



# Understanding Graphics

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## JPG or GIF?

- JPG – use for photos or complex graphics
  - Most gradients
- GIF – use for graphics that have straight lines and solid colors
  - Patterns are acceptable as long as they are not complex

# Examples

- Here is a photo that is saved as a JPG and then as a GIF



## JPG Close-Up

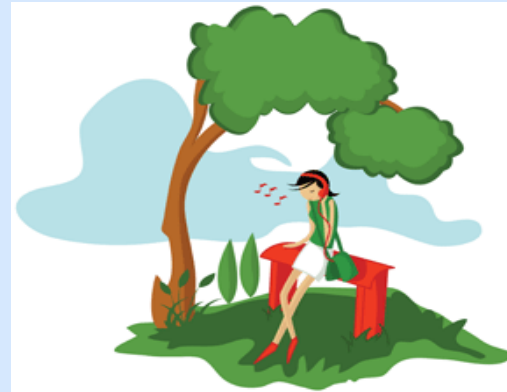
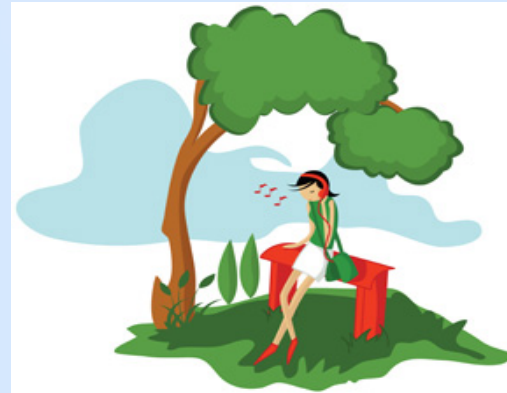


