

Web Page Concept and Design :

Getting a Web Site Up and Running



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?**

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**

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**

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**

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)**



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/>**

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**

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

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 bgcolor="#FFFFFF" text="#000066"> ... <BODY>
```

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>

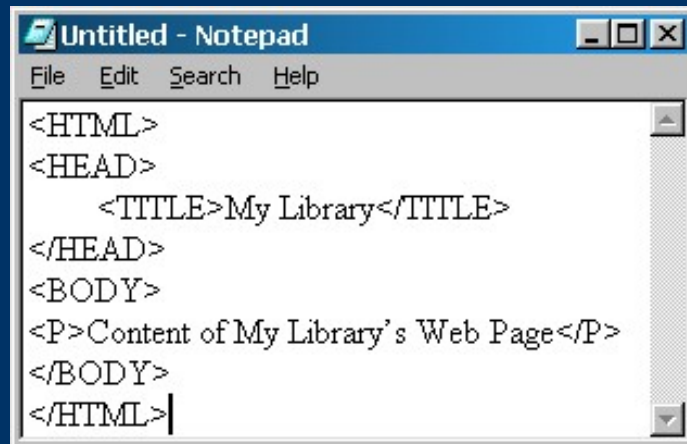
<P>Content of My Library's Web Page</P>

</BODY> Contains all information displayed on the browser

</HTML> [closing tag]

These tags generally define the basic structure of a web page

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.**

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)

What are the basic HTML tags?

<H1> My Library </H1>

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

