?
<http://webreference.com/greatsite.html>

◆ Visit and evaluate library web sites.

- ◆ Choose which ones you could use as models for your web site.

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Lesson 3

Creating web pages using HTML

Web Page Concept and Design :

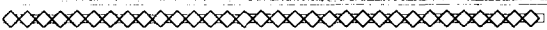
Getting a Web Site Up and Running



Lesson 3. Creating Web Pages Using HTML

UNESCO ICTLP Module 6 Lesson 1

Scope

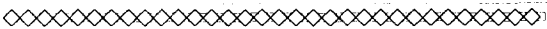


- ◆ **What is HTML?**
- ◆ **What are the tools needed for creating web pages using HTML?**
- ◆ **What are the basic HTML tags?**
- ◆ **How to create a web page using HTML?**
- ◆ **How to build a web site using HTML?**

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Learning outcomes



- ◆ **Define what is HTML**
- ◆ **Determine the basic tools for creating web pages using HTML**
- ◆ **Use basic HTML coding and tags**
- ◆ **Use HTML to create web pages**
- ◆ **Build a web site using HTML**

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What is HTML?

HyperText Markup Language (HTML)

- ◆ the publishing language of the World Wide Web; the standard used to create web pages
- ◆ markup language that defines the structure of information by using a variety of tags and attributes, which is designed to display text and other information on a screen and provide hyperlinks to other Web documents

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What is HTML?

Web Standards

- ◆ The W3C (World Wide Web Consortium) develops specifications, (called "Recommendations") guidelines, as well as software and tools that enhance interoperability between web browsers, servers, and other web-enabling technologies.
- ◆ Their recommendations on Web technologies and protocols like HTML, CSS, XHTML, XML, and HTTP are considered the Web standards
- ◆ The HTML 4.01 specification from W3C is the latest HTML standard supported by new browsers

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What is HTML?

HTML Standards

- ◆ HTML 4.01 specification defines the HyperText Markup Language (HTML)
- ◆ "In addition to the text, multimedia, and hyperlink features of the previous versions of HTML (HTML 3.2 [HTML32] and HTML 2.0 [RFC1866]), HTML 4 supports more multimedia options, scripting languages, style sheets, better printing facilities, and documents that are more accessible to users with disabilities." (W3C)

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Activity 3.1

◆ Read these introductions to HTML

◆ What is HTML? InterNIC 15 Minutes Series (mirrored by Netskills)

- <http://www.netskills.ac.uk/mirrors/15min/html/html/sld01.html>

◆ Introduction to HTML

- <http://wdvl.internet.com/Authoring/HTML/Intro/>

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What are the basic tools?

◆ Plain text editor like NotePad – to write HTML documents

◆ Web browser – to test and view the created web page

◆ HTML reference book – to serve as guide for HTML tags

◆ Information and other materials about the library in electronic file

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What are the basic HTML rules?

◆ HTML tags are enclosed by brackets < > for example <HTML>

◆ Most tags require a closing tag <HTML> ... </HTML>

◆ Tags must be nested correctly <I>My Library Web Site</I> first tag on, last tag off

◆ HTML treats all white space as a single blank space

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What are the basic HTML rules?

◆ Tags are not case sensitive but are usually written in uppercase, with the attributes and values in small letters enclosed by quotation marks

◆ Most tags have optional attributes with several possible values that modify the tag's behavior

Look inside HTML element (Tag)

TAG	attribute	value	closing tag
<BODY	bcolor	"#FFFFFF"	text="#000066"> ... <BODY>

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What are the basic HTML tags?

<HTML> [identifies the document as HTML]

<HEAD>

<TITLE>My Library</TITLE>

</HEAD>

Contains information about the HTML document

<BODY>

<P>Content of My Library's Web Page</P>

</BODY> Contains all information displayed on the browser

</HTML> [closing tag]

These tags generally define the basic structure of a web page

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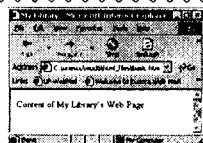
11

What are the basic HTML tags?

```

<HTML>
<HEAD>
<TITLE>My Library</TITLE>
</HEAD>
<BODY>
<P>Content of My Library's Web Page</P>
</BODY>
</HTML>

```



◆ The basic HTML tags above (written using Notepad and saved with a file extension .htm) create a simple web page shown beside it.

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What are the basic HTML tags?

◆ Header tags range from **<H1>** to **<H6>**, **<H1>** the largest and **<H6>** is the smallest.

◆ The headings' size shows the hierarchy of importance on the page's layout.

<H1> My Library </H1> (page title)

<H2> Mission, Vision and Goals </H2> (main topic)

<H3> Objectives</H3> (subtopic)

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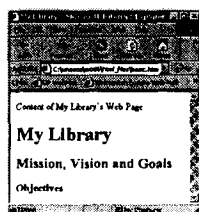
13

What are the basic HTML tags?

<H1> My Library </H1>

<H2> Mission, Vision and Goals </H2>

<H3> Objectives</H3>



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What are the basic HTML tags?

◆ Use **<CENTER>** tag to center elements on the page

<CENTER>

<H1> My Library </H1>

<H2> Mission, Vision and Goals </H2>

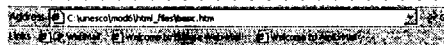
</CENTER>

<H3> Objectives</H3>

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What are the basic HTML tags?



