STRATEGIC WEBSITE TECHNOLOGIES

LECTURE 2
(BASIC HTML)

Some Definitions:

Server: A machine or a program that provides services such as files, remote connection, e-mail delivery.

Client: A machine or a program that reaches and uses the services provided by a server (Web Browsers such as IE).

Hypertext: Hypertext means text stored in electronic form with cross-reference links between pages.

HTML: HyperText Markup Language. In HTML itself, there is no programming-just the "marking up" of regular text for emphasis and organization.

Web browser: A Web browser is a computer program that interprets HTML commands to collect, arrange, and display the parts of a Web page.

Web Page: A page created to be seen by a Web browser. (=HTML page)


Web Pages vs Paper Pages

When you are viewing Web pages, they look a lot like paper pages. The difference is that Web pages can be **dynamic**, **interactive** and **entertaining.**

Dynamic : The information they contain can change instantly. (Flexibility).
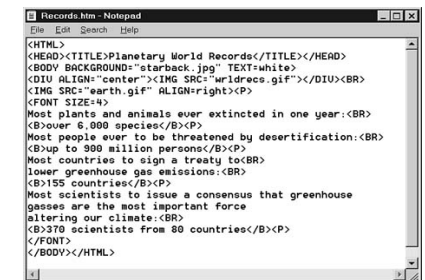
Interactive : They can execute actions upon users request (hyperlinks, ordering forms, databases etc.)

Entertaining : They can include multimedia effects.
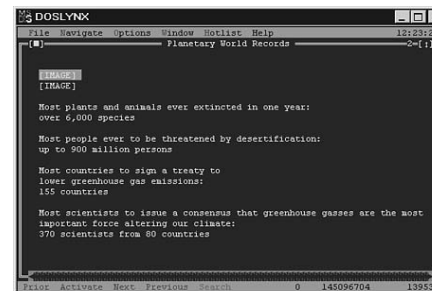
On the editing site Web pages are usually a compilation of several files.
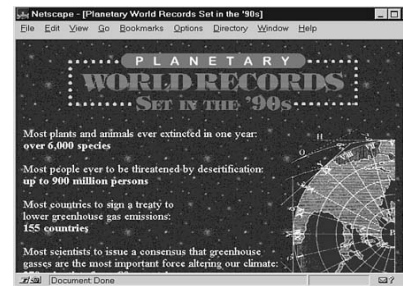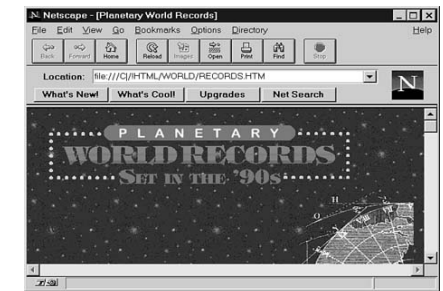

Netscape Navigator 3.0

The HTML File

DOS-LYNX

Netscape Navigator 1.2

Tags:

An HTML tag is a coded command used to indicate how part of a Web page should be displayed.

Tags start with "<" and end with ">" *delimeters*.

Most HTML tags have two parts:

an opening tag, to indicate where a piece of text begins,

a closing tag, to show where the piece of text ends.

Closing tags start with a / (forward slash) just after the < symbol.

Tags with a corresponding closing tag are called **containers**, since they contain parts of text.
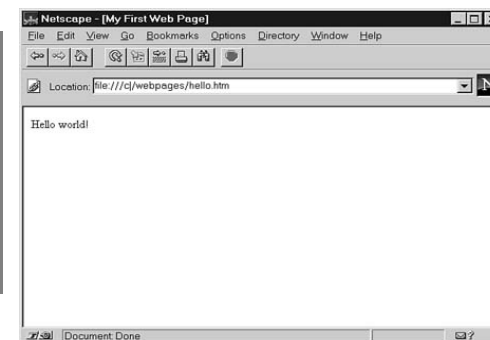

Every Web page you create must include the **<HTML>, <HEAD>, <TITLE>,** and **<BODY>** tags (containers).

<HTML> and </HTML> tags contain the whole document.

<HEAD> and </HEAD> tags contain the essential information about the document such as TITLE, keywords, author etc.

<BODY> and </BODY> tags contain the main body of the document to be displayed.
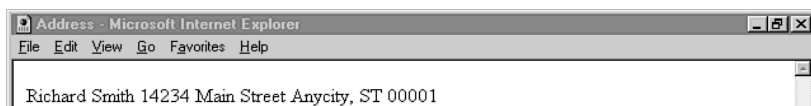
```
<HTML>
<HEAD>
  <TITLE> My First Web Page </TITLE>
</HEAD>
<BODY>
  Hello World!
</BODY>
</HTML>
```

Basic Text Layout

When a Web browser displays HTML pages, it pays no attention to line endings or the number of spaces between words.

```
<HTML>
<HEAD>
  <TITLE>Address</TITLE>
</HEAD>
<BODY>
  Richard          Smith
  14234  Main Street
  Anycity, ST       00001
</BODY>
</HTML>
```


Richard Smith 14234 Main Street Anycity, ST 00001

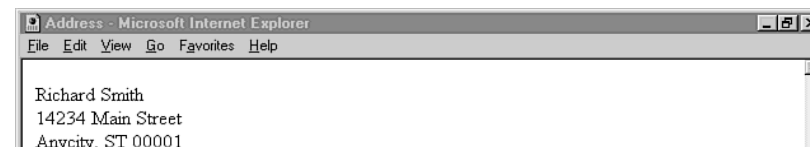To control where line and paragraph breaks actually appear, you must use HTML tags.

