HTML Color & Graphics

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Oct. 24, 2006

Visit the Computer Survival School's
Online WWW Site at:
http://css.ait.iastate.edu/

Registering your Homepage

To register your NetID with the Homepage Server, telnet to isua.iastate.edu and enter:

1. % **add www**

2. % **setup_www**

and respond to the prompts. This process creates a WWW subdirectory in your home directory and puts a sample file named homepage.html in that WWW subdirectory. Setup_www also sets the protection on your NetID so that the Homepage Server can access your WWW subdirectory files.

Once you have successfully registered with the Homepage Server, move into your WWW subdirectory:

3. % **cd**

4. % **cd WWW**

Once you are in your WWW subdirectory, enter the following commands to copy in some sample files and make a second .html file:

```
% cp /home/www/html/gifs/quips.gif quips.gif
% cp /home/www/html/gifs/paper.gif paper.gif
% cp /home/www/html/gifs/drivein.gif drivein.gif
% add spires
% cp /home/spires/WWW/fire.wav fire.wav
% cp homepage.html testpage.html
```

Then return to your desktop and open up an Web browser in an additional window:

In the 'Location:' or 'Address:' box on the top part of your browser, enter one of the following URL's to link to your homepage:

http://NetID**.public.iastate.edu/**
http://NetID**.public.iastate.edu/homepage.html**

Then click back to your initial window. Your NetID will soon be added to the Homepage directory at:
http://www.public.iastate.edu/directory.html

Basic HTML

HTML stands for Hypertext Markup Language. It is the markup language used to create a web page on the internet. HTML commands known as tags are enclosed in < > and mostly come in pairs <H1>Topic</H1> which surround the area where the effect is to take place with a / preceding the ending tag name.

Try out each of the examples that follow in your own homepage.html file by editing the file with pico. To use pico enter:

% **pico homepage.html**

Once you have changed your homepage.html file then save your file to disk with ^**O** (hold down ctrl and press O) normally followed by a **RETURN** then click on the **RELOAD** button within Netscape. (Enter ^**X** followed by a **RETURN** instead of ^O to save and exit pico at end of session.)

An alternate to editing with pico is to use a desktop text editor like Wordpad or TextEdit. To do this, you need to: 1.) copy the homepage.html file to your local desktop, 2.) edit the file with Wordpad or TextEdit and then 3.) copy the homepage.html file back to Project Vincent or just view the file locally using an Internet browser.

The computer systems in Durham 89 are equipped with click-and-drag AFS so you can use your Project Vincent files just like they were on an additional hard drive on your desktop. If you didn't have this feature available, you would have to use FileZilla or Fetch to download or upload your files once you've finished editing them.

Your initial homepage looks like this:

```
<HTML>
<HEAD>
<TITLE>
Personal Homepage -
Your Name Here</TITLE>
</HEAD>

<BODY>

<H1>Welcome!</H1>

This is a sample homepage.<P>

Text can be shown in <B>bold</B>
and <EM>emphasis</EM>.<P>

My electronic mail address is
<ADDRESS>somewhere@out.there</ADDRESS><P>

</BODY>
</HTML>
```

Setting WWW Page Colors

You can alter the <BODY> tag to set background and link colors:

<BODY BGCOLOR="color" TEXT="color" LINK="color" VLINK="color" ALINK="color">

where BGCOLOR is background color, TEXT is text color, LINK is link color, VLINK is visited link color and ALINK is active link color.

A color is in the form #?????? where ?????? is in three ordered pairs of two for red/green/blue. A single ?? pair can be from 00-FF in value which determines the strength of that particular color. 16 Standard Colors (where name can be used instead of color code):

Black:	#000000	Blue:	#0000FF
Red:	#FF0000	Yellow:	#FFFF00
White:	#FFFFFF	Green:	#008000
Silver:	#C0C0C0	Gray:	#808080
Lime:	#00FF00	Olive:	#808000
Maroon:	#800000	Navy:	#000080
Purple:	#800080	Teal:	#008080
Fuchia:	#FF00FF	Aqua:	#00FFFF