<H3> Objectives</H3>



What are the basic HTML tags?

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

<CENTER>

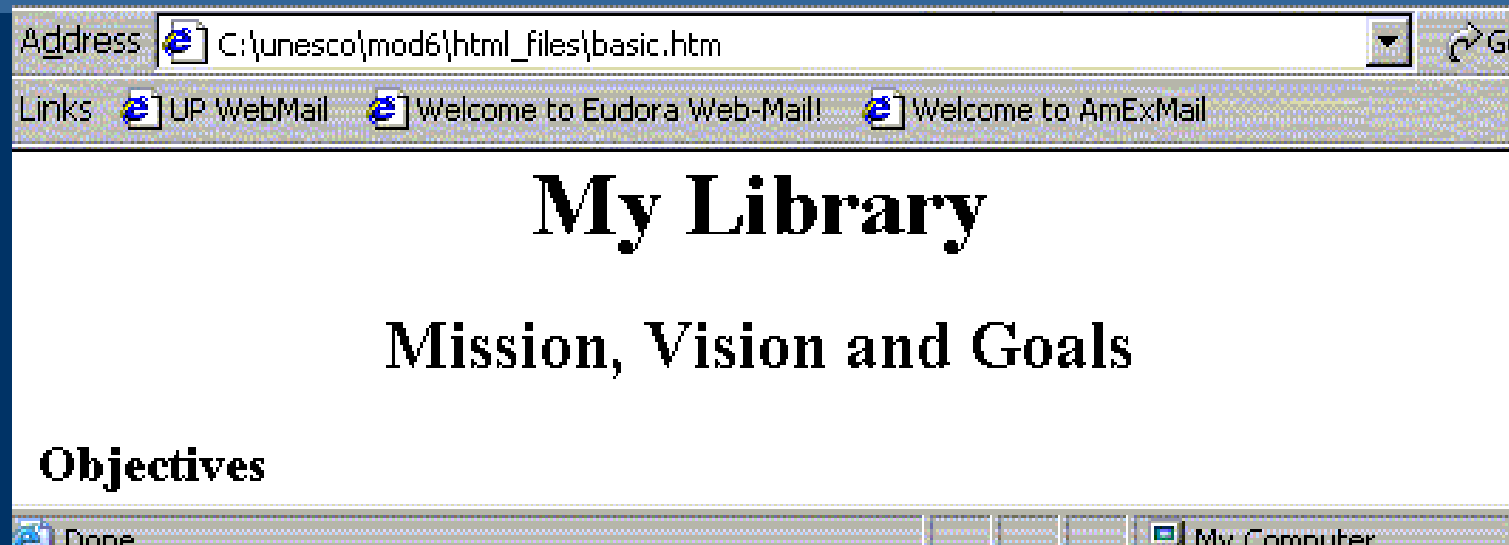
<H1> My Library </H1>

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

</CENTER>

<H3> Objectives</H3>

What are the basic HTML tags?



<CENTER>

<H1> My Library </H1>

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

</CENTER>

<H3> Objectives</H3>

What are the basic HTML tags?

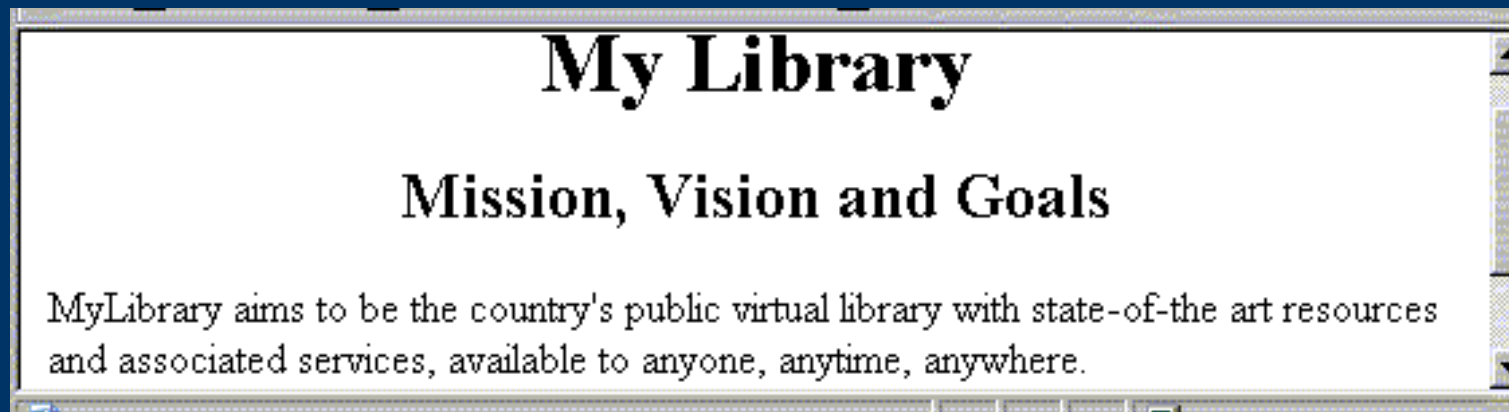
- ◆ The `<P>` tag breaks the textual information on a page and inserts a single line space, which is useful for defining and separating paragraphs.

`<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>`

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>



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.

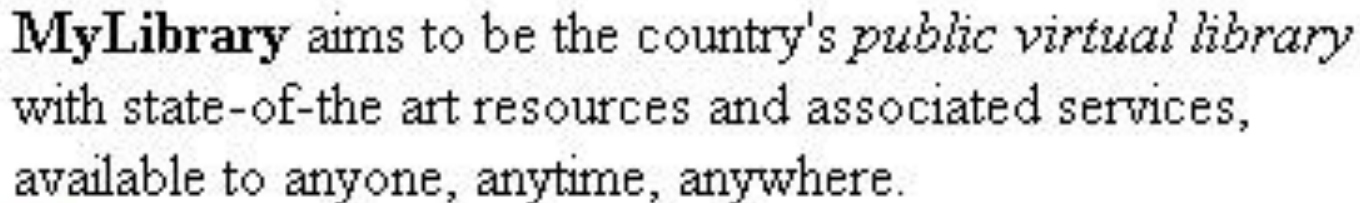
Use the align attribute of the <P> tag to justify the paragraph: center, right or left. (left is the default)

<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>

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.

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.

