Unit 4 Lesson 2
HTML Organization Techniques

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PowerPoint Lecture

and Updates

by

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Creating Better Web Pages

- Elements that can make your web pages better include:
  - Choosing fonts, colors, pictures, and organizational elements.
  - Single and double spacing techniques.
  - Line techniques.
  - Other specialized organizing tags.
  - Good color choices for text and backgrounds.
  - White space.
  - Font style, size, and color.
  - Hypertext links help to make web pages interesting and easy to navigate.
  - An index for a long web page.

Figure 2-1

<html>

    <head>

        <title>HTML and JavaScript**</title>**

    </head>

    <body>

        <center><h1>Organizing Tags**</h1></center>**

        There are many ways to organize a Web page. This Web page will organize text, hypertext links, colors, and fonts. It will also demonstrate single spacing, double spacing, and the use of line breaks.

        This Web page will display how to organize Web pages in a number of ways using:

        Powerful Lines

        Hyperlinks to HTML and JavaScript Sources

        Hyperlinks to Previously Created Web Pages

        Fancy Fonts

        Perfect Pictures

        Orderly Tables

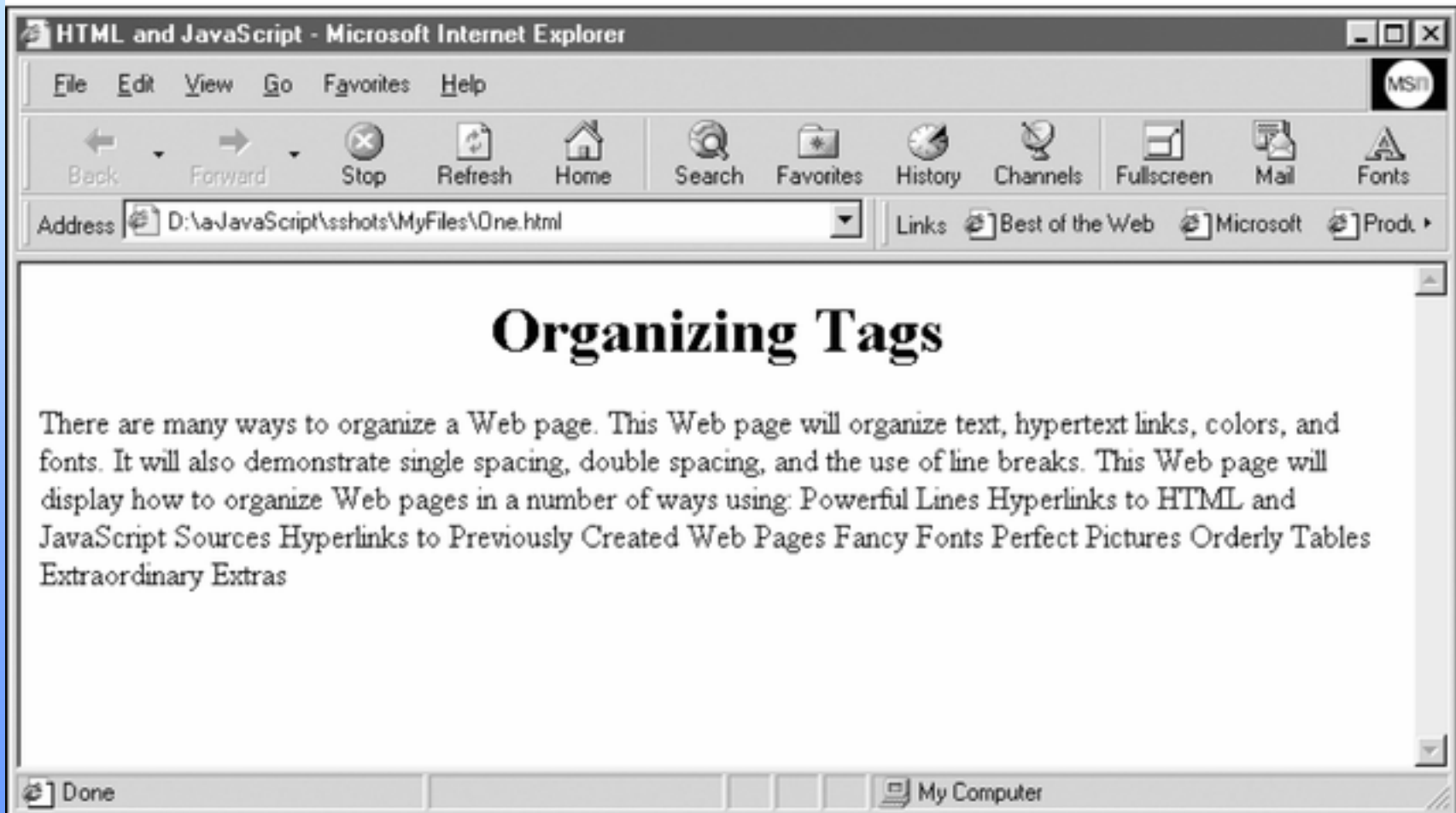   Extraordinary Extras

    </body>

</html>

Six.html

Figure 2-2

FIGURE 2-2

This is an unorganized Web page.

HTML and JavaScript - Microsoft Internet Explorer

File   Edit   View   Go   Favorites   Help

Back   Forward   Stop   Refresh   Home   Search   Favorites   History   Channels   Fullscreen   Mail   Fonts

Address   D:\aJavaScript\sshots\MyFiles\One.html

Links   Best of the Web   Microsoft   Prod.

