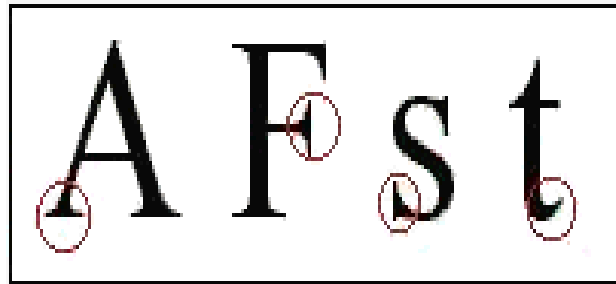


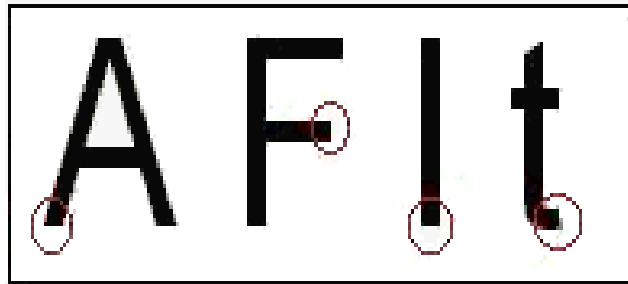
- Typography
- Multimedia
- Images, formats, and optimization
- Animated GIFs

# Serifs



Small decorative strokes that are added to the end of a letter's main strokes are called serifs. These cross-lines at the end of a stroke are either: slab, wedge or hair. And they are bracketed or unbracketed.

# Sans



Sans serif faces don't have serifs; cross-lines at the end of a stroke. The appearance of the letters is reduced to the essential figures.

# Image Formats

- JPG – millions of colors
- GIF – limited to 256 colors, transparency, and animation
- PNG – created for the web, gradation of transparency, no animation, millions of colors, yet does well with limited colors.

# JPG

- Short for Joint Photographic Experts Group, the original name of the committee that wrote the standard.
- JPG is a lossy compression technique. Works well for compressing images with areas of similar saturation of color (not diagrams or line drawings)
- JPG images support 16 million colors and are best suited for photographs and complex graphics. The user typically has to compromise on either the quality of the image or the size of the file.

# GIF

Short for Graphics Interchange Format.

Unlike JPG, the GIF format is a lossless compression technique and it supports only 256 or less colors. GIF is better than JPG for images with only a few distinct colors, such as line drawings, black and white images and small text that is only a few pixels high.

With an animation editor, GIF images can be put together for animated images.

GIF also supports transparency

Patent Issues until 2003

# PNG

Short for Portable Network Graphics

PNG was developed as a patent-free answer to the GIF format

An image in a lossless PNG file can be 5%-25% more compressed than the same image as a GIF.

PNG builds on the idea of transparency in GIF images and allows the control of the degree of transparency, known as opacity. Saving, restoring and re-saving a PNG image will not degrade its quality.

PNG does not support animation like GIF does.

# Color Formats

- Find existing images (photographs, complex drawings) and
  - Save as gif, & gif with transparency,
  - Save as jpg with different compressions
  - Save as png with different compressions



# HTML5 Video Tag

```
<video width="320" height="240"  
controls="controls" preload="auto"  
poster="stillframe.jpg">
```

```
<source src="movie.mp4" type="video/mp4">  
<source src="movie.ogv" type="video/ogg">
```

```

```

```
</video>
```

# HTML5 Video Support

[https://en.wikipedia.org/wiki/HTML5\\_video#Browser\\_support](https://en.wikipedia.org/wiki/HTML5_video#Browser_support)

# HTML5 Audio Tag

```
<audio controls="controls">
```

```
<source src="sound.ogg" type="audio/ogg">
```

```
<source src="sound.mp3" type="audio/mpeg">
```

Your browser does not support the audio element.

```
</audio>
```

# MP3

MP3 (ordinarily referring to MPEG-1 Audio Layer 3)

MP3 is an audio compression format capable of a great reduction in the amount of data required to reproduce audio, while sounding like a faithful reproduction of the original uncompressed audio to most listeners.

A simple link to a MP3 file:

```
<a href="myfile.mp3">My Song</a>
```

# Exercises

- Export an image as a JPG, GIF and PNG
- Create an Animated Gif

Homework:

Use an HTML5 Video tag to embed a video clip.