## GIF Close-Up

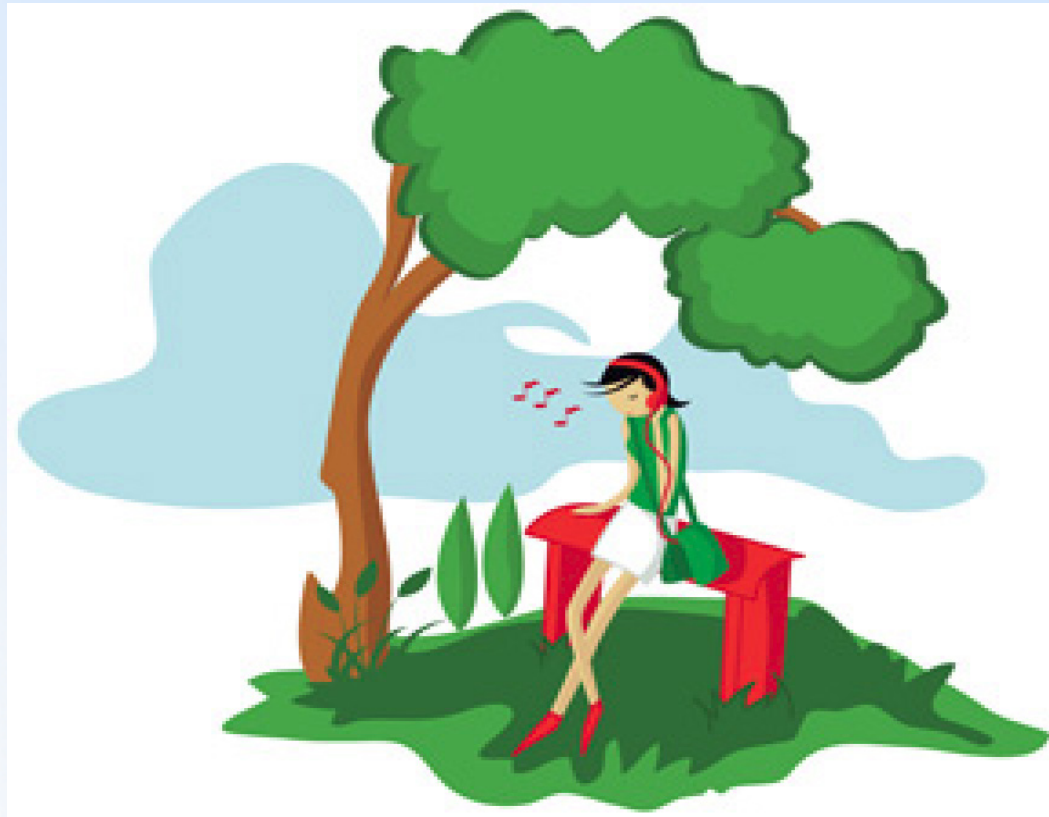


# Examples

- Here is a photo that is saved as a JPG and then as a GIF



## JPG Close-Up



## GIF Close-Up



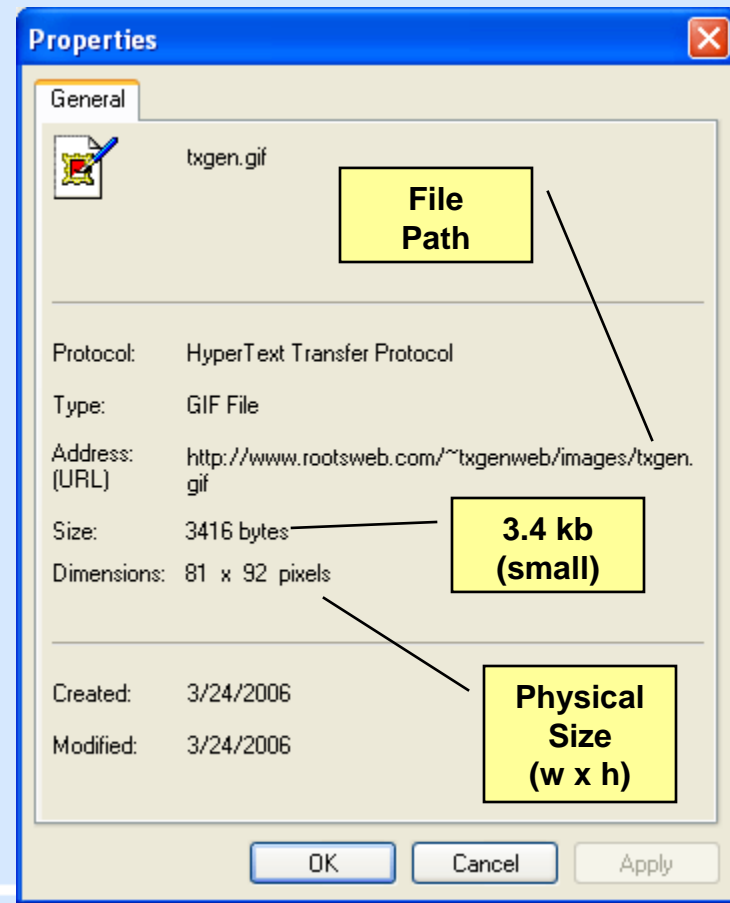
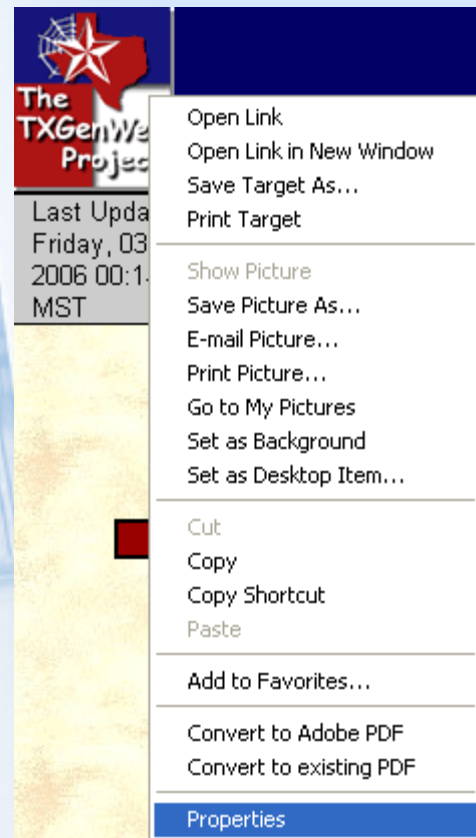


## Image Size

- Image size refers to 2 things:
  - Space the file takes on your computer (kilobytes or megabytes)
  - The physical size of the image (width x height)
- If you have an image that is in the megabyte range, it is too large!

# How do I know the size?

- Right click on the image on the web and go to properties



## JPG & GIF vs. Size

- Saving a file as JPG or GIF will change the size of the file



JPG  
137 kb



GIF  
45.9 kb

- However, sometimes choosing a smaller size means the quality will be terrible

## Example

The logo for Jevan.com features the text "Jevan.com" in a bold, red, sans-serif font. The letters have a slight 3D effect with a white highlight on the top and a dark shadow on the bottom. The logo is centered within a white rectangular box.

Hatching droves of laughter from egg sacs of jollity.

This graphic should have been saved as a GIF, but it was saved as a low resolution JPG. You can see how bad it looks.

# Example



This graphic should have been saved as a JPG.  
Notice the pixilation.