Organizing Tags

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Done   My Computer

Single and Double Spacing

- Two easiest tags to use to organize a page are the:

- <p></p> or paragraph tags,

- and the <br /> or break tag
  - The break tag is an empty tag and has no end tag.
  - The following is incorrect:
    </br>
  - The correct usage is:
  - Use the break tag to generate a blank line instead of ending a paragraph.

Figure 2-3

```html
<html>
    <head>
            <title>HTML and JavaScript</title>
    </head>
    <body>
            <center><h1>Organizing Tags</h1></center>
            <p>There are many ways to organize a Web page. This Web page will organize text, hypertext links, colors, and fonts. It will also demonstrate single spacing, double spacing, and the use of line breaks.</p>
            <p>This Web page will display how to organize Web pages in a number of ways using:</p>
            <br />Powerful Lines
            <br /> Hyperlinks to HTML and JavaScript Sources
            <br /> Hyperlinks to Previously Created Web Pages
            <br /> Fancy Fonts
            <br /> Perfect Pictures
            <br /> Orderly Tables
            <br /> Extraordinary Extras
    </body>
</html>
```

Seven.html

Figure 2-4

FIGURE 2-4

The <P></P> and <BR> tags clean up a Web page.
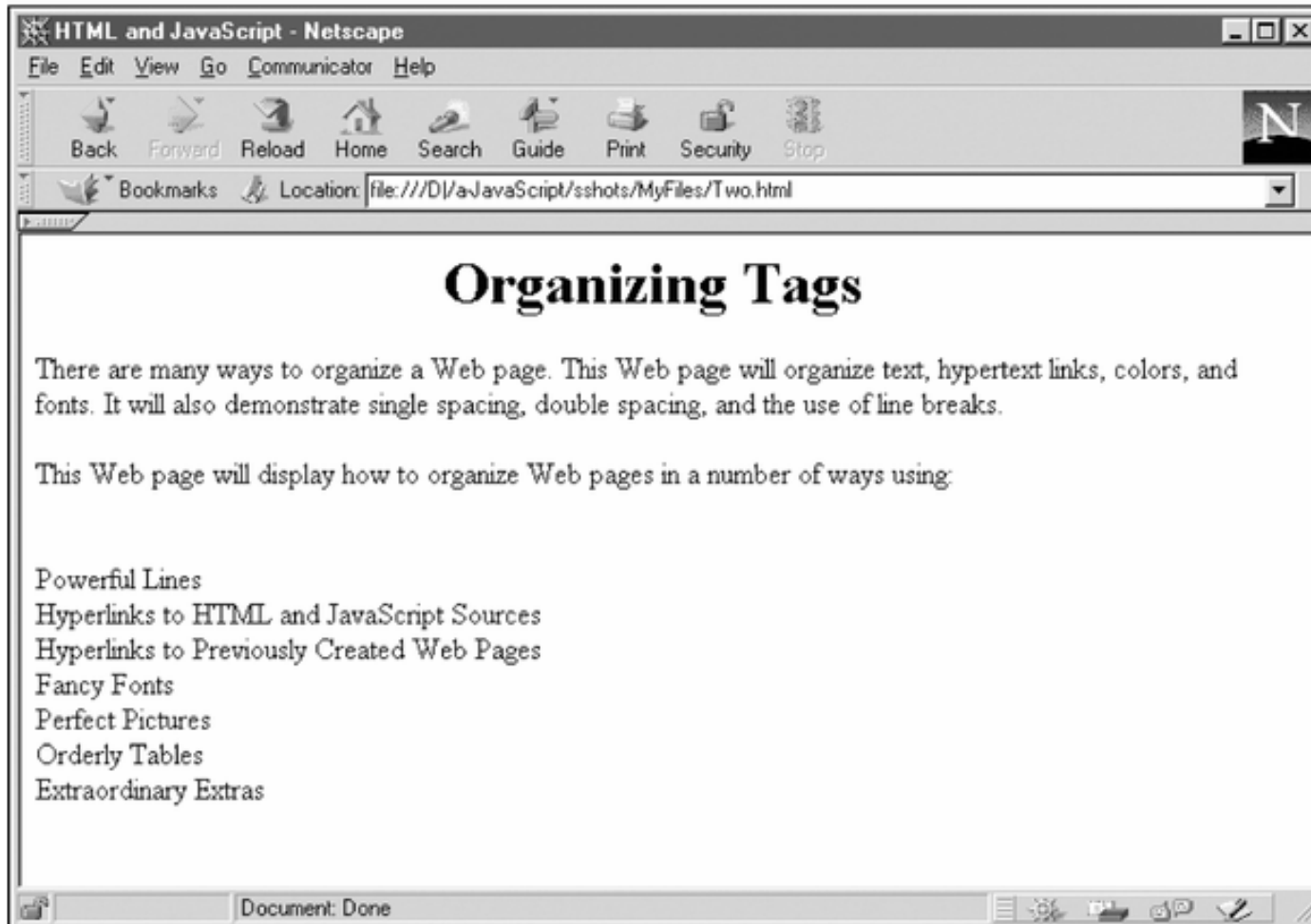
White Space

- Remember that white space includes a space, tab, and enter key, as well as a blank line.

- White space is important for the readers of a web page.

- White space is a term used to describe the area around text that allows the user's eye to rest and find the important parts of a document.