My Library

Mission, Vision and Goals

Objectives

```
<CENTER>
<H1> My Library </H1>
<H2> Mission, Vision and Goals </H2>
</CENTER>
<H3> Objectives</H3>
```

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What are the basic HTML tags?

◆ The **<P>** tag breaks the textual information on a page and inserts a single line space, which is useful for defining and separating paragraphs.

<H2> Mission, Vision and Goals </H2>

<P> MyLibrary aims to be the country's public virtual library with state-of-the art resources and associated services, accessible to anyone, anytime, anywhere. </P>

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What are the basic HTML tags?

<P> MyLibrary aims to be the country's public virtual library with state-of-the art resources and associated services, available to anyone, anytime, anywhere. </P>

My Library

Mission, Vision and Goals

MyLibrary aims to be the country's public virtual library with state-of-the art resources and associated services, available to anyone, anytime, anywhere.

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What are the basic HTML tags?

My Library

Mission, Vision and Goals

MyLibrary aims to be the country's public virtual library with state-of-the art resources and associated services, available to anyone, anytime, anywhere

Use the align attribute of the <P> tag to justify the paragraph: center, right or left. (left is the default)

<P align=center> MyLibrary aims to be the country's public virtual library with state-of-the art resources and associated services, available to anyone, anytime, anywhere. </P>

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HTML basic tags

◆ Format text with tags that make the text bold and/or italic <I> to put emphasis on some points

<P> MyLibrary aims to be the country's <I> public virtual library </I> with state-of-the art resources and associated services, available to anyone, anytime, anywhere. </P>

MyLibrary aims to be the country's *public virtual library* with state-of-the art resources and associated services, available to anyone, anytime, anywhere.

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HTML basic tags

◆ Tags can be nested as long as the first tag open is the last tag closed with and end tag.

<P> MyLibrary aims to be the country's <I> public virtual library </I> with state-of-the art resources and associated services, available to anyone, anytime, anywhere. </P>

MyLibrary aims to be the country's ***public virtual library*** with state-of-the art resources and associated services, available to anyone, anytime, anywhere.

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What are the basic HTML tags?

- ◆ Break tag **
** forces line breaks without creating a vertical space, which should be used only for reasons of design or content

<H3> Library Hours </H3>

<P> Monday – Friday </BR>

8:00 a.m. – 5:00 p.m. <P>

<P> *Open on Holidays </P>

UNESCO ICTLP Module 6, Lesson 1

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What are the basic HTML tags?

<H3> Library Hours </H3>

<P> Monday – Friday </BR>

8:00 a.m. – 5:00 p.m. <P>

<P> *Open on Holidays </P>

Library Hours

Monday – Friday
24 Hours Open

*Open on Holidays

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What are the basic HTML tags?

- ◆ Horizontal rule **<HR>** tag separate major sections of the page by inserting a bar in between paragraphs or sections

- ◆ Using one or more of its attributes could vary its appearance

services and privileges
Library Hours

<HR width=50% size=3 align=center>

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Exercise 1

- ◆ Create a new folder in C:\ directory and name it as mod6_html
- ◆ Open NotePad or any text editor
- ◆ Use the basic tags discussed to create a basic web page about your library, mission, vision and goals, history, collections, services, etc. (You can copy and paste the information if they are already in electronic form. Supply the necessary tags in the appropriate place.)
- ◆ Save the file as about.htm in the created directory c:\mod6_html
- ◆ Test / View / Edit using your browser

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What are other HTML formatting tags?

- ◆ HTML also supports lists; unordered lists, ordered lists and, definition list, which is sometimes the best way to present information
 - ◆ Unordered list is a bulleted list that uses and tags
- ```
<H3> Objectives </H3>
 Acquire a comprehensive collection of
multimedia materials
 Develop appropriate user education and
training packages

```

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---

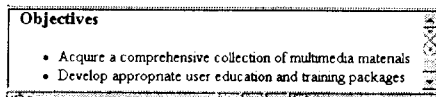
---

---

---

## What are other HTML formatting tags?

- ```
<H3> Objectives </H3>
<UL><LI> Acquire a comprehensive collection of
multimedia materials</LI>
<LI> Develop appropriate user education and
training packages</LI>
</UL>
```



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What are other HTML formatting tags?

◆ Ordered list is a numbered list that uses and tags

<H3> Library Resources </H3>

 Library Collections

 Library Catalog

 Electronic Resources

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What are other HTML formatting tags?

<H3> Library Resources </H3>

 Library Collections

 Library Catalog

 Electronic Resources

Library Resources

1. Library Collections
2. Library Catalog
3. Electronic Resources

UNESCO ICTLP Module 6 Lesson 1

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What are other HTML formatting tags?

◆ Lists can be nested, one within another

 Library Collections

 Books

 Journals

 Library Catalog

 Electronic Resources

 CD-ROMs

 Abstracts & Indexes

UNESCO ICTLP Module 6 Lesson 1

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What are other HTML formatting tags?

```
<OL>
<LI> Library Collections </LI>
  <UL> <LI> Books </LI>
    <LI> Journals </LI>
  </UL>
<LI> Library Catalog </LI>
<LI> Electronic Resources
</LI>
  <UL> <LI> CD-ROMs </LI>
    <LI> Abstracts &
      Indexes </LI>
  </UL>
</OL>
```

Library Resources

1. Library Collections
 - o Books
 - o Journals
2. Library Catalog
3. Electronic Resources
 - o CD-ROMs
 - o Abstracts & Indexes

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What are other HTML formatting tags?