The **
** tag forces a line break, and the **<P>** tag creates a paragraph break.

<P> can be used as a container or just as a single tag at the end of the paragraph.

```
<BODY>
  <P>
    Richard Smith<BR>
    14234 Main Street<BR>
    Anycity, ST 00001<BR>
    </P>
</BODY>
```


Richard Smith
14234 Main Street
Anycity, ST 00001

Headers

```
<H1>Header Level One is the largest for headlines or page titles</H1>
<H2>Level Two is a little smaller for major subheads</H2>
<H3>Level Three is again smaller, for minor subheads</H3>
<P>This is regular text.</P>
<H4>Level Four is about the same size as regular text, but emphasized</H4>
<H5>Level Five: again emphasized, but smaller than regular text</H5>
<H6>Level Six is generally the smallest header</H6>
```
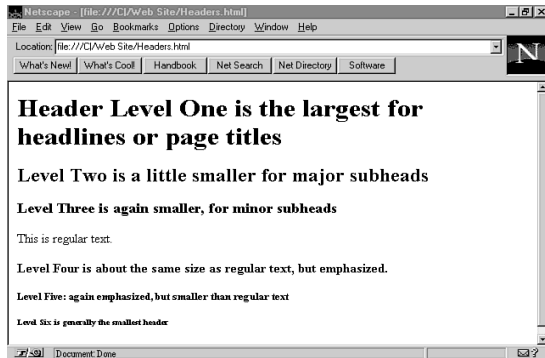
Text Emphasis

It is possible to emphasize certain parts of text using emphasis tags. There are two kinds of such tags physical and logical.

•Physical tags defines the way emphasis to be used.

•Logical tags leave this to browsers.

PHYSICAL EMPHASIS TAGS	
Tags	Meaning
<B>, </B>	Bold Text
<I>, </I>	Italic Text
<U>, </U>	Underlined text

LOGICAL EMPHASIS TAGS	
Tags	Meaning
<STRONG>, </STRONG>	Strong Emphasis (Bold Text)
<EM>, </EM>	Emphasis (Italic Text)
<TT>, </TT>	Teletype (Monospaced text)

```
<P> This is a test of the <B>bold tag</B><BR>
This is a test of the <STRONG>strong emphasis tag</STRONG><BR> </P>
<P> This is a test of the <I>italics tag</I><BR>
This is a test of the <EM>emphasis tag</EM><BR> </P>
<P> This is a test of the <B><I>bold and italics tags together</I></B><BR>
This is a test of the <STRONG><EM>strong and emphasis tags together</EM>
</STRONG><BR></P>
<P> While we're at it, does <U>underlined text</U> appear in this browser?<BR>
And what does <TT>teletype text</TT> look like?<BR> </P>
```
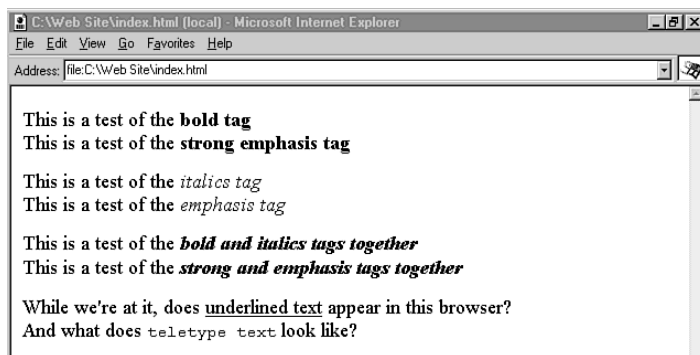
Other Text Formatting Tags

<CITE>, </CITE>	Bibliographical citation (Italic)
<BLOCKQUOTE>, </BLOCKQUOTE>	Block of quoted text (Indented)
<DFN>, </DFN>	Term definition (Regular)
<ADDRESS>, </ADDRESS>	Street or e-mail address (Italic)
<CODE>, </CODE>	Programming lines (Monospaced)
<VAR>, </VAR>	Variable (Italic)
<PRE>, </PRE>	Preformatted text (spaces, tabs and breaks are kept as they are)

To set the size and color of any text on a Web page, use the <FONT> tag:

<FONT SIZE=5 COLOR="purple" FACE="arial,chicago">This text will be big and purple.</FONT>

```
<P>Oh beautiful, for spacious skies,

     For amber waves of grain.

     For purple mountains' majesty,

     Above the fruited plains.</P>


<PRE>Oh beautiful, for spacious skies,

          For amber waves of grain.

     For purple mountains' majesty,

          Above the fruited plains.</PRE>
```