- White space helps open up a document to the human eye.

- Compare Figure 2-2 with Figure 2-4.

- White space is also important in writing and viewing HTML and JavaScript code.

Figure 2-2
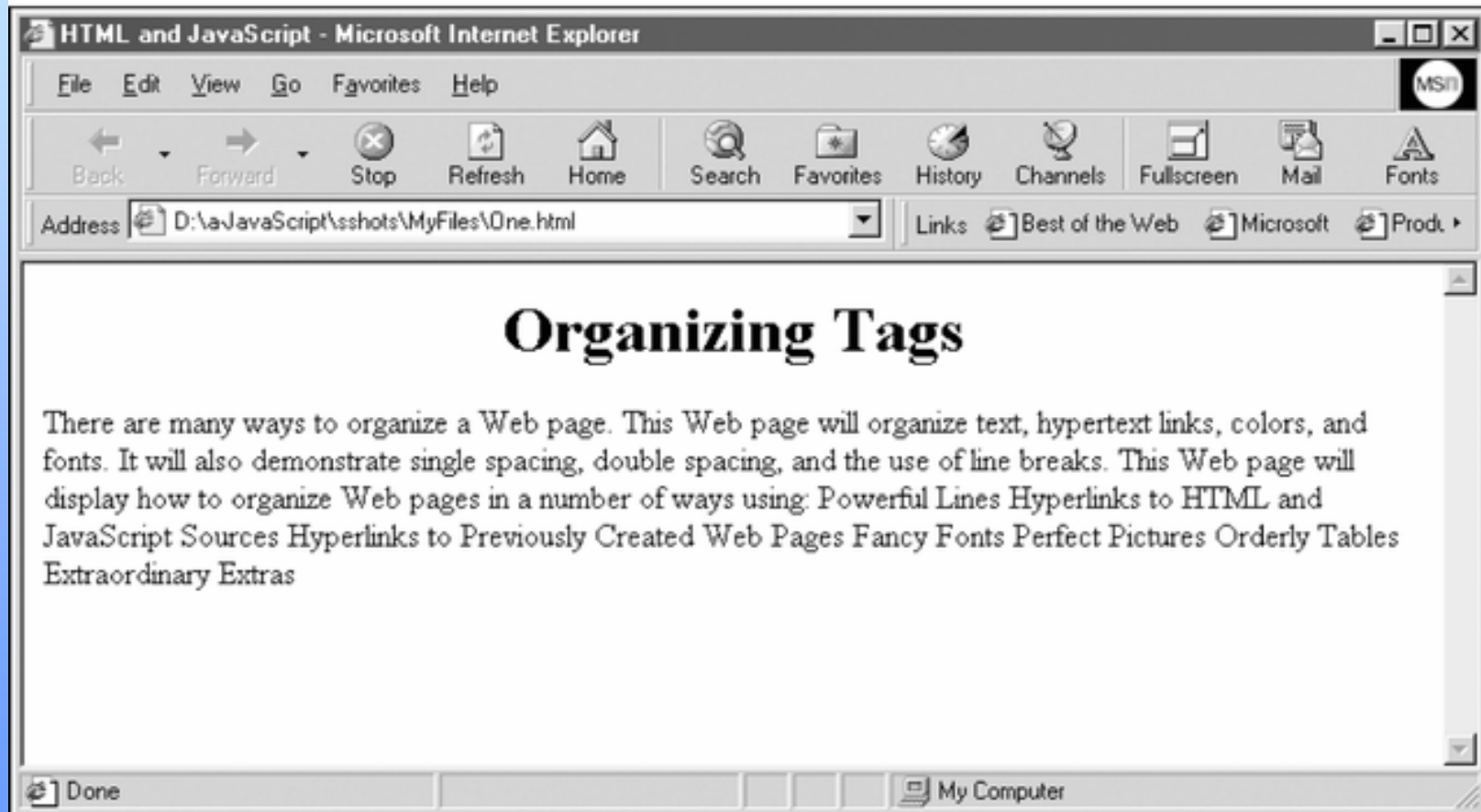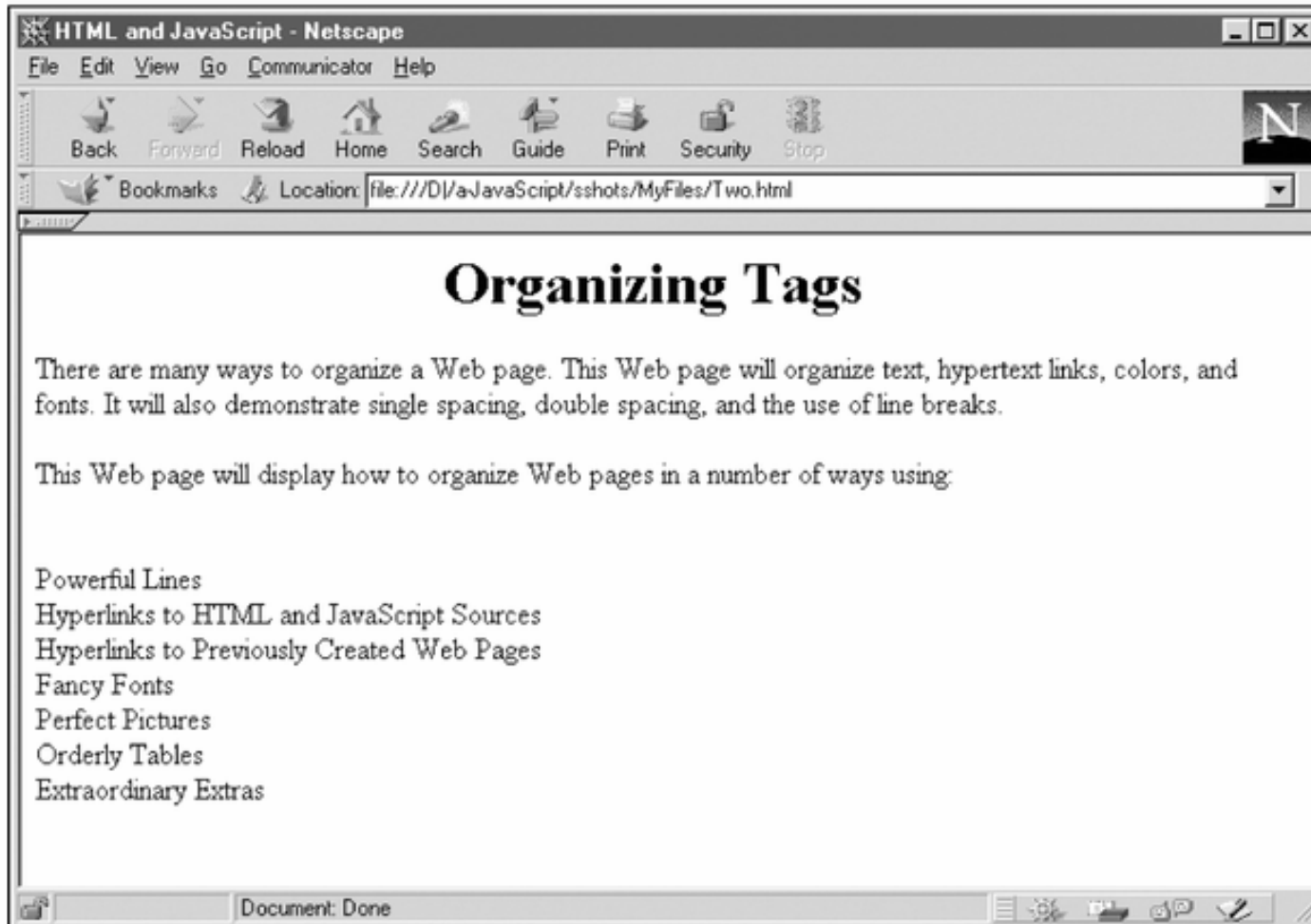