♦ The list item type attribute can be used to change the bullets in disc, square or circle, and in from number 1 to lowercase (a) or uppercase (A) letters, or lowercase (i) or uppercase (I) roman numerals

```
<OL type=I>
<LI> Library Collections </LI>
  <UL type=square> <LI> Books </LI>
    <LI> Journals </LI> </UL>
<LI> Library Catalog </LI>
<LI> Electronic Resources </LI>
  <UL type=disc> <LI> CD-ROMs </LI>
    <LI> Abstracts & Indexes </LI> </UL>
</OL>
```

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What are other HTML formatting tags?

```
<OL type=I>
<LI> Library Collections </LI>
  <UL type=square> <LI> Books </LI>
    <LI> Journals </LI> </UL>
<LI> Library Catalog </LI>
<LI> Electronic Resources </LI>
  <UL type=disc> <LI> CD-ROMs </LI>
    <LI> Abstracts & Indexes </LI> </UL>
</OL>
```

Library Resources

- I Library Collections
 - Books
 - Journals
- II Library Catalog
- III Electronic Resources
 - CD-ROMs
 - Abstracts & Indexes

Library Resources

1. Library Collections
 - o Books
 - o Journals
2. Library Catalog
3. Electronic Resources
 - o CD-ROMs
 - o Abstracts & Indexes

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What are other HTML formatting tags?

- ◆ Definition list allows listing of terms and definitions. Uses <DL>, <DT> for the term and <DD> for definition.

<DL>

<DT> Definition Term </DT>

<DD> Definition </DD>

<DT> Membership Card </DT>

<DD> Users of the library must present their membership card to avail of the library services and privileges. </DD>

</DL>

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What are other HTML formatting tags?

<DL>

<DT> Definition Term </DT>

<DD> Definition </DD>

<DT> Membership Card </DT>

<DD> Users of the library must present their membership card to avail of the library services and privileges. </DD>

</DL>

Definition Term

Definition

Membership Card

Users of the library must present their membership card to avail of the library services and privileges.

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Exercise 2

- ◆ Create two more web pages, about your library collections and library services (one web page for each) using the list tags and other tags discussed earlier.
- ◆ Save and name them accordingly, collection.htm and services.htm, in the created directory c:\mod6_html
- ◆ Test / View / Edit using your browser
- ◆ Always save file after editing before viewing the page

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How to add color

- ◆ The color of the background and text elements of the web page can vary using attributes of the <BODY> and tag
- ◆ To specify color, HTML uses the color names (16 colors supported by most browsers), or the numerical equivalent in RGB hexadecimal codes that correspond to over 14 million possible color, shades, hues and tints

White #ffffff Black #000000 Blue #0000ff
Red #ff0000 Yellow #ffff00 Green #008000

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How to add color

```
< BODY bgcolor="#ffffff" text="#000000"  
link="#0000cc" vlink="#00ff00" alink="#ff0000" >
```

- ◆ bgcolor sets the background color of the whole page
- ◆ text defines the text color for the page
- ◆ link - unvisited link color
- ◆ vlink - visited link color
- ◆ alink - activated link color

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How to add color

```
< BODY  
bgcolor="#8A2BE2"  
text="#ffffff"  
link="#0000ff"  
vlink="#00ff00"  
alink="#ff0000" >
```



```
< BODY  
bgcolor="green"  
text="white"  
link="#ffffff"  
vlink="#00ff00"  
alink="#ff0000" >
```



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How to add color

- ◆ Color attribute of tag sets the color of selected text within the page overriding the text attribute on the <BODY> tag.

```
<CENTER>
<FONT color="#000000"><H1> My Library </H1>
</FONT>
<H2> Mission, Vision and Goals </H2></CENTER>
<FONT color="#ffff00">
<P> <B> MyLibrary </B> aims to be the country's
<B> <I> public virtual library </I> </B> with state-of-
the art resources and associated services,
available to anyone, anytime, anywhere. </P>
</FONT>
```

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How to add color

```
<CENTER>
<FONT color="#000000"><H1> My Library </H1> </FONT>
<H2> Mission, Vision and Goals </H2></CENTER>
<FONT color="#ffff00">
<P> <B> MyLibrary </B> aims to be the country's <B> <I> public
virtual library </I> </B> with state-of-the art resources and
associated services, available to anyone, anytime, anywhere. </P>
</FONT>
```



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Exercise 3

- ◆ Edit the web pages you have created, you should have three by now: about.htm, collections.htm and services.htm
- ◆ Add color to your page
- ◆ Consult with an HTML reference book or the Internet for the hexadecimal color codes you can use to add color
- ◆ Test / View / Edit / Save in the created directory c:\mod6.html

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How to add images

◆Image and other graphical elements can be added on the web page through the tag using the src (source) attribute that points to the image / graphics