America - Microsoft Internet Explorer

File Edit View Go Favorites Help

Oh beautiful, for spacious skies, For amber waves of grain. For purple mountains' majesty, Above the fruited plains.

```
Oh beautiful, for spacious skies,
     For amber waves of grain.
For purple mountains' majesty,
     Above the fruited plains.
```
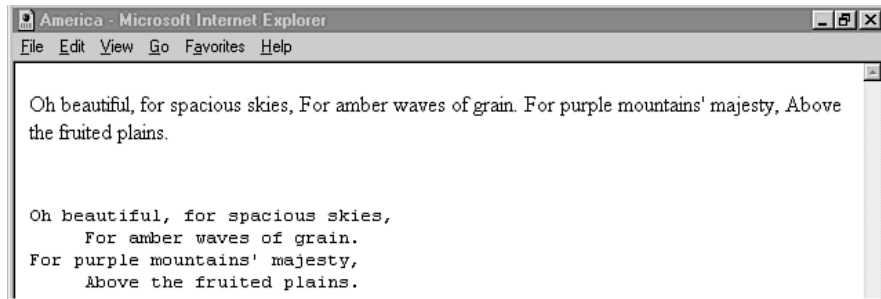
Warning: Long lines with <PRE> tag are generally not wanted!

Comments

Comments in an HTML document are expressed using the

<!-- and --> container.

These are generally used for explaining the HTML code.

For example:

<!--This is a comment that won't display in a browser-->

<!--This page is Copyright 2000 M T Soylemez-->

Horizontal Rules

These are obtained using the <HR> tag.

Can take the following attributes:
WIDTH= width in pixels
SIZE=height in pixels
NOSHADE
SRC="imagefile"

Some Attributes for the <BODY> Tag

- BGCOLOR : Background Color (such as "RED", "WHITE", "BLUE")

- BACKGROUND : Background Image

- TEXT : Text Color

- LINK : Color for links

- ALINK : Color for active links (when they are clicked)

- VLINK : Color for visited links.

Example :

<BODY BGCOLOR="WHITE" TEXT="BLACK" LINK="GREEN">

LISTS

It is possible to form lists using list tags: <UL>, <OL>

<UL>, </UL> is used for unordered lists

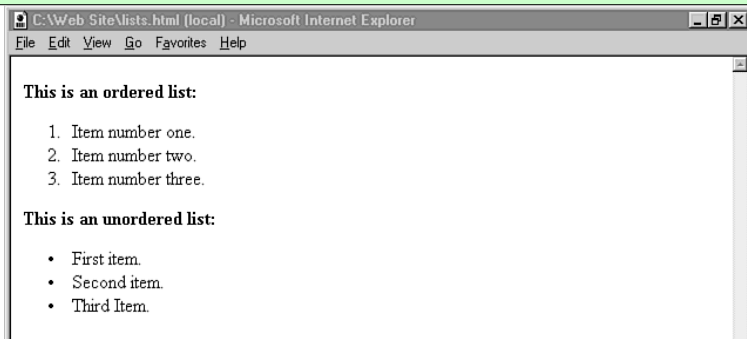<OL>, </OL> is used for ordered lists

List items in a list are separated by <LI> tags.

Like other containers it is possible use other formatting tags inside list containers (including other lists).

```
<OL>
    <LI> Item number one.
    <LI> Item number two.
    <LI> Item number three.
</OL>
<UL>
    <LI> First item.
    <LI> Second item.
    <LI> Third Item.
</UL>
```
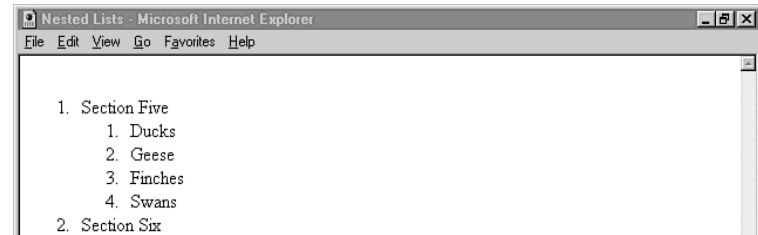
C:\Web Site\lists.html (local) - Microsoft Internet Explorer

File Edit View Go Favorites Help

This is an ordered list:

1. Item number one.
2. Item number two.
3. Item number three.

This is an unordered list:

- First item.
- Second item.
- Third Item.

```
<OL>
    <LI>Section Five
        <OL>
        <LI> Ducks
        <LI> Geese
        <LI> Finches
        <LI> Swans
        </OL>
    <LI> Section Six
</OL>
```

