

Web Graphics

- Web Graphics are usually Raster Graphics
- Use compression to reduce file size for faster download through network
- Requires processing to uncompress and properly display within browser window
- Supported graphic file formats
 - ◆ JPEG = Joint Photographic Experts Group
 - ◆ GIF = Graphics Interchange format
 - ◆ PNG = Portable Network Graphic (Not Yet)

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JPEG Format

- *filename.jpg* (note the extension)
- Best for photographs (24 bit color)
- Excellent Compression
 - ◆ Images > 100 x 100 pixels
 - ◆ Quality:file size (10:1 to 100:1)
- Lossy Process (Not for Archive)

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JPEG Format

- File Size Reduction
 - ◆ Reduce image size
 - ◆ Reduce quality
 - ◆ Gaussian Blur image
 - ◆ Keep 24-bit color (Do NOT reduce colors)
- Properties:
 - ◆ Loading: Progressive or Standard
 - ◆ No Transparency and No Animation

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GIF Format

- *filename.gif* (note the extension)
- Best for graphics with
 - ◆ Non-Photographic Images
 - ◆ Long runs of same color
 - ◆ Maximum palette size of 256 colors
 - ◆ Small Images < 100 x 100 (Less Overhead)
 - ◆ Formatted Text (Shadows 3D Fonts)
- Lossless LZW Compression

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GIF Format

■ File Size Reduction

- ◆ Reduce image size
- ◆ Reduce palette colors
(128,64,32,16,8,4,2)
- ◆ Do NOT Anti-alias or Blur

■ Properties:

- ◆ Loading: Interlaced or Standard
- ◆ Transparency
- ◆ Animation

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Image Sources

■ Acquire on Web (Right click and Save)

- ◆ <http://www.iconbazaar.com/>
- ◆ <http://multimedia.lycos.com/>
- ◆ <http://www.artville.com>
- ◆ <http://www.eyewire.com>

■ Digitize Photo or Drawing

- ◆ Scanner
- ◆ Digital Camera

■ Create using Graphics Software

- ◆ Paintshop Pro
- ◆ Adobe Photoshop
- ◆ Macromedia Fireworks

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HTML: Image Tag

■

- ◆ "URL" can be local file "bob.gif"
- ◆ "URL" can be remote file
"http://www.bob.com/bob.gif"

■ Attributes:

- ◆ ALIGN=RIGHT LEFT TOP MIDDLE BOTTOM
- ◆ BORDER=0 to 127 pixels Border around image
- ◆ ALT="Bob's Mug" Alternate text label
- ◆ WIDTH=200 HEIGHT=150
- ◆ VSPACE=8 HSPACE=12 Places space around image
- ◆ LOWSRC='filename.gif' Initial image load. Not supported by Microsoft IE

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HTML: Background Image Tag

■ <BODY BACKGROUND="WallPaper.gif">

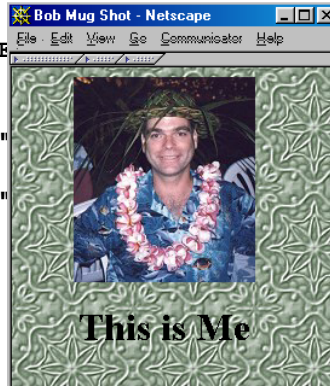
- ◆ Chosen image will tile as background
- ◆ Do Not Specify LENGTH WIDTH Attributes
- ◆ Use images that will tile properly as a tessellation
- ◆ Select background image for high contrast

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HTML: Image Tag Example

```
<HEAD>
<TITLE>Bob Mug Shot</TITLE>
</HEAD>
<BODY
BACKGROUND="Tessellate.jpg"
<CENTER>
<IMG SRC="Bob.jpg" WIDTH="
HEIGHT="170"><BR>
<H1>This is Me</H1>
</CENTER>
</BODY>
</HTML>
```



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Tips: Image Display

- Don't contribute to the world wide wait. Use reduced size images
- Specify the height and width of your pictures to load text and layout first.
- Try to reduce image byte size by reducing colors for GIF or resolution for JPEG.
- Minimize use of linked downloaded images.

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Graphics Assignment

- Manipulate an image that you intend to use on your web site.
 - ◆ Examine how these changes affect file size.
 - ◆ Save in both GIF and JPEG formats
- Find and manipulate a background image that you intend to use on your web site.
- Create several buttons that you intend to use with your web site: Resume, Back
- Insert the images in your Web Pages using HTML

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