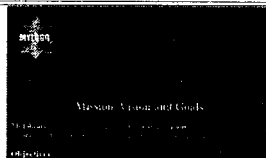
< IMG src="mylogo.gif" >



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How to add images



<CENTER>

<H1> My Library </H1>

<H2> Mission, Vision and Goals </H2> </CENTER>

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How to add images

<CENTER>

<H1> My Library </H1>

<H2> Mission, Vision and Goals </H2>

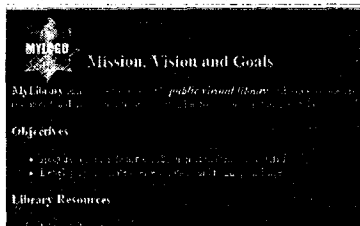
</CENTER>



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How to add images



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How to add images



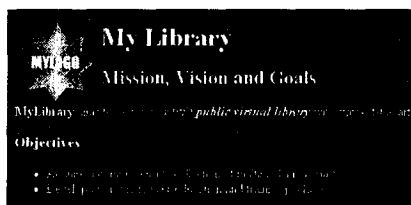
**<IMG src="mylogo.gif" width=100
height=100 align=left alt=logo>**

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How to add images

**<BODY bgcolor="#000800"
background=marb.jpg >**



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Exercise 4

- ◆ Insert images on your web pages
- ◆ Test / View / Edit using your browser and Notepad
- ◆ Always save them after editing
- ◆ Respect copyright of materials, use original or free graphical materials for your web pages

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How to create hyperlinks

- ◆ Hypertext links are created on web pages using the <A> anchor tag with the HREF (Hypertext Reference) attribute
- ◆ Hyperlinks connect your web pages together and point to other web documents (build your web site)

`Library Collection`

`<A HREF=`

`"http://www.unesco.org/webworld/portal_bib/">`
`UNESCO Libraries Portal `

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How to create hyperlinks

``
`Library Collection`

Library Resources

- Library Collection
- Library Portal
- Library Network

Links to Internet Resources

UNESCO Libraries Portal
A database that lists all the world's
UNESCO libraries and
all the world's libraries

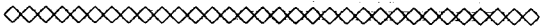
`<A HREF=`

`"http://www.unesco.org/`
`webworld/portal_bib/">`
`UNESCO Libraries Portal`
``

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How to create hyperlinks



- ◆ Hyperlinks are also used to connect to graphic and other media
- ◆ Icons and other graphic elements can be used as the the “trigger” (object) users click on to jump to the referred document

` MyLibrary `

`<A HREF "mylibrary.jpg"> `

`<A HREF "mylibrary.jpg" border=0> `

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How to create hyperlinks



` MyLibrary `



`<A HREF "mylibrary.jpg"> `



` `



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How to create hyperlinks



- ◆ Link to e-mail address can be created to automatically open the e-mail program on the system supplying the address

Contact ` me@mylibrary.edu `



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Exercise 5

- ◆ Create a new web page that will serve as your library's home page
- ◆ Name it as index.htm
- ◆ Create links to the other web pages you have created
- ◆ Create a link back to index.htm on the other web pages
- ◆ Place contact information at the bottom of each page (e-mail, tel no#, etc)
- ◆ Add more elements, pictures etc...
- ◆ View / Test the links / Edit and save

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Activity 3.2

- ◆ Read the following articles
- ◆ Dave Raggett. Getting started with HTML
 - <http://www.w3.org/MarkUp/Guide/>
- ◆ Selena Sol. Introduction to Web Design
 - <http://www.wdvl.com/Authoring/HTML/Tutorial/>
- ◆ NCSA: A Beginner's Guide to HTML
 - <http://archive.ncsa.uiuc.edu/General/Internet/WWW/HTMLPrimerAll.html>
- ◆ Writing for the Web: A Primer for Librarians
 - <http://bones.med.ohio-state.edu/eric/papers/primer/toc.html>

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Activity 3.2

- ◆ Submit electronic copies of the web pages created using the lesson: about.htm, collections.htm, services.htm and index.htm. The links on the web pages should be working.

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Lesson 4

Web site publishing and maintenance

Web Page Concept and Design :

Getting a Web Site Up and Running

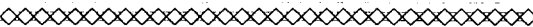


Lesson 4. Web Site Publishing and Maintenance

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Scope



- ◆ What are the steps in publishing a web site?
- ◆ Why is it important to secure a domain name?
- ◆ What web hosting services are available?
- ◆ What do you need to upload the web pages to a web host?
- ◆ What are the steps in updating and maintaining a web site?
- ◆ How do you promote and market your web site?
- ◆ What are the ethical, legal and other issues related to web publishing?

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Learning outcomes



- ◆ Identify the steps in web publishing, update and maintenance
- ◆ Realize the importance of a domain name
- ◆ Differentiate between web hosting services
- ◆ Upload web pages to a web host
- ◆ Demonstrate the ability to promote and market a library's web site
- ◆ Address ethical, legal and other issues related to web publishing

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What are the steps in publishing a web site

- ◆ Secure a domain name
- ◆ Acquire web hosting services
- ◆ Test the website
- ◆ Upload the web pages
- ◆ Update the information
- ◆ Validate the links
- ◆ Promote the site
- ◆ Address issues and concerns in web publishing

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How to get your own domain

- ◆ Think of a short name that would best describe your institution. It can be an acronym or a “nickname” with the appropriate top level domain (TLD) like: mylibrary.edu or mylibrary.com or mylibrary.org or mylibrary.net
- ◆ Search on one of the domain registrars to find out if the name you have chosen is still available