Nested Lists - Microsoft Internet Explorer

File Edit View Go Favorites Help

1. Section Five
    1. Ducks
    2. Geese
    3. Finches
    4. Swans
2. Section Six

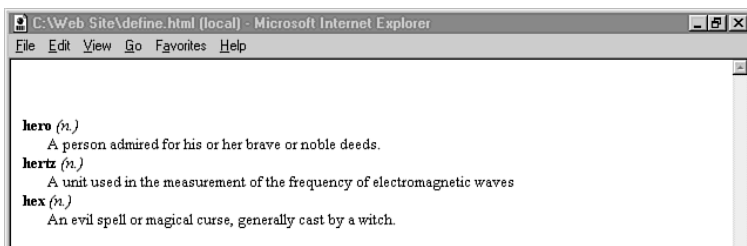# Definition Lists (<DL>, <DT>,<DD>)

```
<DL>
    <DT><B>hero</B> <I>(n.)</I>
    <DD>A person admired for his or her brave or noble deeds.
    <DT><B>hertz</B> <I>(n.)</I>
    <DD>A unit used in the measurement of the frequency of electromagnetic waves
    <DT><B>hex</B> <I>(n.)</I>
    <DD>An evil spell or magical curse, generally cast by a witch.
</DL>
```

C:\Web Site\define.html (local) - Microsoft Internet Explorer

File Edit View Go Favorites Help

hero *(n.)*
    A person admired for his or her brave or noble deeds.
hertz *(n.)*
    A unit used in the measurement of the frequency of electromagnetic waves
hex *(n.)*
    An evil spell or magical curse, generally cast by a witch.

Creating Links

The basic link for creating hypertext and hypermedia links is the <A>, or anchor, tag. It takes the following form:

<A HREF="URL">Text describing link</A>

A URL (Uniform Resource Locator) defines the relative or absolute (internet) address of the resource (generally a page) to be linked.

Several URLs

http://www.homepage.com

mailto:me@here.com

ftp://ftp.fileserver.com

telnet:server.com

```
<A HREF="products.html">Our Product Information</A>

<A HREF="http://www.bignet.net/realcorp/products.html">Our Product Information</A>
```
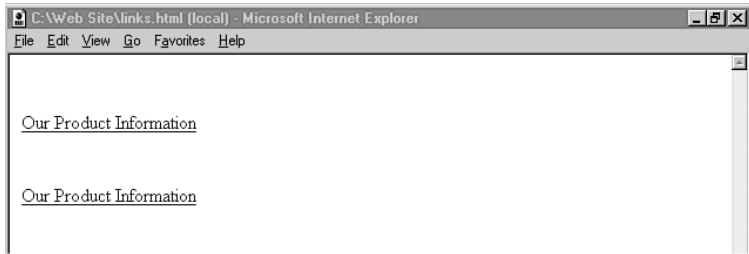

Section Links

It is possible to put an anchor to certain parts of a document and link to these parts.

This is done using the NAME option in the <A> tag and using a # in front of the section name with the HREF option. For example,

<A NAME="section_name">Beginning of new section</A>

<A HREF="#section_name">Link to another section</A>

or

<A HREF="info.htm#section_name">Link to another section</A>

or

<A HREF="http://www.mysite.com/info.htm#section_name">Link to another section</A>

Graphics

To put an image on a Web page <IMG> tag is used

<IMG SRC="*image URL*">

For example,

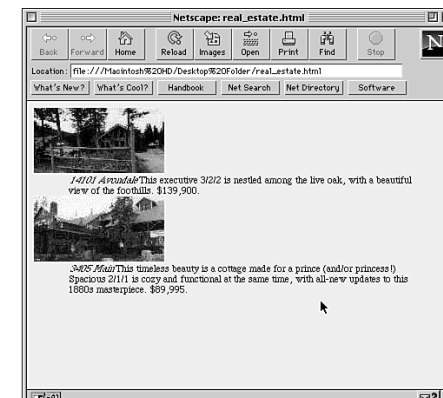<IMG SRC="http://www.mysite.com/myimage.gif">

```
<P><IMG SRC="start.gif"> It's time to start our adventure in the world of
the Web. As you'll see below, there is much to learn. </P>
```


Mixing images with lists

```
<DL>
<DT><IMG SRC="Small_House14101.GIF">
<DD><EM>14101 Avondale</EM> This executive 3/2/2 is nestled among the live
oak, with a beautiful view of the foothills. $139,900.
<DT><IMG SRC="Small_House3405.GIF">
<DD><EM>3405 Main</EM> This timeless beauty is a cottage made for a prince
(and/or princess!) Spacious 2/1/1 is cozy and functional at the same time,
with all-new updates to this 1880s masterpiece. $89,995.
</DL>
```

Some Attributes for the <IMG> Tag

The ALT Attribute

<IMG SRC="image URL" ALT="Text description of graphic">

For example:

<IMG SRC="image1.gif" ALT="Logo graphic [20K]">

The WIDTH and HEIGHT Attributes

<IMG SRC="image URL" WIDTH=200 HEIGHT=100>

The ALIGN Attribute

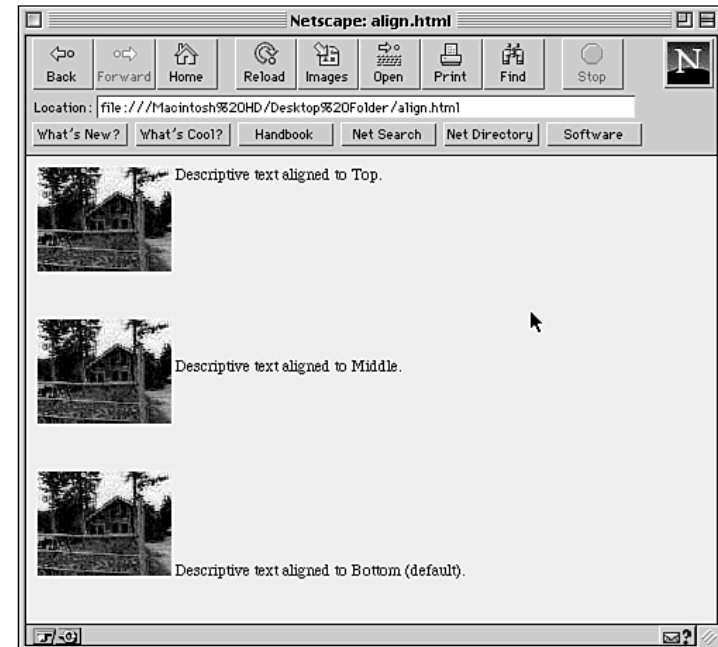<IMG SRC="image URL" ALIGN="direction">

```
<IMG SRC="image1.gif" ALIGN="TOP"> Descriptive text aligned to top.
<IMG SRC="image1.gif" ALIGN="MIDDLE"> Descriptive text aligned to middle.
<IMG SRC="image1.gif"> Descriptive text aligned to bottom (default).
```

The LOWSRC Attribute

<IMG SRC="bigfile.gif" LOWSRC="tinyfile.jpg">

First small image file is downloaded then the big one.

This allows a preview of the image.

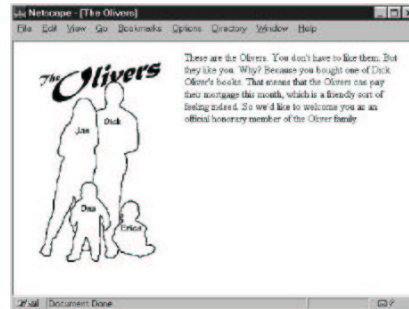# Images That Are Links

```
<A HREF="http://www.fakecorp.com/index.html"><IMG SRC="home_button.gif"
ALT="Back to Home"></A>
<A HREF="http://www.fakecorp.com/products.html"><IMG SRC="prod_button.gif"
ALT="To Products"></A>
<A HREF="http://www.fakecorp.com/about.html"><IMG SRC="about_button.gif"
ALT="To About Bigcorp"></A>
<A HREF="http://www.fakecorp.com/service.html"><IMG SRC="serv_button.gif"
ALT="To Service"></A>
```

Considerations on Choosing the Right Graphics Type

Two conflicting considerations: Quality and Size (download time).

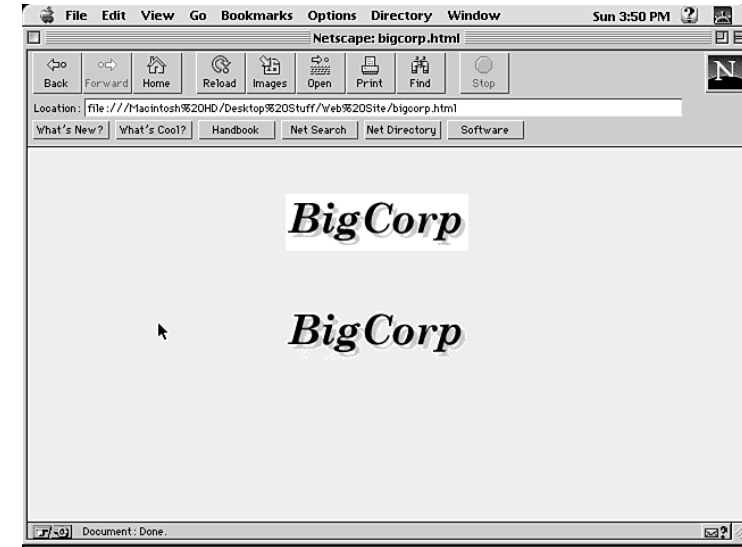A good average size for a Web graphic is between 10K and 30K

Three graphic formats are used: GIF, JPEG and PNG

GIF (CompuServe Graphics Interchange Format) the most popular, small size, 256 colors, interlacing, transparency, animation

JPEG (Joint Photographic Experts Group) high quality, 16.7 million colors

PNG (Portable Network Graphic) a combination of both

Transparency

TIPS

- Use graphics only when necessary. Don't forget that they are slow to download and not everybody will be able to see them.
- The contents of the image should be relevant to your pages theme.
- Use correct type of graphics.
- Crop images when possible.
- Consider the copyright issues.