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>

What are the basic HTML tags?

<H3> Library Hours </H3>

<P> Monday – Friday </BR>

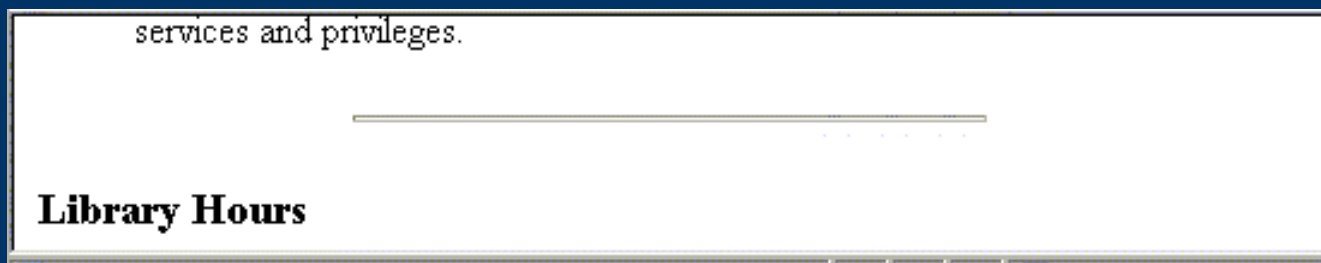
8:00 a.m. – 5:00 p.m. <P>

<P> *Open on Holidays </P>



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



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



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**

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`

``

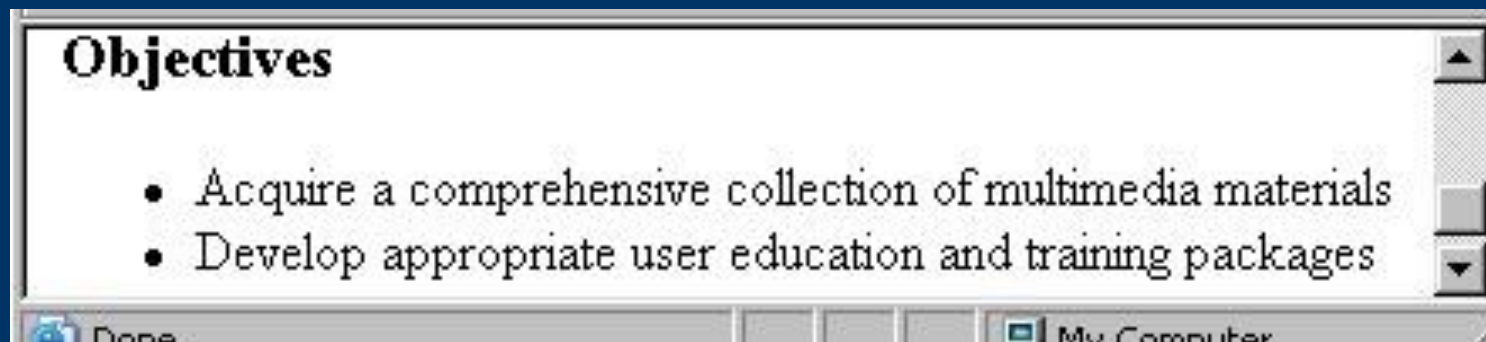
What are other HTML formatting tags?

`<H3> Objectives </H3>`

` Acquire a comprehensive collection of multimedia materials`

` Develop appropriate user education and training packages`

``



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 `

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

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 **

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

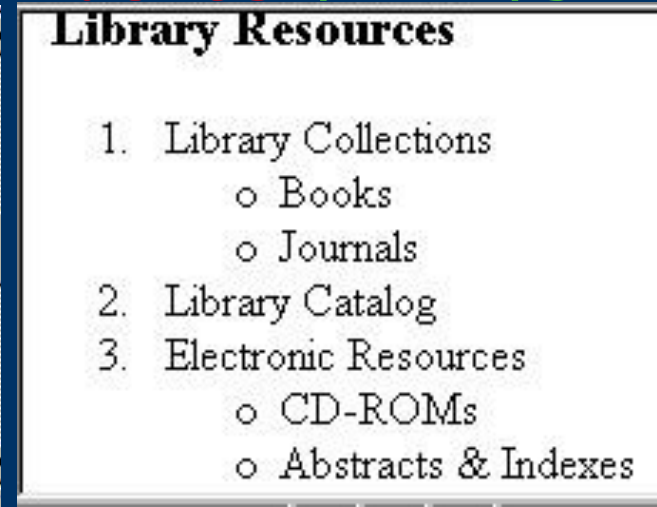
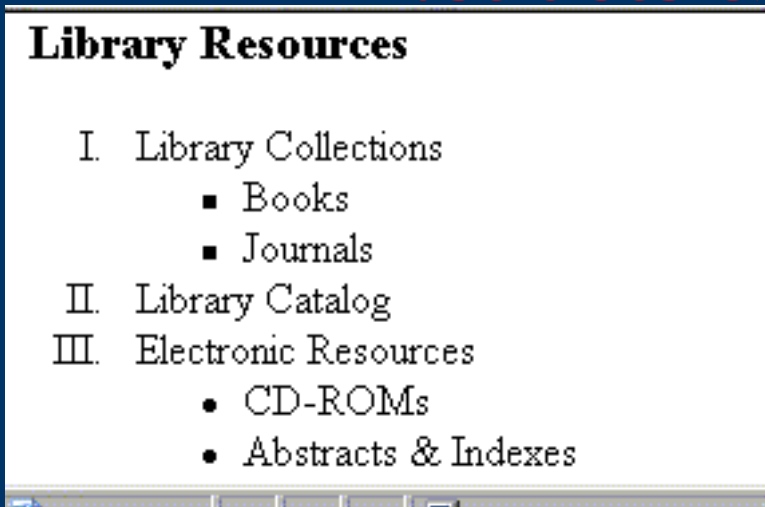
What are other HTML formatting tags?

- ◆ 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>
```