FIGURE 2-2
This is an unorganized Web page.

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File   Edit   View   Go   Favorites   Help

Back   Forward   Stop   Refresh   Home   Search   Favorites   History   Channels   Fullscreen   Mail   Fonts

Address   D:\aJavaScript\sshots\MyFiles\One.html   Links   Best of the Web   Microsoft   Prodt

Organizing Tags

There are many ways to organize a Web page. This Web page will organize text, hypertext links, colors, and fonts. It will also demonstrate single spacing, double spacing, and the use of line breaks. This Web page will display how to organize Web pages in a number of ways using: Powerful Lines Hyperlinks to HTML and JavaScript Sources Hyperlinks to Previously Created Web Pages Fancy Fonts Perfect Pictures Orderly Tables Extraordinary Extras

Done   My Computer

Figure 2-4

FIGURE 2-4

The <P></P> and <BR> tags clean up a Web page.

Tag Attributes

- HTML tags can be enhanced by giving them *attributes* and *values*.

- *Attributes* are the choices that you can change for a particular tag.

- Remember to place double quotes around the values.

- <element **attribute** = "value">Element Text</element>

- For the *values*, remember that computers use numbers, in this case *hexadecimal* values.

- *Hexadecimal* digits operate on a base-16 number system

- *Hexadecimal* numbers use the letters A, B, C, D, E, and F along with the numbers 0 to 9 to create their 16 different digits.

Tag Attributes 2

- Many tags contain attributes that control the behavior, and in some cases the appearance, of elements in the page.

- Attributes are inserted within the tag brackets.

<element attribute1="value1" attribute2="value2" …/>
for one-side tags

<element attribute1="value1" attribute2="value2" …>content</element>

for two-sided tags

Color Theory

- Any color can be thought of as a combination of three primary colors: **red**, **green**, and **blue**.

- By varying the intensity of each primary color, you can create almost any color and any shade of color.

- This principle allows a computer monitor to combine pixels of red, green, and blue to create the array of colors you see on your screen.