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How to get your own domain

- ◆ Try it on Network Solutions at <http://www.networksolutions.com> for .com, .org, and .net TLD
- ◆ You can also search at InterNIC whois search <http://www.internic.net/whois.html>
- ◆ You can also search for other domain registrars at the InterNIC site

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How to get your own domain

- ◆ Look for accredited registrars in your country if you want to use your country code TLD
- ◆ Find out if the domain you want with your country code TLD is available by searching at <http://www.uwhois.com>
- ◆ Register your domain name in any of the domain registrars by providing the needed information and pay the necessary fees

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How to get your own domain

- ◆ If you are part of an organization like a university, check with your IT department. It is possible that your organization already have a domain name.
- ◆ The person or group responsible can give you a subdomain name like mylibrary.univ.edu or mylibrary.digital.com

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Activity 4.1

- ◆ Read:
 - ◆ InterNIC FAQs on the Domain Names, Registrars, and Registration.
 - <http://www.internic.net/faqs/domain-names.html>
 - ◆ Your Own Domain Name.
 - <http://www.webmasterbase.com/article/6>
 - ◆ How to Register Your Own Domain Name.
 - <http://www.thesitewizard.com/archive/registerdomain.shtml>
- ◆ Choose your own domain name, then search it through one of the domain registrars

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Where to host your web site?

◆ There are three ways to host your web site:

- Have your own web server
- Host it on commercial web hosting sites for free
- Host in on commercial web hosting sites for a fee

◆ Each option has its advantages and disadvantages

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Where to host your web site?

◆ Having your own web server gives you greater control over the application programs running on your server and access to your web site, updating, troubleshooting and maintenance

◆ Must meet the the hardware and software requirements with adequate bandwidth Internet connection

◆ Personnel must have expertise in setting up, updating, managing and maintaining servers

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Where to host your web site?

◆ Free web hosting sites mean that you need not incur the cost of buying the necessary hardware and software, pay for Internet connection bandwidth, or hire personnel

◆ Downside: loaded with advertisements, limited file storage size, and will be restricted to certain applications that will run on your web site

◆ Typically have a slow download capability and weak file security

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Where to host your web site?

- ◆ Commercial web hosting companies usually offer two options:
- ◆ file storage space for hosting your web site with support for some application tools like flash or cgi-bin
- ◆ or all these features plus services such as the development and design of your web site

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Where to host your web site?

- ◆ High cost relative to the amount of services being provided
- ◆ Weak file security and confidentiality; you must trust an outside organization with full access to your web site, and this can be risky even with a non-disclosure agreement
- ◆ The risk of becoming overly dependent to the company providing services and its stability and capability to continue doing business

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Where to host your web site?

- ◆ Your choice should be based on the purpose of the web site, the target audience, the information and services to be provided, and your organizations human, material and financial resources
- ◆ Provisions should be allotted for the continuous growth of your institution's web site

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Activity 4.2

- ◆ Read the following articles:
- ◆ Finding a Home for Your Site.
 - <http://www.learnthenet.com/english/html/51server.htm>
- ◆ Choosing a Webhosting Company.
 - <http://www.webmasterbase.com/article/5>
- ◆ How to Choose a Web Host
 - <http://www.thesitewizard.com/archive/findhost.shtml>

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Activity 4.2

- ◆ Visit some of the web hosting sites offering free or commercial hosting and compare the cost, file storage space, features and added value services
- ◆ Register at one of the free web hosting site for example Netfirm <http://www.netfirms.com> to be able to complete the activities for this lesson
- ◆ You may opt to use your own web server for the activities

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How to upload your web site

- ◆ Your web site must be uploaded to a web server connected to the Internet in order to be accessed on the Web, the host for your web site
- ◆ Use a FTP client program to connect to your host in order to upload (transfer) your web site (files and other documents) to the server

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How to upload your web site

- ◆ One of the most popular FTP program for PC is WS_FTP LE downloadable at FTPplanet.com and it is free for personal and educational use
- ◆ Test you web site before uploading to the server, then test it again once it has been uploaded

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Activity 4.3

- ◆ Read these tutorials to how to upload web pages:
- ◆ Uploading Your Pages [Online] URL
 - http://html.about.com/library/beginning/bl_begin122298.htm
- ◆ Uploading Web Pages to Your Host [Online] URL
 - <http://www.ftpplanet.com/ftpresources/webpage.htm>

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Activity 4.3

- ◆ Download WS_FTP LE or get hold of an FTP program that will work with your system
- ◆ WS_FTP is supported at Netfirms.com and has its own help file on how to use WS_FTP
- ◆ Connect to the web server of your host and upload your web pages
- ◆ Test your web site and submit your URL to your course coordinator/instructor

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How to manage your web site

- ◆ The information in your web site should be updated for timeliness and accuracy
- ◆ Due to the Internet's dynamic nature, links on you site should be validated periodically to eliminate or at least minimize dead links - links to unavailable information
- ◆ Make use of your Web site to provide where needed new information and services

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How to manage your web site

- ◆ Provide for user feedback through email and/or forms
- ◆ Measure and analyze the web site traffic
- ◆ Use the resources available on the Web for maintaining web sites: HTML validator, Netmechanic, etc.