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>
```



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>`

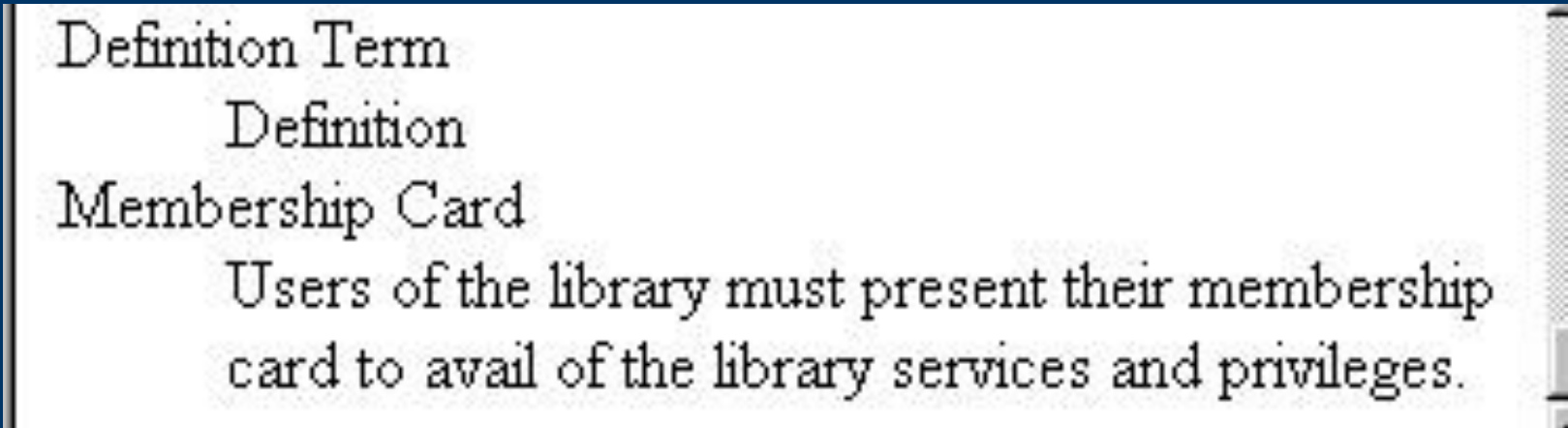
`<DT> Membership Card </DT>`

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

`</DL>`

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>
```