Color Chart: www.zspc.com/color/index-e.html

Blue Violet:	#9F5F9F	Cadet Blue:	#5F9F9F
Indian Red:	#4E2F2F	Goldenrod:	#DBDB70
Quartz:	#D9D9F3	Sea Green:	#238E68
Dark Orchid:	#9932CD	Plum:	#EAADEA
Light Wood:	#E9C2A6	Sienna:	#8E6B23
Orange:	#FF9900	Old Gold:	#CFB53B
Neon Pink:	#FF6EC7	Feldspar:	#D19275
Orange Red:	#FF2400	Sky Blue:	#3299CC
Summer Sky:	#38B0DE	Turquoise:	#ADEAEA
Yellow Green:	#99CC32	Dusty Rose:	#856363
Slate Blue:	#007FFF	Violet:	#4F2F4F
Forest Green:	#238E23	Pink:	#8C8F8F
Navy Blue:	#23238E	Scarlet:	#8C1717
Dark Purple:	#871F78	Copper:	#B87333

Changing the Text Color

You can control the font size/color directly with <FONT SIZE=# COLOR="color"> which ends with </FONT> or <BASEFONT SIZE=#> where # is a number from 1 to 7 (default 3). Alternatively, <BIG> creates a large font size which ends with </BIG>. <SMALL> creates a small font size which ends with </SMALL>.

Graphics

Setting a Background Graphic

You can also alter the <BODY> tag to have HTML use a graphic image for the background on your webpage:

<BODY BACKGROUND="paper.gif">

Fuzzy images, small color squares and images with sharp contrasts make for good backgrounds but can overwhelm your other color choices.

Animated Gifs

Animated gifs are used like normal graphic images but appear to move and change on a WWW page. For more information on animated gifs see:

http://members.aol.com/royalef/gifanim.htm

Either Adobe Photoshop (newer versions) or Macromedia Flash can help you create animated gifs. Flash Animated gifs can also add interactivity to your WWW page.

Graphic placement

When placing inline graphics (GIF, JPEG, PNG, XBM or XPM) in the midst of text use ALIGN=LEFT or RIGHT to have the text snake around the image on the page and VSPACE=# or HSPACE=# to put some space around your graphic:

<IMG ALIGN=left VSPACE=7 HSPACE=7 SRC="quips.gif">

The TOP, MIDDLE and BOTTOM standard ALIGN options align the baseline of the current line of text with the TOP, MIDDLE and BOTTOM of the GRAPHIC.

Some additional ALIGN options refine the standard options:
TEXTTOP - aligns to the top of the tallest text on the current line.
ABSMIDDLE - aligns the middle of the current line with the middle of the image.
BASELINE - aligns the bottom of the image with the baseline of the current line.
ABSBOTTOM - aligns the bottom of the image with the bottom of the current line.

Sizing Inline Images: Internet browsers can load a graphic up to 50% faster if you specify in the html the pixel width and height of the graphic:

```
<IMG WIDTH=184 HEIGHT=119 SRC="quips.gif">
```

Adobe Photoshop can give you basic pixel width and height information.

Linking from a Graphic: Using a graphic to link two Web pages may sound confusing but it is simply a combination of a hypertext link and an inline graphic. Here is an example of a local link from a graphic:

```
<A HREF="testpage.html">
<IMG ALIGN=bottom SRC="quips.gif"></A>
```

This link is set so that if you click on the 'quips.gif' graphic then you will be transported to the local HTML page named testpage.html. At this point, to avoid confusing your two files, you might want to clear the links out of your testpage.html file.

Using this same method you could also link from a graphic to any other page on the internet. Here is a graphics (quips.gif) link to the Lycos search engine (http://www.lycos.com/):

```
<A HREF="http://www.lycos.com/">
<IMG ALIGN=bottom SRC="quips.gif"></A>
```

A lot of interesting effects can be made by combining graphic and textual links with different types of lists. Try creating an unnumbered <UL> ...</UL> or numbered <OL> ...</OL> list of graphic or textual links. You can also use multiple <UL> <UL> <UL> at the start of a page to have your text run down just the right side of the page.

External Items

External Graphics

Inline items/graphics are immediately shown when a page is activated. External items/graphics on a page are activated separately so as not to slow down page loading. An external item may be connected to a textual anchor:

```
<A HREF="drivein.gif">
Press here to see the internet drive-in.</A>
```

or to a graphic anchor:

```
<A HREF="quips.gif">
<IMG ALIGN=bottom SRC="drivein.gif">
</A>
```

External items are commonly used to show a larger or more enhanced version of a graphic. External graphics images can be **.GIF, .JPG, .JPEG, .PNG,** .TIFF, .HDF or .XBM.