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Activity 4.4

- ◆ Read the following:
- ◆ Maintenance and Updating
<http://www.learnthenet.com/english/html/52publiz.htm>
- ◆ Getting Feedback
– <http://www.learnthenet.com/english/html/54feedbk.htm>
- ◆ Measuring Traffic
– <http://www.learnthenet.com/english/html/55measur.htm>

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How to promote your web site



- ◆ Your web site promotion should be done using all the available resources at your disposal, tri media, on the Net, by word of mouth, demonstrations, training sessions, workshops, etc.
- ◆ Aside from press releases and advertisements in newspapers, radio and television, you can submit your web site to search engines to establish your presence online

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How to promote your web site



- ◆ Search engines require you to submit a description of your web site, what information, services or products are available, who is responsible and other related information
- ◆ You can also make posters, flyers and leaflets with a description of your web site and its URL
- ◆ Promote it during workshops and training sessions

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Activity 4.5



- ◆ Write a short description of your web site
- ◆ Submit it to different search engines
- ◆ Submit a copy to your course instructor / coordinator

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Ethics, legal, and other issues in Web publishing

- ◆ **Netiquettes - accepted behavior on the Net**
- ◆ **Privacy and confidentiality - protect your privacy and respect confidentiality of records**
- ◆ **File security - from viruses and hackers; provision for file back up and disaster recovery**

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Ethics, legal, and other issues in Web publishing

- ◆ **Copyright and Intellectual Property Rights**
- ◆ **Fair Use of copyrighted works for educational and research purposes**
- ◆ **Reference citation of electronic resources**
- ◆ **Obtaining permission to link to web sites before making the link**

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Ethics, legal, and other issues in Web publishing

- ◆ **Web site evaluation – quality, accuracy, timeliness of information, design effectiveness**
- ◆ **Accessibility design – provisions for the physically handicapped, specially the visually challenged who uses the Internet**

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Activity 4.6

Read these articles:

- ◆ Copyright Law and Fair Use. Stanford. [Online] URL
 - <http://www.sul.stanford.edu/copyright.html>
- ◆ Copyright Basics. Copyright Office. Library of Congress. [Online] URL
 - <http://www.loc.gov/copyright/circs/circ1.html>
- ◆ Rinaldi, Arlene H. The Net: User Guidelines and Netiquette. [Online] URL
 - <http://www.fau.edu/netiquette/net/>
- ◆ WebRef: What Makes a Great Web Site? INT Media Group. [Online] URL
 - <http://webreference.com/greatsite.html> /



Glossary of terms used in Module 6

- ◆ **Access.** Refers to the ability of the user to connect to a database, or Internet service.
- ◆ **Accessibility.** Guidelines for designing web contents accessible to people with disabilities and more available to all users whatever software, hardware and platform they are using to access the Web and for making it easier to find information on the Web.
- ◆ **Anchor.** Text and graphical elements embedded with hyperlinks and other objects users click on to jump to a web document pointed by the browser.
- ◆ **Applications software.** A program that is designed to perform a specific task.
- ◆ **ASCII.** The encoding system called American Standard Code for Information Interchange
- ◆ **Backup.** Pertains to a procedure or device to make a duplicate of a system or data for future use in the event of loss from the server or hard disk due to various factors
- ◆ **Client** - Computers that requests information on a web server.
- ◆ **Client / server** - The computing architecture that designates computers as servers or clients dividing the workload.
- ◆ **Content.** Textual, graphic elements, and other information in several media types that comprises a web page.
- ◆ **Design.** Overall style, structure, and presentation of a web page.
- ◆ **Domain name.** The familiar name of the computer hosting the web site of an individual or organization that correspond to a series of numbers (IP address) that serve as routing addresses on the Internet.
- ◆ **Domain Name System (DNS).** An Internet service that translates domain names into IP addresses.
- ◆ **DNS Servers.** Servers on the Internet that acts as Internet Directory transforming domain names into IP addresses. Points to the location of a web host by providing their IP address transformed from their domain names.
- ◆ **Domain Name Registrars.** Companies accredited by ICANN (The Internet Corporation for Assigned Names and Numbers) that offers registration services for the domain names of organizations and individuals.
- ◆ **Electronic mail.** A communications tool used to send messages to and from computers. Also called e-mail.
- ◆ **End user.** Same as user. The individual providing input or using output from the computer.
- ◆ **FTP.** File Transfer protocol. Refers to the protocol and the program used to transfer files from one computer to another.
- ◆ **Graphics.** Images, Icons, and other graphical elements found on a web page.
- ◆ **Home page.** The main page of a Web site that typically serve as an index or table of contents to other web pages.
- ◆ **Hyperlinks.** The embedded hypertext links that points to other web pages and other related resources.