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**

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`

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

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" >
```



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



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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>

<H1> My Library </H1>

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

<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>

How to add color

<CENTER>

<H1> My Library </H1>

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

<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>



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



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**

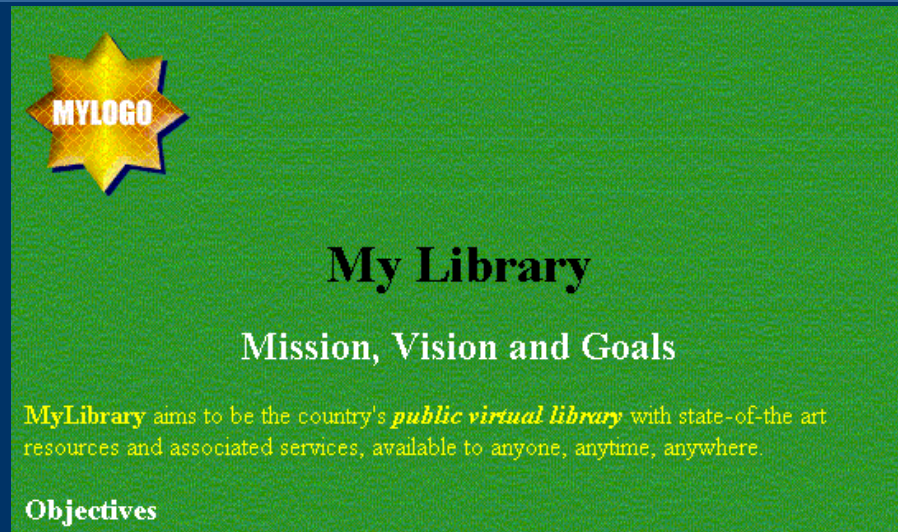
How to add images

- ◆ **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" >



How to add images



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