Primary & Secondary Colors for Light

- Here is a color chart for the primary and secondary colors of light:
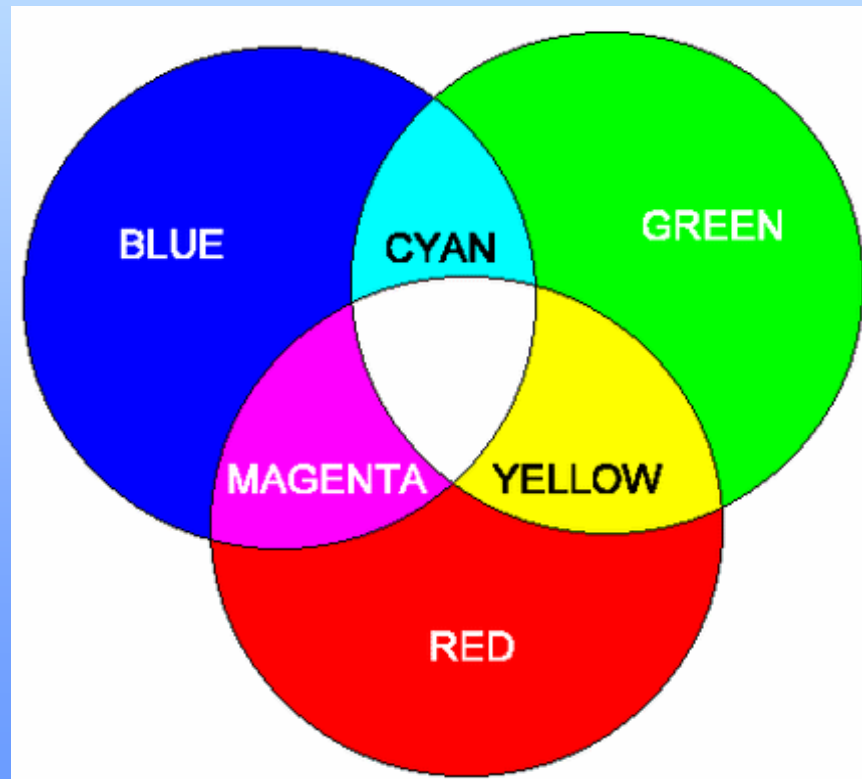
RGB (Red, Green, and Blue)

- Software programs, such as your Web browser, define color mathematically.

- The intensity of each of three colors (RGB) is assigned a number from 0 (absence of color) to 255 (highest intensity).

- In this way, 255^3, or more than 16.7 million, distinct colors can be defined.

- Each color is represented by a triplet of numbers, called an **RGB triplet**, based on the strength of its **R**ed, **G**reen, and **B**lue components.

Color Values

- For example, here are some colors and their hexadecimal equivalents.
    - White = #FFFFFF
    - Black = #000000
    - Red   = #FF0000
    - Green = #00FF00
    - Blue   = #0000FF
    - Yellow = #FFFF00

Color Values 2

- Shades of colors are created by changing the numbers.

- The first two digits represent the amount of Red, the next two the amount of Green, and the last two digits the amount of Blue.

- Because our computer monitors use light to create colors, the presence of all color is White, while the absence of all color is Black.
  - White = #FFFFFF
  - Black = #000000
  - For more information on colors in HTML, visit:
  - http://www.web-source.net/216_color_chart.htm

Browser Safe Colors

- There are 216 colors that are considered to be "Browser Safe".

- This means that these colors should look the same, no matter what browser or computer platform you are using. (Mac or PC, Explorer or Firefox, etc).

- To find lists of these colors, you can search the Internet for "Browser Safe Colors".

- The link below is a useful chart that I found on the Internet.

- http://www.web-source.net/216_color_chart.htm

The 16 Basic Color Names

- The 16 basic color names that are recognized by all versions of HTML and XHTML.

Color Name	RGB Triplet	Hexadecimal	Color Name	RGB Triplet	Hexadecimal
Aqua	(0,255,255)	00FFFF	Navy	(0,0,128)	000080
Black	(0,0,0)	000000	Olive	(128,128,0)	808000
Blue	(0,0,255)	0000FF	Purple	(128,0,128)	800080
Fuchsia	(255,0,255)	FF00FF	Red	(255,0,0)	FF0000
Gray	(128,128,128)	808080	Silver	(192,192,192)	C0C0C0
Green	(0,128,0)	008000	Teal	(0,128,128)	008080
Lime	(0,255,0)	00FF00	White	(255,255,255)	FFFFFF
Maroon	(128,0,0)	800000	Yellow	(255,255,0)	FFFF00

Figure 2-5

- You can change the back ground color of a web page using the BODY BGCOLOR attribute.

- For the color values, you can use color constants (in all capital letters), or the hexadecimal browser safe choices.

<body bgcolor="YELLOW">

<body bgcolor="#0033FF">

- **All attributes of the <body> element were deprecated in HTML 4.01.**

Horizontal Rule

- The horizontal rule tag, draws a horizontal line across the web page <hr />.

- The <hr /> tag can use attributes and values to customize the line.

- **All attributes of the <hr /> element were deprecated in HTML 4.01.**

- The attributes are **width, align, color**, and **size** (line thickness).

- The values for horizontal rule include *pixels* or *percents* for the **width**, and a number for the **size** both enclosed in double quotes.

- For example:

  <hr width = "50%" size = "10"> (50%)

  <hr width = "200" size = "10"> (200 pixels)

- The width specifies the width of the line as a percentage of the web page (50% means half the size of the web page).

- The default **size** is 2.

Horizontal Rule 2

- You can align the horizontal rule to the left or right of the page.
- The default alignment is center.
- You can only see the alignment effect if the width of the horizontal rule is less than the width of the page.

<hr width="200" align="left">

< hr width="200" align="right">

- You can use the color attribute to change the color of the line.