Sourcing Graphics

It is possible to obtain graphics files from several sources:

1. **Create graphics in a graphics application (Adobe Photoshop, CorelDRAW!, Fractal Painter, MS Paint, FireWorks)**

2. **Download public-domain graphics**

3. **Use scanned photographs**

4. **Digital cameras**

5. **Use PhotoCDs**

IMAGE MAPS

An image map is an image on a Web page that leads to two or more different links, depending on which part of the image someone clicks.

Modern Web browsers use client-side image maps, but you can also create server-side image maps for compatibility with old browsers.

An image can be declared as an image map by using an ISMAP attribute in the <IMG> tag. The place of the map data is given by the USEMAP attribute in <IMG> tag.

<IMG SRC="image.gif" ISMAP USEMAP="#mapdata">

The data containing the coordinates of the hotzones (the clickable areas) and the link addresses is written in a different file or in a <MAP> container.

<MAP NAME="mapdata">
<AREA ...>
<AREA ...>
...
</MAP>

The <AREA> tag should contain the following attributes:

SHAPE : To define the shape of the hotzone. Can be "RECT", "CIRCLE", "POLY" or "DEFAULT"

COORDS: To give the necessary coordinates for the hotzone. (Corner points for RECT and POLY, center point and radius for CIRCLE)

HREF: The document to be linked to.

e.g.
<AREA SHAPE="RECT" COORDS="100,100,200,200" HREF="http://www.amazon.com">

Classroom Exercise

1. Write an empty html document with a background color "BLUE".

2. Include "menu.gif" file in your document.

3. Declare this image as an image map. You should use a tag similar to <IMG SRC="Images/menu.gif" ISMAP USEMAP="#MyFirstMap">

4. Declare 3 rectangular hotzones with coordinates (18,18,280,60), (18,70,280,115) and (18,130,280,170) in a <MAP> container named MyFirstMap. The hotzones should link to the corresponding pages on the course web site.

```
<map name="MyFirstMap">

  <area href="jpeg_vs_gif.htm" shape="rect" coords="18,18,280,59">

  <area href="interlaced_gif_files.htm" shape="rect" coords="18,71,280,114">

  <area href="transparency.htm" shape="rect" coords="18,128,280,169">

</map>
```

Try changing the coordinates and shapes of the hotzones.

When to Use Imagemaps

• When the links have a physical relation to each other. (World Map)

• When you want to enable users to go to important points on your site at any time. (Clicking on pictures is easier than reading text)

• When you want to give your Web site a sense of consistency (as a navigation tool).

Things to Consider:

•You must consider nongraphical browsers when designing your Web pages. (You can use an anchor tag to overcome this problem.

•Because imagemaps tend to be rather large graphics, they take awhile to download.

•Therefore, it is a good idea to provide text links along with image maps.

•Stick to normal shapes whenever possible.

•Don't allow your hotzones to overlap.

•There are several programs that help creating image maps. (MapThis, MapEdit, FrontPage)

Tables

A table is an orderly arrangement of text and/or graphics into vertical columns and horizontal rows.

The basic HTML table tags are as follows:

<TABLE>…</TABLE> -containers for the table data.

<CAPTION> ... </CAPTION> -To put a caption to the table.

<TR>…</TR> -Each row in the table is contained by these tags.

<TD>…</TD> -Table data is contained within these tags.

<TH>…</TH> -To create headers.

```
<TABLE>
    <CAPTION>Team Members for 3-Person Basketball</CAPTION>
    <TR><TH>Blue Team</TH><TH>Red Team</TH><TH>Green Team</TH>
    <TR><TD>Mike R.</TD><TD>Leslie M.</TD><TD>Rick G.</TD>
    <TR><TD>Julie M.</TD><TD>Walter R.</TD><TD>Dale W.</TD>
    <TR><TD>Bill H.</TD><TD>Jenny Q.</TD><TD>Fred B.</TD>
</TABLE>
```

Team Members for 3-Person Basketball

Blue Team	Red Team	Green Team
Mike R.	Leslie M.	Rick G.
Julie M.	Walter R.	Dale W.
Bill H.	Jenny Q.	Fred B.

Attributes of the <TABLE> tag

Attributes	Explanation
ALIGN, VALIGN	Horizontal (LEFT, RIGHT, CENTER) and Vertical Alignment (of elements)
WIDTH, HEIGHT	can be either percentages, as in WIDTH="50%", or absolute values (e.g., WIDTH="15cm").
COLS	the number of columns in your table
BORDER	The width of the border surrounding the table.
CELLSPACING	The space to include between the walls of the table
CELLPADDING	The space to give data elements away from the walls of the cell.

Attributes for Table Rows and Cells

<TR> tag can take the following attributes:

ALIGN, VALIGN, BGCOLOR

<TD> and <TH> tags can take the following attributes:

ALIGN, VALIGN, BGCOLOR, WIDTH, HEIGHT, CELLSPACING, CELLPADDING, NOWRAP (for text to be displayed as a single line).

