



Images



Worth a Thousand Words

- Images are found on almost all websites
 - Loads quickly & keeps site traffic flowing smoothly
 - Increased Internet speed
 - File types improves quality & load speed
 - Adjustments cut down on file size without sacrificing quality
 - Should be chosen for a purpose
 - Convey useful information
 - Support text content
 - Inspire curiosity or enjoyment

- Tells browser to start an image
- Void element/empty tag
- src attribute used to establish the “source” of the image
 - Can be a relative location if in your domain
 - Can be an absolute location if located on the web

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alt attribute

- Used to describe an image
 - In case image does not show up
 - For screen readers
 - Include enough detail that a person can imagine what the picture looked like with reasonable accuracy
 - Displays where the image should have been

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 roller coaster train zooming through a loop

Image Dimensions

- Most images on the web are raster graphics
 - Made of pixels
 - Blocks of color arranged in a grid
 - When you enlarge a photo, you can see the blocks of individual colors
 - When zoomed out, it looks very smooth and represents the real thing
 - Disadvantage - Limited information stored in file
 - It's as big as it goes
 - If enlarged the pixels become obvious
 - The image is pixelated
 - Use caution changing image sizes
 - Best practice is to keep original file and save changes with a new file name

Image Dimensions



50px × 50px



300px × 300px

height and width attributes

- Changes the height and width of the image within your webpage
- Without, the image will default to original image size
 - Okay if the image is the size you need
- You need to keep the proportions the same as original
 - With both defined it could force the image out of proportion
 - When you define one attribute size, the other adjusts proportionally

Sunflower at its original size



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or

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Sunflower forced out of proportion



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Sunflower with one dimension defined, automatically proportioned



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Image Formats for the Web

- Quality vs File Size
 - Printed images usually use TIFFs
 - Large file sizes
 - High image quality
 - 150+ px/inch
 - Web images are usually JPEG, GIF, or PNG
 - Smaller file sizes
 - Lower image quality
 - 72 px/inch - most a monitor will read

JPEG - Joint Photographic Experts Group

- Pronounced “jay-pegs”
 - File extension .jpeg or .jpg
- Ideal for complex images and photographs
 - Anything with a high variation in color used
- Low file size
 - Compresses the quality
 - Narrows down color variety
 - Image could look muddy and blurry
- Does not support transparency



GIF: Graphics Interchange Format

- Pronounced gif or jif, depending on who you ask
- Displays images with 256 colors or fewer
- Supports transparency
- Good for art with few colors and simple transparency
 - Logos
 - Icons
- Keeps file size low and quality high
- Works with animations



PNG: Portable Network Graphics

- Pronounced P-N-G
- Similar to GIF
 - Supports more colors
 - Produces better quality in transparency
 - Tends to load faster
- Best option for images with large portions of flat colors
- Used when text is prominent
 - Will keep text crisp and clear



Match image to most appropriate file type



JPEG

GIF

PNG

Match image to most appropriate file type



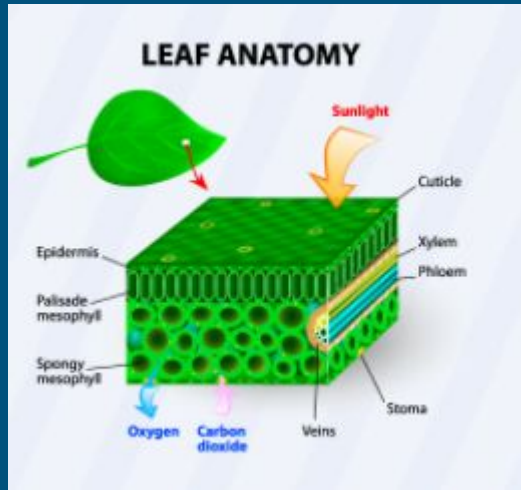
JPEG

GIF

PNG

Photographs or photo-realistic color palettes should be set as JPEGs.

Match image to most appropriate file type

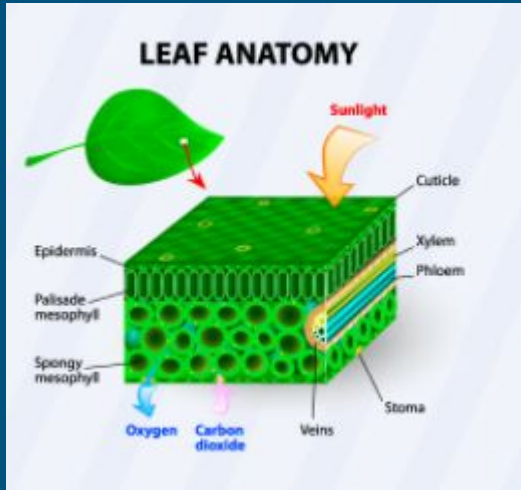


JPEG

GIF

PNG

Match image to most appropriate file type



JPEG

GIF

PNG

Image needing detailed transparency and a variety of colors in an illustration is best as PNGs

Match image to most appropriate file type



JPEG

GIF

PNG

Match image to most appropriate file type



JPEG

GIF

PNG

Images using very few colors and requiring only basic transparency should be GIFs

Match image to most appropriate file type



JPEG

GIF

PNG

Match image to most appropriate file type



JPEG

GIF

PNG

Photographs or photo-realistic color palettes should be set as JPEGs

Match image to most appropriate file type



JPEG

GIF

PNG

Match image to most appropriate file type



JPEG

GIF

PNG

Images with detailed transparency and a variety of colors in an illustrations should be PNGs.

Image Optimization

- Keep file size below 100 kilobytes
 - The lower the better
 - Might need to make compromises
- If visual quality is important, file size may be larger
- Smaller, lower quality images will have lower file sizes
- Thumbnail images
 - Smaller or cropped versions of a larger image
 - Usually has hyperlinks added
 - When clicked, full size, higher quality image comes up
- Avoid images that don't add beneficial content
- Avoid images with lots of text
 - Hard to edit
 - Content is lost if it doesn't show up



**Roses are red,
violets are blue,
I read it on the Internet,
so it has to be true.**

Code to add an image called “book-cover.jpg”. It’s a picture of the book cover of a spy novel. It’s original size is 300px by 450px, but you want to display at half the size.

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images-example.html

1. Copy images-example.html from the shared web design data files folder.
2. Paste images-example.html into your web design folder.
3. Open images-example.html from YOUR web design folder into your browser and into <txt> App
4. Follow along in class/with screencast to learn about using Google Images Tools and completing images-example.html.