< hr color="red">

Figure 2-6

```
<html>
    <head>
        <title>HTML and JavaScript</title>
    </head>
    <body bgcolor="YELLOW">
        <center><h1>ORGANIZING Tags</h1></center>
        <p>There are many ways to organize a Web page.  This web page will organize
        text, hypertext links, colors, and fonts.  It will also demonstrate single spacing,
        double spacing, and the use of line breaks.  </p>
        <p>This Web page will display how to organize Web pages in a number of ways
        using:  </p>
        <br />Powerful Lines
        <br /> Hyperlinks to HTML and JavaScript Sources
        <br /> Hyperlinks to Previously Created Web Pages
        <br /> Fancy Fonts
        <br /> Perfect Pictures
        <br /> Orderly Tables
        <br /> Extraordinary Extras
```

Figure 2-6 Continued

<hr />

<p><h2>Powerful Lines</h2></p>

A horizontal Rule tag 50% wide and 10 increments high.

<hr width="50%" size="10">

A horizontal Rule tag 25% wide and 20 increments high.

<hr width="25%" size="20">

A horizontal Rule tag 10% wide and 30 increments high.

<hr width="10%" size="30">

A Horizontal Rule tag without attributes and values.

<hr />

</body>

</html>

Eight.html(background color)

Nine.html (horizontal rule)

Figure 2-7

FIGURE 2-7
Powerful lines can be inserted in a Web page.
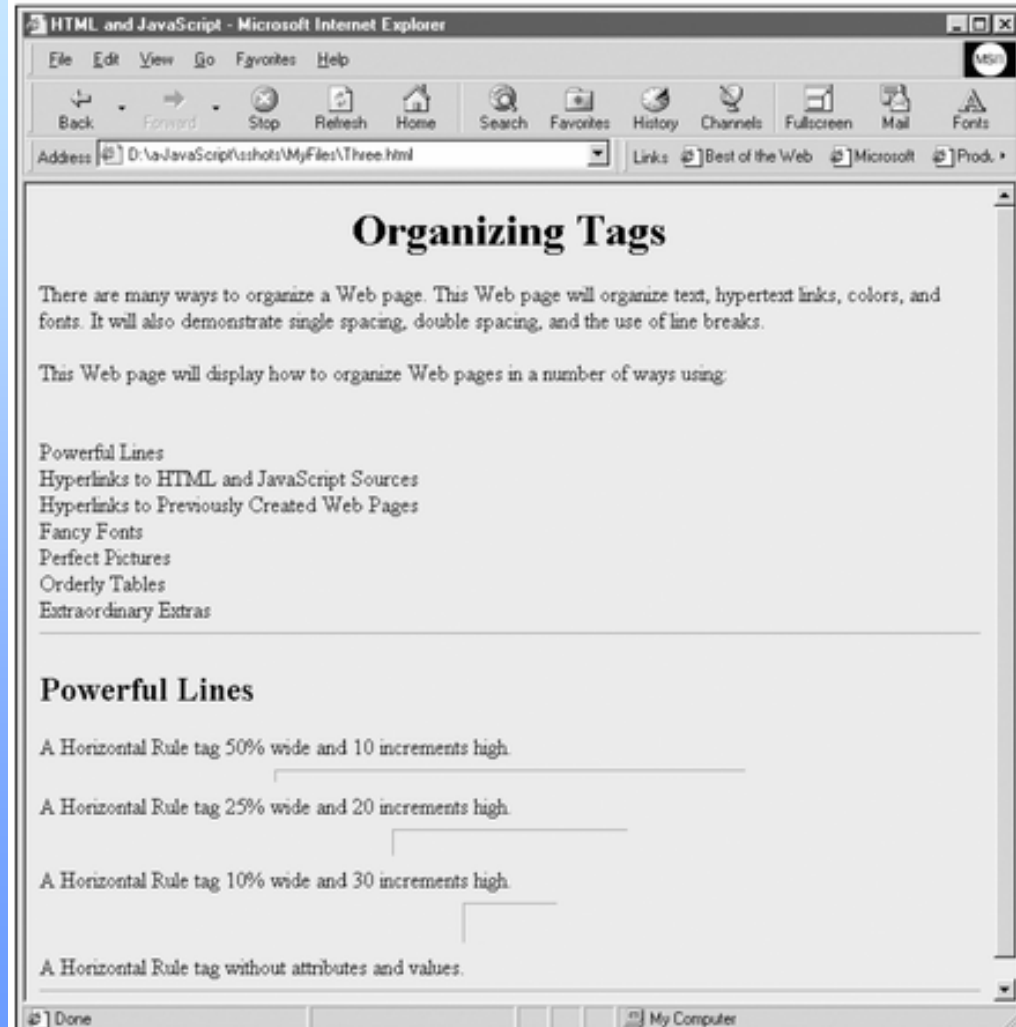
Bad Color Choices

- It is considered impolite to display a Web page that is hard to read.

- It is also a good idea to think for the visually impaired and those who suffer from color blindness when making your color selections.

- Mixing red and green for text and backgrounds can be difficult for color blind people to read.

- Dark text on a dark background can also be difficult to read.

- A font size that is too small is also difficult to read for some people.

Hyperlinks

- Hyperlinks are created with special tags called ***anchor tags***.

- The anchor tag has several parts.

- Links must use the ***href*** attribute of the anchor tag <a>

- The opening and closing tags are called the anchor or link tags and look like this:

 Place Text Here

File Name

- There are several ways to use links, you can:
  - 1) link to another place within your own document,
  - 2) link to a URL or Web page anywhere on the WWW, and
  - 3) link to another web page on your own website.

Hyperlinks Within The Same Page

- To create links that move to another place on the same page, you need to create a named link (that points to the destination link) and a destination link.

- Use the *name* attribute which describes the destination of where you wish to go on the page.

- You also need to create an anchor which is the destination.