- ◆ **Hypertext.** Presents and relates information in a non-linear and non-hierarchical organization allowing the user to view related information through a system of hypertext links (hyperlinks).
- ◆ **HyperText Markup Language (HTML).** The standard language used to create web pages. Markup language that uses tags and attributes that web browsers interpret to display web pages on the screen.
- ◆ **HyperText Transfer Protocol (HTTP).** The underlying protocol behind the World Wide Web.
- ◆ **ICANN.** The Internet Corporation for Assigned Names and Numbers (ICANN) is the non-profit corporation that was formed to assume responsibility for the IP address space allocation, protocol parameter assignment, domain name system management, and root server system management functions previously performed under U.S. Government contract by IANA and other entities
- ◆ **Icons.** Pictographs that are used in a Windows environment to indicate operations such as copy, save, delete, etc.
- ◆ **Information.** The output of information processing. Useful data
- ◆ **Information system.** Generally a computer based system for storing and retrieving data and information.
- ◆ **Intellectual property rights.** Recognized legal claim to ownership of recorded or manifested ideas.
- ◆ **Interactive.** Pertaining to online where there is immediate interaction between user and the computer.
- ◆ **InterNIC.** The Internet's Network Information Center has been established to provide the public information regarding Internet domain name registration services.
- ◆ **Internet.** A global network of computers communicating under one set of guidelines formally called the TCP/IP.
- ◆ **Intranet.** An internal network belonging to an organization that uses TCP/IP with access limited only to members of the organization.
- ◆ **IP address.** A series of numbers called Internet Protocol numbers that serve as routing addresses on the Internet used to locate and communicate information on the Internet.
- ◆ **Navigation.** The system used to explore and view the set of information and related information on a web site.
- ◆ **Netiquette.** The accepted behavior online on the Net.
- ◆ **Program.** A set of instructions for the computer to perform a particular function. Also called software.
- ◆ **Protocols.** The set of rules and standards computers used to communicate with each other.
- ◆ **Site structure.** The overall layout of the web site, the connection and relationship of web documents on a web site.
- ◆ **Simple Mail Transfer Protocol (SMTP).** The protocol used for sending and receiving electronic mail.
- ◆ **Text editor.** Applications programs used to edit ASCII files like Notepad.
- ◆ **Top-level domains.** Limited number of predefined suffixes attached to Internet domain names. Some of these are: .com, .net, .org, .edu, and .mil.

- ◆ **Uniform Resource Locator (URL).** Is the uniform naming scheme that specifies unique addresses for web servers, documents and other resources, no matter what its access protocol.
- ◆ **Upload.** The process of transferring files from a client computer to a server through the Internet.
- ◆ **User friendly.** Used to describe a user interface that enables the inexperienced user to interact successfully with the computer
- ◆ **Web browser.** Application software used to search and display web pages. The client software used to access the Web.
- ◆ **Web host.** The machine that hosts web sites and applications programs needed to serve documents on the Internet. See web server
- ◆ **Web page.** An electronic document on the World Wide Web formatted using HTML and displayed using a web browser.
- ◆ **Web server.** The computer running application software that listens and respond to a client computer's request made through a web browser.
- ◆ **Web site.** A collection of related web pages of a certain individual, group, or organization connected through a system of hyperlinks, hosted in a particular domain.
- ◆ **World Wide Web.** A global hypertext information system that serve as a way to access and provide information in various media via the Internet.

Lesson 1



Activity 1-1

Visit the following web documents to know more about the World Wide Web

1. How the Web Works
<http://www.learnthenet.com/english/html/13wworks.htm>
2. The Web At-a-glance
<http://www.learnthenet.com/english/web/000www.htm>

Lesson 1



Activity 1-2

Read these articles to know more about how the Web works

1. Client/Server, the Internet, and WWW
<http://www.robelle.com/www-paper/paper.html>
2. How Web servers and the Internet Work
<http://www.howstuffworks.com/web-server.htm>
3. The Web At-a-glance
<http://www.learnthenet.com/english/web/000www.htm>

Lesson 1



Activity 1-3

Explore these pages that contain links to several web servers and browsers

1. World Wide Web Server Software - <http://www.w3.org/Servers.html>
2. Browsers - <http://www.webreference.com/internet/software/browsers/>

Lesson 1



Activity 1-4

Read these articles to know more about how a web page works:

1. What is a web page? - <http://www.dreamink.com/beginners/b2.html>
2. How web pages work - <http://www.howstuffworks.com/web-page.htm>
3. How Web Sites Work - <http://www.workz.com/content/629.asp>

Lesson 2



Activity 2-1

Go through the first steps in web page design and answer the initial questions discussed. You can add more information as you would like. Write them down using the activity sheet provided in this module.

Lesson 2



Activity 2-2

Read these articles:

1. Anatomy of a Web Page - <http://worldlinklearning.net/ei/mod010301.html/>
2. Web Page Elements - <http://www.bilk.ac.uk/college/helpweb/familiar.htm>

Lesson 2



Activity 2-3

1. Read this article:
Yale Style Manual - <http://info.med.yale.edu/caim/manual/>
2. Resources: Design Tips - <http://www.csus.edu/web/tips.html>
3. Create a storyboard for your web page, with a layout for each page
4. Organize your web site – illustrate the structure of your site showing how the pages are linked to each other

Lesson 2



Activity 2-4

1. Read the following articles:
 - Designing effective web pages
<http://www.becta.org.uk/websiteawards/effectivedesign.html>
 - Indiana University: Basics of Web Design. <http://www.indiana.edu/~iuinfo/guides/basics.html>
2. Make a checklist regarding your library's web site – what you'll need and what information you'll provide

Lesson 2



Activity 2-5

1. Read the following articles:
 - ALA's Selection Criteria
<http://www.ala.org/parentspage/greatsites/criteria.html>
 - What makes a great web site? <http://webreference.com/greatsite.html>
2. Visit and evaluate library web sites.
3. Choose which ones you could use as models for your web site.