Note that CAPTION can be alligned to BOTTOM by using the **ALIGN** attribute.

SPANNING ROWS and COLUMNS

It is possible to have table cells span several rows or columns.

The attributes **ROWSPAN** and **COLSPAN** are used with <TD> and <TH> tags to do this.

For example, to span two adjacent cells on a row in a header cell:

<TH ROWSPAN=2>

And to span two adjacent cells on a column

<TH COLSPAN=2>

```
<TABLE BORDER>
 <TR><TH>Student</TH><TH>Test 1</TH><TH>Test 2</TH><TH>Average</TH>
 <TR><TH>Mike M.</TH><TD>100</TD><TD>75</TD><TD ROWSPAN=3>N/A</TD>
 <TR><TH>Susan T.</TH><TD>80</TD><TD>95</TD>
 <TR><TH>Bill Y.</TH><TD COLSPAN=2>Dropped Course</TD>
</TABLE>
```

Student	Test 1	Test 2	Average
Mike M.	100	75	
Susan T.	80	95	N/A
Bill Y.	Dropped Course		

Exercise:

  Write the HTML to create the table shown below:


```
<TABLE BORDER=5>
<TR> <TD ROWSPAN=3>A</TD>  <TD COLSPAN=3>B</TD> </TR>
<TR> <TD>E</TD> <TD>F</TD> <TD ROWSPAN=2>C</TD> </TR>
<TR> <TD COLSPAN=2>D</TD> </TR>
</TABLE>
```
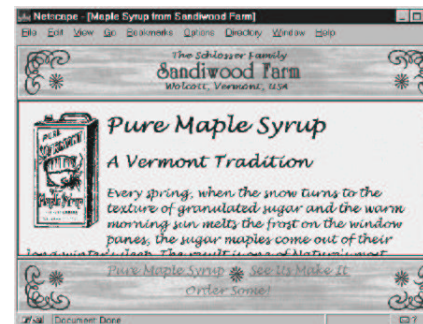
Frames

- Frames divide the browser window into multiple HTML documents.

- Like tables, frames allow you to arrange text and graphics into rows and columns of text and graphics.

- However, unlike a table cell, any frame can contain links that change the contents of other frames (or itself).

Each frame is prepared as a separate HTML document, and then are connected by a FRAMESET document. A FRAMESET document is an HTML document where <FRAMESET> container is used instead of <BODY> container.

Generally <FRAMESET> tag comes with either a ROWS or a COLS attribute. (e.g. ROWS="100,*,200" or COLS="20%,40%,*")

In a FRAMESET container each frame is defined by a <FRAME> tag where the location of the source corresponding to the frame is given by the SRC attribute and a name is attached by a NAME attribute. e.g.

```html
<html>
<head>
</head>
<FRAMESET cols="40%,*">
    <FRAME SRC="image_map.htm" NAME="links">
    <FRAME SRC="index.html" NAME="main">
</FRAMESET>
</html>
```

In addition to the NAME attribute, the <FRAME> tag can take the following special frame-related attributes:

MARGINWIDTH: Left and right margins of the frame (in pixels)

MARGINHEIGHT: Top and bottom margins of the frame (in pixels)

SCROLLING: Display scrollbar for the frame? ("yes " , "no" or "auto")

NORESIZE: Don't allow this frame to be resized by the user.

In the general form:

```
<FRAME SRC="url" NAME="window_name" SCROLLING=YES|NO|AUTO MARGINWIDTH="value"
MARGINHEIGHT="value" NORESIZE>
```

Note that it is possible to have FRAMESETs inside other FRAMESETs.

LINKING FRAMES

The real power of frames becomes apparent with the TARGET attribute of the <A> (anchor) tag. Using this attribute it is possible to the make linked page to be shown on another frame. For example,

<A HREF="transparency.htm" TARGET="main"> Transparency </A>

TARGET can also be used with the <AREA> tag in an image map.

Instead of giving name of a frame the following values can be used with TARGET:

_SELF : The same pane as the link was clicked.

_BLANK : Open a new browser.

_PARENT : The parent frame

_TOP : The whole browser window

The <NOFRAMES> Tag

Frames are only supported by Netscape Navigator version 2.0 or higher and Microsoft Internet Explorer version 3.0 or higher. By using <NOFRAMES> tag the older versions of browsers can be supported.

Text and HTML tags inside the <NOFRAMES> container are ignored by frames-capable browsers. All others should generally ignore the other frames tags (which they won't recognize), but display the text in between the <NOFRAMES> tags. The following is an example:

```html
<FRAMESET ROWS="25%,75%">
<FRAME SRC="menu.html">
<FRAME SRC="index.html">
<NOFRAMES>
<P>This page requires a Frames capable browser to view. If you'd prefer,
you can access our <a href="2_index.html">HTML 2.0 compliant pages</a>
to view this information without the frames interface.</P>
</NOFRAMES>
</FRAMESET>
```

FORMS

Forms are used to request information from users and are very important for collecting information for your company. In an HTML document, forms are set between the <FORM> container tags. The form container works as follows:

    <FORM METHOD="how_to_send" ACTION="URL">

    ...form data...