Hyperlinks Within The Same Page 2

- Below is the syntax for a *named anchor*:

<a **name** = " label "> Text to be displayed

- For example,

<a **name** = "Powerful"> Powerful lines

- <a **name="MyAnchorName">**Text to use as link destination

- To link directly to the named section, add a # sign in the *href* attribute, and the name of the anchor to the end of a URL, like this:

<a **href** = " #label "> Text to be displayed

- For example,

 <a **href** = " #Powerful"> Powerful Lines

<a **href="#MyAnchorName">**Link To My Anchor

More Hyperlinks

- To open a link in a new window use the *target* attribute with "_blank" as the value:

**Google

- Using _blank for a target will open the content in a new window every time.

- Email links launch your default email program, and include a specified address

- Email link syntax:

Send Email

Figure 2-9

```
<html>
    <head>
        <title>HTML and JavaScript</title>
    </head>
    <body bgcolor=WHITE>
        <center><h1>Organizing Tags</h1></center>

        <p>There are m,any ways to organize a Web page.  This Web page will organize text, hypertext
        links, colors, and fonts.  It will also demonstrate singe spacing, and the use of line breaks.</p>

        <p>This web page will display how to organize Web pages in a number of ways using:  </p>

        <br /><a href="#powerful">Powerful Lines</a>
        <br />Hyperlinks to HTML and JavaScript Sources
        <br />Hyperlinks to Previously Created Web Pages
        <br />Fancy Fonts
        <br /> Perfect Pictures
```

Figure 2-9 Continued

Orderly Tables

Extraordinary Extras

<hr />
<p><h2> Powerful lines </h2></p>

A Horizontal Rule tag 50% wide and 10 increments high.
<hr width="50%" size=10>
A Horizontal Rule tag 25% wide and 20 increments high.
<hr width="25%" size=20>
A Horizontal Rule tag 10% wide and 30 increments high.
<hr width="10%" size=30>
A Horizontal Rule tag without attributes and values.
<hr />

    </body>
</html>

Ten.html

Creating Hypertext Links to the Web

- What made the web popular was the ability to surf from any web page to any other web page in the world with the click of a mouse.

- URLs allow a web browser to pinpoint an exact file on the web.

- URL stands for Uniform Resource Locators which is the web page address.

- Generic Sample: http://www.company.com/webpagefolder/anotherfolder/afileyou want .html

- When you enter a URL int your HTML web page, you are identifying a path specific HTML file located somewhere in cyberspace.

- You often can see the name of a file at the end of a URL that ends in .html.

Various Parts of an URL

- http:// tells the network how to transfer or move the file you are requesting.

- http stands for Hypertext Transfer Protocol.

- A protocol is a communications system used to transfer data over networks.

- "www" tells us that the server where the file is located uses web technology.

- The second part of the address is the actual name of the server that hosts the web page (www.company.com)

- The slashes and names represent the folders on the web server where the files are located.

Various Parts of an URL 2

- **Absolute URL** is the complete URL
  - protocol (http://)
  - server name (www)
  - domain name (lcusd.net, google.com, etc)
  - path (folders delineated by /)
  - filename (something.html)

Parts of an URL 3

- A sample URL for a Web page:

http ://www.mwu.edu /course/info.html #majors

protocol | server | path | filename | id or anchor name

Figure 2-11

```
<html>
    <head>
        <title>HTML and JavaScript</title>
    </head>
    <body bgcolor="WHITE">
        <center><h1>Organizing Tags</h1></center>

        <p>There are many ways to organize a Web page.  This Web page will organize text, hypertext
        links, colors, and fonts.  It will also demonstrate singe spacing, and the use of line breaks.</p>

        <p>This Web page will display how to organize Web pages in a number of ways using:  </p>

        <br /><a href="#powerful">Powerful Lines</a>
        <br /><a href="#hyperlinks">Hyperlinks to HTML and JavaScript Sources</a>
        <br />Hyperlinks to Previously Created Web Pages
        <br />Fancy Fonts
        <br />Perfect Pictures
        <br />Orderly Tables
        <br />Extraordinary Extras
```

Figure 2-11 Continued

```
<hr />
<p><h2><a name="powerful">Powerful Lines</a></h2></p>

A horizontal Rule tag 50% wide and 10 increments high.
<hr  width="50%"  size="10">

A horizontal Rule tag 25% wide and 20 increments high.
<hr  width="25%"  size="20">

A horizontal Rule tag 10% wide and 30 increments high.
<hr  width="10%"  size="30">

<p><h2><a name="hyperlinks"> HYPERLINKS to HTML and JavaScript Sources
</a></h2></p>

<br /><a href=http://www.miscrosoft.com">Microsoft</a>
<br /><a href=http://home.netscape.com">Netscape</a>
<br /><a href=http://www.sun.com">Sun Microsystems</a>
<br /><a href=http://www.oracle.com">Oracle</a>


    </body>

</html>
```

Eleven.html

Figure 2-13

Let's add links to the pages we have already created.

```
<html>
    <head>
        <title>HTML and JavaScript</title>
    </head>
    <body bgcolor="white">
        <center><h1>Organizing Tags</h1></center>

        <p>There are m,any ways to organize a Web page.  This Web page will
        organize text, hypertext links, colors, and fonts.  It will also demonstrate
        singe spacing, and the use of line breaks.</p>

        <p>This web page will display how to organize Web pages in a number of
                ways using:  <p/>

        <br /><a href="#powerful">Powerful Lines</a>
        <br /><a href="#hyperlinks">Hyperlinks to HTML and JavaScript
        Sources</a>
```