Lesson 3



Activity 3.1

Read these two introductions to HTML:

1. What is HTML? InterNIC 15 Minutes Series (mirrored by Netskills)
<http://www.netskills.ac.uk/mirrors/15min/html/html/sld01.html>
2. Introduction to HTML <http://wdvl.internet.com/Authoring/HTML/Intro/>

Lesson 3



Exercise 1

Ask the students to do Exercise 1. Explain clearly and check on their work. Provide tips and guidelines that will help them produce the desired page. Remind them of the activities in the previous lesson, which should help them define the design and content of their web page.

Lesson 3



Exercise 2

Ask the students to do Exercise 2. Explain clearly and check on their work. Provide tips and guidelines that will help them produce the desired page. Remind them of the activities in the previous lesson, which should help them define the design and content of their web pages. The pages created on this exercise ("collection.htm" and "services.htm") and the one created in exercise 1 ("about.htm") will be used in the hyperlinking part of this lesson.

Lesson 3



Exercise 3

Ask the students to do Exercise 3. Provide them with a copy of the Hexadecimal color codes and let them figure out the color they want to use by trying out the color codes.

Lesson 3



Exercise 4

Ask the students to do Exercise 4. Remind them of the need to observe and respect copyrighted materials.

Lesson 3



Exercise 5

Ask the students to do Exercise 5. Help them get hold of the materials listed for further readings, and guide them in order to accomplish the assigned task

Lesson 3



Activity 3.2

1. Read the following articles:
 - Dave Raggett. Getting started with HTML
<http://www.w3.org/MarkUp/Guide/>
 - Selena Sol. Introduction to Web Design
<http://www.wdvl.com/Authoring/HTML/Tutorial/>
 - NCSA: A Beginner's Guide to HTML
<http://archive.ncsa.uiuc.edu/General/Internet/WWW/HTMLPrimerAll.html>
 - Writing for the Web: A Primer for Librarians <http://bones.med.ohio-state.edu/eric/papers/primer/toc.html>
2. Submit electronic copies of the web pages created using the lesson: about.htm, collections.htm, services.htm and index.htm. The links on the web pages should be working.

Lesson 4



Activity 4.1

1. Read:
 - *InterNIC FAQs on the Domain Names, Registrars, and Registration.* [Online] URL <http://www.internic.net/faqs/domain-names.html>
 - Mickiewicz, Matt. *Your Own Domain Name.* SitePoint. [Online] URL <http://www.webmasterbase.com/article/6>
 - Heng, Christopher. *How to Register Your Own Domain Name.* Thesitewizard.com [Online] URL <http://www.thesitewizard.com/archive/registerdomain.shtml>
2. Choose your own domain name, then search it through one of the domain registrars

Lesson 4



Activity 4.2

1. Read the following articles:
 - Learn the Net: *Finding a Home for Your Site*. Michael Lerner Productions. [Online] URL <http://www.learnthenet.com/english/html/51server.htm>
 - Mickiewicz, Matt. Choosing a Webhosting Company. SitePoint. [Online] URL <http://www.webmasterbase.com/article/5>
 - Heng, Christopher. How to Choose a Web Host. Thesitewizard.com [Online] URL <http://www.thesitewizard.com/archive/findhost.shtml>
2. Visit some of the web hosting sites offering free or commercial hosting and compare the cost, file storage space, features and added value services
3. Register at one of the free web hosting site for example Netfirm <http://www.netfirms.com> to be able to complete the activities for this lesson
4. You may opt to use your own web server for the activities

Lesson 4



Activity 4.3

1. Read these tutorials on how to upload web pages:
 - Uploading Your Pages [Online] URL
http://html.about.com/library/beginning/bl_begin122298.htm
 - Uploading Web Pages to Your Host [Online] URL
<http://www.ftpplanet.com/ftpresources/webpage.htm>
2. Download WS_FTP LE or get hold of an FTP program that will work with your system
3. WS_FTP is supported at Netfirms.com and has its own help file on how to use WS_FTP
4. Connect to the web server of your host and upload your web pages
5. Test your web site and submit your URL to your course coordinator/instructor

Lesson 4



Activity 4.4

Read the following:

- Learn the Net: Maintenance and Updating Michael Lerner Productions [Online] URL <http://www.learnthenet.com/english/html/52publiz.htm>
- Learn the Net: Getting Feedback Michael Lerner Productions [Online] URL <http://www.learnthenet.com/english/html/54feedbk.htm>
- Learn the Net: Measuring Traffic Michael Lerner Productions [Online] URL <http://www.learnthenet.com/english/html/55measur.htm>

Lesson 4



Activity 4.5

1. Write a short description of your web site
2. Submit it to different search engines.
3. Submit a copy to your course instructor/coordinator

Lesson 4



Activity 4-6

Read these articles:

1. Copyright Law and Fair Use. Stanford. [Online] URL <http://www-sul.stanford.edu/copyright.html>
2. Copyright Basics. Copyright Office. Library of Congress. [Online] URL <http://www.loc.gov/copyright/circs/circ1.html>
3. Rinaldi, Arlene H. The Net: User Guidelines and Netiquette. [Online] URL <http://www.fau.edu/netiquette/net/>
4. WebRef: What Makes a Great Web Site? INT Media Group. [Online] URL <http://webreference.com/greatsite.html> /

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