The background of the slide features a light blue gradient with a faint, semi-transparent image of classical architectural columns on the left side. The columns are white with detailed capitals and fluted shafts. The entire slide is framed by a dark brown border.

## Physical Size

- If you have an image that is large, do not insert it on your web page and then resize it in html
  - Even though it looks smaller, it still takes the full amount of time to load
  - It will look distorted

# Examples

- These top 2 photos have been resized in html



**Physical Size:**  
2400 x 1596  
**File Size:**  
11 Megabytes



**Physical Size:**  
1000 x 665  
**File Size:**  
1.9 Megabytes



**Physical Size:** 300 x 200  
**File Size:** 175 Kilobytes

The background of the slide features a light blue gradient with a faint, semi-transparent image of classical architectural columns on the left side. The columns are white with detailed capitals and are set against a darker blue background. The entire slide is framed by a thin brown border.

## Solution

- If you want your users to have access to the larger photo, make a thumbnail of the smaller image and then link it to the larger image
  - In genealogy, having access to the larger photo can be very beneficial
    - Census records
    - Tombstone photos
    - Old letters



## Example

- [View example](#)
- Tombstone thumbnail – 19.6 Kilobytes
- Tombstone photo – 1.91 Megabytes
- Census thumbnail – 19.6 Kilobytes
- Census photo – 16.2 Megabytes
- Note that both of the thumbnails are the same physical size, even though the originals are different sizes
  - This helps to coordinate your site and make it easier for your users to follow your content

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# Making Graphics in Photoshop

- You can make graphics in Photoshop that are complex or simple
  - Layers
  - Warping text
  - Anti-aliasing
  - Save for web

# Layers

- Gives you the ability to “lay” objects on top of each other and to easily make changes later
  - Be sure to save the original file in PSD format
  - Don’t rasterize the text or shapes; you will not be able to adjust them later
- [View an example](#)

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# Warping Text

- Warping text is very easy
  - Use with caution
  - Be careful not to lose readability
  - Writing text on a path is very complex and needs a program like Illustrator

# Example

- [View an example](#)

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## Anti-aliasing

- All computer displays show images in bitmap mode. What this means is that every image is really a bunch of tiny little squares that make up the image
- Anti-aliasing is the name for techniques designed to reduce or eliminate this effect, by shading the pixels along the borders of graphical elements

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# Anti-aliasing Pros and Cons

- **Pros**

- Makes fonts look smoother
- Rounded edges look round
- Type is easier to read (for some) because it looks more like printed type
- It's just plain prettier (some would argue)

- **Cons**

- Small fonts become too fuzzy to read
- Sharp edges may be fuzzy and not precise
- You can't print anti-aliased text as it comes out blurred
- Images are generally larger
- Type is easier to read (for some) because the blurring is reduced and the fonts are clear

## Examples

**Henry  
Wax  
Karnes**

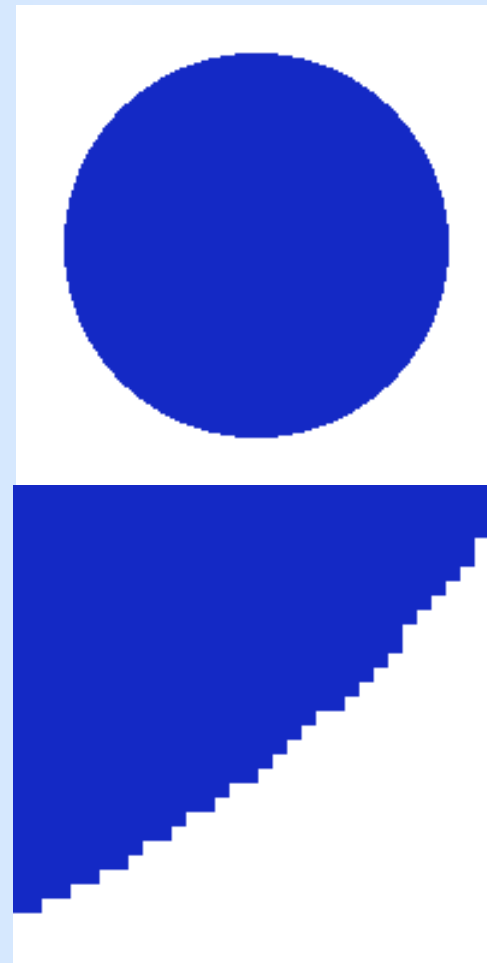
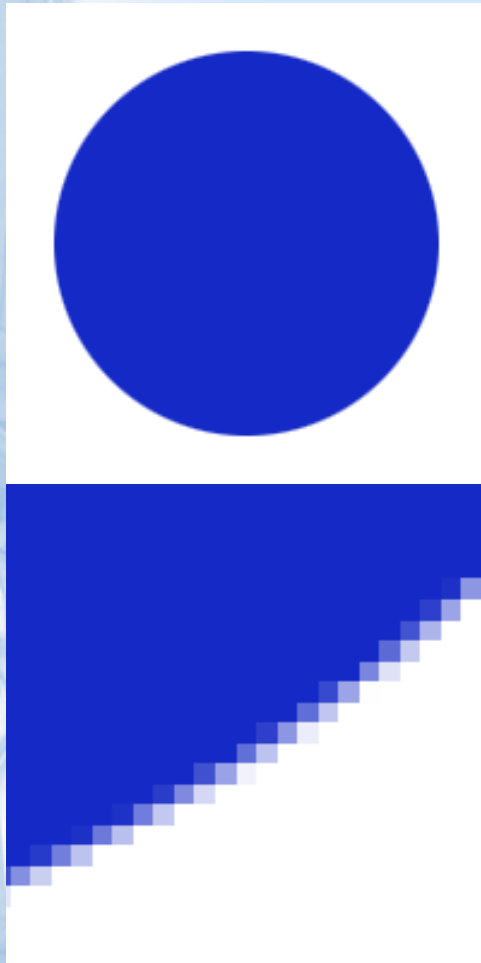
**W X**