Figure 2-13 Continued

```
<br />Hyperlinks to Previously Created Web Pages
<br />Fancy Fonts
<br />Perfect Pictures
<br />Orderly Tables
<br />Extraordinary Extras

<hr />
<p><h2><a name= "powerufl">Powerful Lines</a></h2></p>

A horizontal Rule tag 50% wide and 10 increments high.
<hr  width="50%"  size="10">
A horizontal Rule tag 25% wide and 20 increments high.
<hr  width="25%"  size="20">
A horizontal Rule tag 10% wide and 30 increments high.
<hr  width="10%"  size="30">
A Horizontal Rule tag without attributes and values
<hr />

<p><h2><a name= "hyperlinks">Hyperlinks to HTML and JavaScript Sources
</a></h2></p>
```

Figure 2-13 Continued

```
<br /><a href=http://www.miscrosoft.com">Microsoft</a>
<br /><a href=http://home.netscape.com">Netscape</a>
<br /><a href=http://www.sun.com">Sun Microsystems</a>
<br /><a href=http://www.oracle.com">Oracle</a>
<hr />
<p><h2a name= "previous"> Hyperlinks to Previously Created Web
Pages</a></h2></p>

<br /><a href="one.html>One</a>
<br /><a href="two.html>Two</a>
<br /><a href="three.html>Three</a>
<br /><a href="four.html>Four</a>
<br /><a href="five.html>Five</a>
<br /><a href="six.html>Six</a>
<br /><a href="seven.html>Seven</a>
<br /><a href="eight.html>Eight</a>
<br /><a href="nine.html>Nine</a>
<br /><a href="ten.html>Ten</a>
<br /><a href="eleven.html>Eleven</a>
    </body>
</html>
```

Twelve.html

Mr. Dave Clausen

The <Body> Tag Attributes

- The **BODY** tag takes a number of attributes for specifying the background and colors of the document on visual browsers.
  - **These attributes are *deprecated* in HTML 4.01 in favor of *style sheets*, which provide greater flexibility in suggesting the presentation of a document.**
  - **BGCOLOR** = "color", changes a background color,
  - **TEXT** = "color", changes a text color,
  - **LINK** = "color", changes a link color,
  - **VLINK** = "color", changes a visited link color, and
  - **ALINK** = "color", changes an active link color (when the link is selected).
  - **BACKGROUND** = "Uniform Resource Locator", attribute changes a background image for tiling on the document canvas.
  - If one of these attributes is used, then all of them should be included to ensure that the user's chosen colors do not interfere with those suggested in the **<body>** tag.

Coloring Text

- There are three basic types of text color you can change on a web page.

- The text itself using: TEXT= "color"
- The Hyperlink color   LINK= "color"
- The visited link color   VLINK= "color"
- Your color can be one of the color constants or a hexadecimal using one of the 216 browser safe colors.

Figure 2-15

```
<html>
    <head>
        <title>HTML and JavaScript</title>
    </head>
    <body  bgcolor="WHITE"  text="BLUE"  link="RED" vlink="GREEN">



    </body>
</html>
```

Thirteen.html

Marquee Tag & Attributes

- The Marquee tag will make your text scroll across the page like a stock market ticker.

- <**marquee**> Scrolling Text Here</**marquee**>

- There are several attributes for the Marquee tag.
  - Loop: the marquee will stop after the number of times looped.
  - <marquee loop="5"> Your Text Here </marquee>
  - bgcolor: This will add a rectangle of color behind the scrolling text.
  - <marquee bgcolor="#00FFFF">Your Text Here</marquee>

Marquee Tag & Attributes 2

- direction: right, left, up, down
- <marquee direction="right">Your Text Here</marquee>
- width and/or height for the scrolling window
- <marquee width="200"> Your Text Here </marquee>
- <marquee height="40" width="50%"> Your Text Here </marquee>
- behavior/slide: This sliding marquee slides once and stops.
- <marquee behavior="slide"> Your Text Here </marquee>
- behavior/alternate: alternates scrolling your text left & right
- <marquee behavior="alternate"> Your Text Here </marquee>
- scrolldelay: This will delay the speed of the marquee.
- <marquee scrolldelay="200"> Your Text Here </marquee>

http://www.draac.com/marquee.html

The Blink tag

- `<blink> </blink>`
- This tag will cause the text between the opening and closing tag to blink.
- **This tag does NOT work in Internet Explorer (Thank you Microsoft!).**
- The blink tag does work in Netscape Navigator and Mozilla Firefox.

Working with Special Characters

- Occasionally you will want to include special characters in your Web page that do not appear on your keyboard.

£   ®

- HTML supports the use of character symbols that are identified by a code number or name.

- They begin with with the ampersand symbol & and end with a semicolon ;

&code;

Special Characters 2

Symbol	Code	Name	Description
©	©	©	Copyright symbol
®	®	®	Registered trademark
•	·	·	Middle dot (bullet)
°	°	°	Degree symbol
			Nonbreaking space, used to insert consecutive blank spaces
<	<	<	Less than symbol
>	>	>	Greater than symbol
&	&	&	Ampersand

Here is a good online reference for a list of more special characters:

http://www.webmonkey.com/webmonkey/reference/special_characters/

Summary of HTML Tags For Unit 4 Lesson 2