```
<CENTER>
```

```
<H1> My Library </H1>
```

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

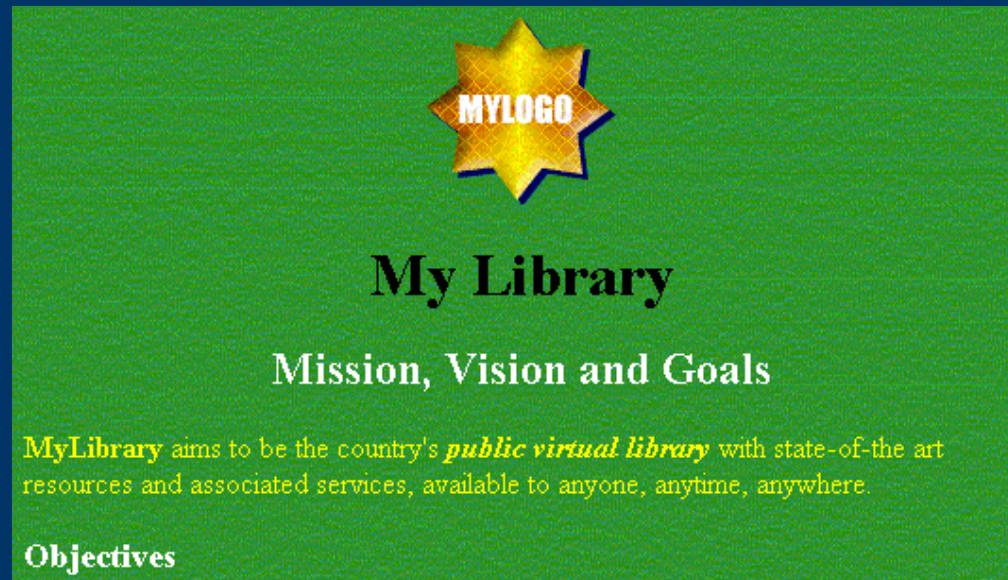
How to add images

<CENTER>

<H1> My Library </H1>

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

</CENTER>



How to add images



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

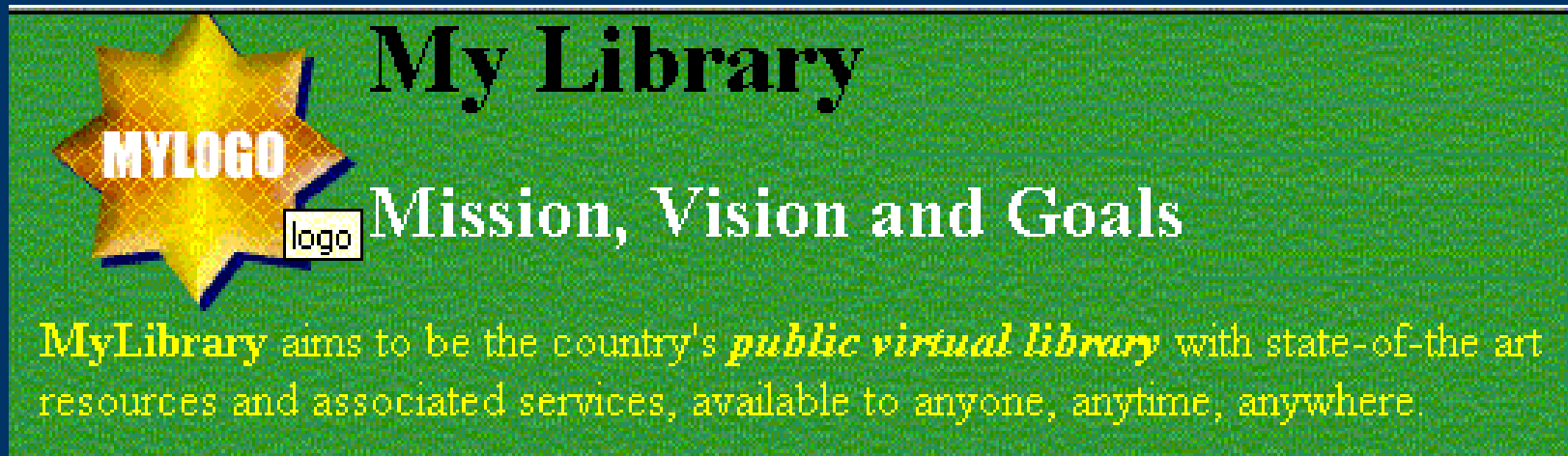
- Acquire a comprehensive collection of multimedia materials
- Develop appropriate user education and training packages

Library Resources

I. Library Collections

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

How to add images



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

How to add images

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





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**

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 `

How to create hyperlinks

**
Library Collection**

Library Resources

- I. Library Collections
 - 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/w
ebworld/portal_bib/">
UNESCO Libraries Portal
**

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

```
<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>
```

How to create hyperlinks

** MyLibrary **



**<A HREF "mylibrary.jpg">

**



**
<IMG
src="mylibrary_sm.jpg"
border=(**



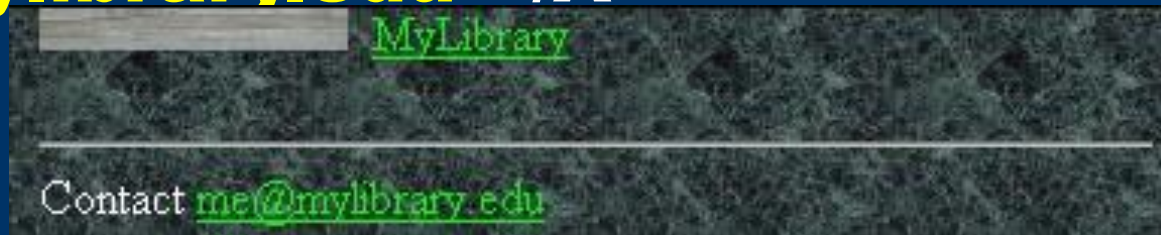
How to create hyperlinks

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

Contact <A

HREF="mailto:me@mylibrary">

**me@mylibrary.edu **





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**



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>**



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.**