

CS 110 Website Production

Adding Graphics

Department of Computer Science
Western Connecticut State University

Session overview

- Image formats
- Including images in Web pages
- Text alternatives
- Image Alignment Options
- Using `border` attribute

Image Formats

- Web browser software generally understands only:
- **GIF** (**gif**) Graphic Interchange Format
(a CompuServe format)
- **JPEG** (**JPG**, **jpeg**, **jpg**) Joint Photographic Expert Group format
- **PNG** Progressive Network Graphics format
- Most common formats – **gif** and **jpg**

Image Formats

- **gif** images can only use a maximum 256 colors
- **jpeg** supports millions of unique colors
- Using **gif** image format you can trim down the palette to the bare minimum number of colors you need for particular graphic. This may make your file size smaller.

Image Formats

- Graphic images are built out of **pixels**: individual dots of information in the graphic.
- The size of an image is measured in pixels.
- **Resolution** is the number of pixels that can be displayed on a monitor. There are 72 pixels per inch.
- In a **gif** image, each pixel can have one of up to 256 colors – need 8 bits of information.

Image Formats

- With good graphic editor, you can trim your color palette to minimize your file sizes
- Gif supports 1-bit (2 color), 2-bit (4 color), 4-bit (64 color), and 8-bit (256 color) formats.
- 1-bit format is any two of 256 colors you can work with e.g. white and light blue

Image Formats

- The majority of images on the Web employ **gif** format, particularly buttons and banners.
- The **jpeg** format is used to most closely duplicate the exact colors of an original image. e. g. for photographic reproductions.

Including Images in Web Pages

- Images are included using the **** format tag.
- The **src** attribute specifies the file name of an image file.
- **** attributes: **src, alt, title, align, width, height, border, vspace, and hspace.**
- The **** element must include the **src** attribute.

Including Images in Web Pages

- Example:

```
<img src = "MyPicture.gif"/>
```

-Single critical attribute –

src="graphicname"

-like **<hr/>** no closing tag

Text alternatives

- The **alt** attribute specifies alternate text to display in place of the image file. It can be read by a screen reader for visually impaired users to hear.
- **alt = "alternative text"**
- Example:
``

Text alternatives – Adding ToolTip

- The **title** attribute specifies alternate text to display in place of the default text as a ToolTip.
title = "Go to WCSU Website"
- If an **** tag does not include a title attribute, the value assigned to the **alt** attribute appears as a ToolTip when the mouse is moved over the image.
- A ToolTip is text that appears on the screen when the mouse is placed over an image.

Image Alignment Options

- Usually the text is aligned with the bottom of icons.
- Attribute **align** gives you precise control over alignment

Image Alignment Options – Standard Alignment

- The three basic image alignment options refer to the alignment of information that appears subsequent to the image itself.
- Attribute – **align**
- Attribute values:
 - “**top**”
 - “**middle**”
 - “**bottom**”

Image Alignment Options – Standard Alignment

- Tip: If you do not want any material to appear to the right of graphic, add a **
** to the end of the HTML sequence that specifies the graphic.

Image Alignment Options – More Sophisticated Alignment

- Using **height** and **width** attributes , the document can be rendered on the screen faster, even before the browser receives the graphic
- The **height** and the **width** attributes are used to specify the size of an image. The value can be in pixels or as a percent, for the window's height and/or width.
- Only one of height and width is necessary to determine the size of an image. The other will be calculated proportionately by the browser.

Using **border** attribute

- The **border** attribute enables you to specify the exact width of the border around a linked image in pixels.
- ``

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Adding Graphics-2

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Adding Background Colors

- Add bgcolor attribute to the **<body>** tag
 bgcolor = "colorname" or
 bgcolor = "#rgb-value"
 <body bgcolor="green" >...</body>
 <body bgcolor="#AAAAAA">

Check out the 216 websafe colors
on google to get a name or a
code for a color.

html websafe colors

Some color names:

aqua; black; blue; fuchsia; gray;
green; lime; maroon; navy;
olive; purple; red; silver; teal;
white; yellow

Background Graphics

- Adding attribute into the **<body>** tag

background = "filename"

<body background="elephant.jpg">

Will repeat the image to tile the background

<body background:no

repeat="elephant.jpg"> doesn't repeat

Graphic file is in the same folder as the html.

Where Can You find Images

- Personally created
- Clipart or other canned image libraries
- Scanned or digital photographs
- Images grabbed off the Web

Creating your own

Copyright is a big issue for images. The best way to handle it is to create your own images. That way YOU own the copyright to them
You need software and maybe a digital camera.

Paint comes with Windows(easy to use)

Paintbrush downloadable, free(easy to use)

gimp-shop2 for PC and Mac free

Digital photographs

- Reduce size of the image file using appropriate editor to change its width and/or height

e.g.

Paint

Paintbrush

Gimp-shop2

PhotoShop