    </FORM>

Here METHOD is either GET or POST, which is the preferred one.

ACTION can be a URL of a CGI script or an e-mail address preceded by mailto:.

In a form, the data is collected from data fields. There are three types of tags for creating fields: <TEXTAREA>, <SELECT>, and <INPUT>.

<TEXTAREA> - For entering multiple lines of text.

<SELECT> - Selection from options (a scroll box or a pop-up menu).

<INPUT> - Other types of input: single lines of text, radio buttons, check boxes, and the buttons to submit or clear the form.

The <TEXTAREA> tag has the following attributes: NAME, ROWS, COLS

It is generally in the following format:

<TEXTAREA NAME="variable_name" ROWS="number" COLS="number">
  default text
</TEXTAREA>

```
<FORM ACTION="mailto:soylemez@elk.itu.edu.tr"
METHOD="POST">
 <TEXTAREA NAME="comments" ROWS="4" COLS="40">
    Enter comments about this Web site.
    Good or Bad.
 </TEXTAREA>
</FORM>
```

Enter comments about this Web site.
Good or Bad.

The <INPUT> tag follows the following format:

    <INPUT TYPE="type_of_box" NAME="variable">

TYPE can be TEXT, PASSWORD, CHECKBOX, RADIO, RESET or SUBMIT.

Depending on the given TYPE attribute SIZE (the no of chars on screen), MAXLENGTH (max. no of chars), VALUE (initial value, or value when checked), and CHECKED attributes can also be used with <INPUT> tag.

```
Type of Computer: <INPUT TYPE="TEXT" NAME="computer" SIZE="50"
MAXLENGTH="50" VALUE="Pentium">
```

Type of Computer: Pentium

```
Enter Password: <INPUT TYPE="PASSWORD" NAME="password" SIZE="25"
MAXLENGTH="25">
```

Enter Password: ᴍᴍᴍᴍᴍ

```
Type of computer(s) you own:<BR>
    <INPUT TYPE="CHECKBOX" NAME="Pentium" CHECKED> Pentium
    <INPUT TYPE="CHECKBOX" NAME="486"> 486-Series PC
    <INPUT TYPE="CHECKBOX" NAME="Macintosh"> Macintosh
```

Type of computer(s) you own:
☑ Pentium ☐ 486-Series PC ☐ Macintosh

```
Choose the computer type you use most often:<BR>
    <INPUT TYPE="RADIO" NAME="Computer" VALUE="P" CHECKED> Pentium
    <INPUT TYPE="RADIO" NAME="Computer" VALUE="4"> 486-Series PC
    <INPUT TYPE="RADIO" NAME="Computer" VALUE="M"> Macintosh
    <INPUT TYPE="RADIO" NAME="Computer" VALUE="O"> Other
```

```
<INPUT TYPE="RESET">

<INPUT TYPE="RESET" VALUE="Reset the Form">
```

```
<INPUT TYPE="SUBMIT">

<INPUT TYPE="SUBMIT" VALUE="SEND IT IN!">
```

The last type of tag used in a form is a <SELECT> tag, which is a container. This is used for pop-up and scrolling menus. Each option in the menu is given by an <OPTION> tag.

```
Choose your favorite food:
<SELECT NAME="food">
 <OPTION SELECTED VALUE="ital"> Italian
 <OPTION VALUE="texm"> TexMex
 <OPTION VALUE="stek"> SteakHouse
 <OPTION VALUE="chin"> Chinese
</SELECT>
```

```
<SELECT NAME="food" SIZE="4">
```

Embedding Multimedia

By giving a link to a multimedia file by the HREF attribute it can be played by browsers when the user clicks on an item.

The <EMBED> tag can be used to embed multimedia controls. It has SRC (source file), WIDTH, HEIGHT (width and height of the control), HIDDEN (yes or no), AUTOPLAY (In order to start playing automatically), LOOP (true or false) attributes.

For example,

```
<embed src="media/loop3.wav" autoplay hidden="yes"
loop=true width="100" height="100">
```

```
<embed src="media/globe.avi" loop=true>
```

Some browsers allow <BGSOUND SRC="source" loop=number> tag for background sound.

Key Elements of Web page design.

Consider	Suggested guidelines
Text Content	Between 100 and 500 words per page
Text Breaks	A headline, rule, or image every 40 to 100 words (except in long articles or stories)
Page Length	Two to four screens (at 640x480 resolution)
File Size	No more than 50KB per page, (animated GIFs can be up to 100KB pp)
Speed	First text and key images appear in under 5sec over a 14.4Kbps modem
Colors	Two to four thematic colors dominant
Fonts	No more than three fonts (in graphics and text)
Blank Space	Background should show on at least 75 percent of page
Contrast	No color in background should be close to text color
Tone&Style	All text and graphics should be consistent in mood and theme
Overall	Page as a whole should appear balanced and attractive