Other External Items

External Sound Items: Commonly supported sound file types found on the WWW are **.AU, .WAV, .RA,** .MID, .AIFF or .VOC. Here is an external sound item example which was copied in earlier from the spires locker:

```
<A HREF="fire.wav">Duck.</A>
```

Assorted External Items: Other commonly supported external items include animation/video files **.MOV, .AVI,** .MPEG or .MPG; text files .TXT; and Acrobat files **.PDF**.

Note:

For all external item types, the suffix part of the filename must both be correct and the file itself must be the right format for the item to work. Not all browsers support all the external item types on all systems.

Using Counters and Embed

Counters

Page counters are now available on the Iowa State homepage. The basic form is:

<img src="http://www.iastate.edu/cgi-bin/Count.cgi?df=ID#.dat">

where ID is your ISU NetID and # is a number (like jastruss9). Each different username and number combination is a separate counter. Page counters can have many different forms like:

<img src="http://www.iastate.edu/cgi-bin
/Count.cgi?df=ID#.dat&dd=B">

Over 50 different counter examples are at:

http://css.ait.iastate.edu/Midland/Docs/Count.html.

AutoSound

Use <EMBED> to make a sound automatically play when your page is accessed. <EMBED> can be placed anywhere in the <BODY> of an html file:

```
<EMBED SRC="fire.wav" AUTOSTART=true WIDTH=0
 HEIGHT=0 LOOP=false VOLUME=50> </EMBED>
```

Working with Graphics

Graphic Transfer

Most standard graphic types need to be uploaded or transferred in binary or raw data mode.

The ALT Option

Use the ALT option on the IMG tag to describe your image for non-graphic browsers (like lynx):

```
<IMG ALT="Drive-in (GIF)" SRC="drivein.gif">
```

Altering an Image

You can use Adobe Photoshop for basic image editing including cropping images, removing scratches, resizing an image, or changing image formats. Images for the Web only need to have a resolution of 72 ppi (pixels per inch) as that is what a normal monitor can display.

Using the Scanner in Durham 139

One or more scanners are normally available in Durham 139. Remember to scan your graphics at 72 ppi for the Web. Once you have scanned in your graphic, save it as a **JPG**, **PNG** or **GIF** file with the proper suffix of **.jpg**, **.png** or **.gif**. Then to use that graphic on your Web page, you need to upload the file using FTP and place it in your WWW subdirectory.

The two main FTP programs in the labs are Fetch (Macintosh) and FileZilla (Windows). You can also use click-and-drag AFS to upload and download your files.

A Final Note to Beginning HTML users

While you are using an Internet Browser, under 'View' pull down to 'Source'— to see the internal html workings of any page on the internet. So find an internet page that you like and 'View' that page to see how it is constructed.

To access your homepage next time you login to Project Vincent enter:

1. % **cd**

2. % **cd WWW**

3. % **pico homepage.html**

Examples from this class are available in the jastruss user directory of the Public Homepage Server:

http://jastruss.public.iastate.edu/

Restoring Std. Homepage File

After class, to restore your homepage file back to how it originally started enter:

% **cp testpage.html homepage.html**

Creating A New HTML File

Using the copy (cp) command, you can also make new HTML files in your WWW subdirectory. For instance, if you would like to create a new HTML file named **fire.html** that is a copy of your homepage.html file you would enter:

% **cp homepage.html fire.html**

or if you wanted a new file named water.html that was a copy of fire.html, you would enter:

% **cp fire.html water.html**

You could then link to the new water.html file by using the following URL:

NetID**.public.iastate.edu/water.html**

References

For more information on Photoshop (altering images) and Flash/Fireworks (animated graphics/gifs), the CSS offers a four class series on Photoshop, a four course series on Flash and a three class series on Fireworks. For more information, see the class descriptions at the CSS Web site: `css.ait.iastate.edu`.

The Bare Bones Guides to HTML is a great online source for HTML information:
`http://werbach.com/barebones/`

Webmonkey - HTML Tutorial is another fine online source for HTML information:
`http://www.webmonkey.com/`

Also *HTML Goodies* has a wealth of HTML and other related information:
`http://www.htmlgoodies.com/`