**Henry  
Wax  
Karnes**

**W X**



# Examples



## Why Not Anti-Alias All the Time?

- It is hard to read small text if it is anti-aliased

genealogy

genealogy

- Aliased text is good if you want to mimic html
  - [View an example](#)

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## Save for Web

- To save on load time, Photoshop has a great feature called “Save for web...”
  - This feature compresses images at various settings to help your images load quickly
  - You can save GIFs or JPGs

## How to Save for Web

- When you have finished creating your image, go to File > Save for Web
- Choose the setting more appropriate for your image: GIF or JPG
- Change the settings to see how long it would take to load

# Screenshots

Adobe Photoshop - [genweb.psd @

File Edit Image Layer Select Filter

New... Ctrl+N

Open... Ctrl+O

Browse... Shift+Ctrl+O

Open As... Alt+Ctrl+O

Open Recent ▶

Edit in ImageReady Shift+Ctrl+M

Close Ctrl+W

Close All Alt+Ctrl+W

Save Ctrl+S

Save As... Shift+Ctrl+S

Save a Version...

Save for Web... Alt+Shift+Ctrl+S

Revert F12

Save

Cancel

Done

Preset: [Unnamed]

JPEG

Optimized

Maximum

Quality: 100

Progressive

Blur: 0

ICC Profile

Matte:

Save

Cancel

Done

Preset: [Unnamed]

GIF

Lossy: 0

Perceptual

Colors: 256

Diffusion

Dither: 100%

Transparency

Matte:

No Transparen.

Amount: 100%

Interlaced

Web Snap: 0%

GIF  
1,222K  
1 sec @ 56.6 Kbps

# Examples: GIF



256 Colors  
3 seconds



128 Colors



64 Colors



32 Colors



16 Colors



8 Colors



4 Colors

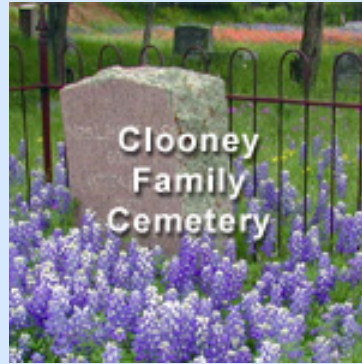


2 Colors  
1 second

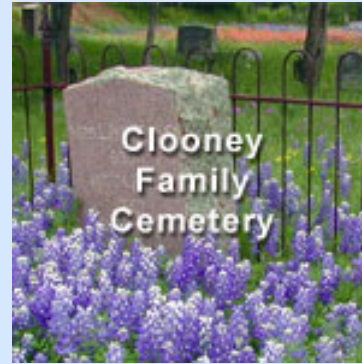
# Examples: JPG



**Maximum  
8 seconds**



**Very High**



**High**



**Medium**



**Low  
2 seconds**

## Final Thoughts

- Remember: your users are at your website to find content, not a lot of graphics
  - When adding graphics, load time should definitely be considered
  - Readability is a must
  - Ask yourself: “Is this graphic a benefit to my users or just eye candy?”
    - Animations can take a long time to load and are usually eye candy



# Questions

