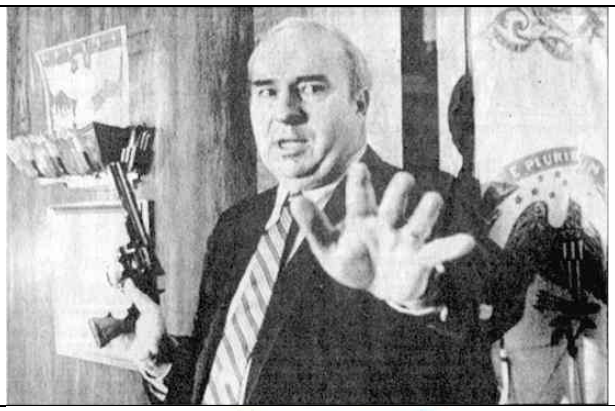
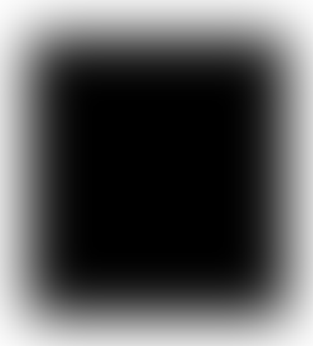
10/3/16

File Formats

Ben Stone

File Type	Compression	Description including use	Example
JPEG	Lossy	• Joint Photographic Expert Group • Used for photographs and other realistic tones • Does not support transparency • Does not support animation • Used on internet • Supports CMYK, RGB, Grayscale • 24 bit colour	
GIF	Loss less	• Support transparency • Maximum 256 colours • Supports animation • Supports interlacing	
WMF		Windows metafile • Can contain vector and raster images	
SVG		Scalable Vector Graphics File • Standard format for displaying vector	http://bit.ly/22464dh

		graphics on the web •	
BMP	Uncompressed	Bitmap Image File • Uncompressed raster image • Supports Greyscale	
PICT	Packbits, JPEG	Picture File • Macintosh's version of WMF. • Can contain bitmap and vector. • Supports RLE • Supports compression	
PDF		Portable Document Format • Can support links • Can display text • Can show images • Can be locked • Preserve Fonts • Preserve formatting across multiple platforms	http://www.specialolympics.org/uploadedFiles/give_me5(1).pdf
PNG	Lossless	Portable Network Graphic • Support transparency and opaque pixels • RGB • 24 bit colour	

SWF	Bitmaps can be compressed with JPEG or a PNG-like zlip compression	Shockwave Flash File • Support Vector based animations • Supports video • Can be viewed in web browser.	

Audio Files

File Type	Compression	Description including use	Example
WAV	Uncompressed	Waveform Audio File Format • Used for high quality audio files. Used in applications for audio editing • Is a windows standard for storing audio.	http://www.wavsource.com/snds_2016-02-14_1408938504723674/tv/mpfc/insurance_claim.wav
FLAC	lossless	Free Lossless Audio Codec. • Compresses audio files with no loss in quality.	
MP3	Lossy Compression	Supported by most portable music players Does not have the same quality as WAV of AIFF files, but is a smaller file.	
AIF	Uncompressed	Audio Interchange File Format • It is most commonly used on Apple Macintosh Computers • CD quality Audio	

Video Files

File Type	Compression	Description including use	Example
MPEG	Lossy	Moving picture Experts Group • There is MPEG 1 and MPEG 2. MPEG 1 is a standard used for audio and video. MPEG 2 is a high quality video format used in digital tv. • Achieves high compression rate by storing only the changes from one frame to another, instead of the entire frame .	
AVI	Varies (can be – it is a container)	Audio Video Interleave • Multimedia container format introduced by Microsoft in November 1992 as part of its video for windows technology. • AVI files can contain both audio and video data in a file container that allows synchronous audio with video playback	
MOV	Proprietary compression algorithm developed by Apple Computer.	Apple Quicktime movie • The format specifies a multimedia container file that contains one or more tracks, each of which stores a particular type of data: audio, visual, effects or text • The International Organisation for standardisation approved the QuickTime file format as the basis of MPEG-4 file format.	

FLV	Flash Video	• There are two different FLV formats, F4V for H.264-based content and open FLV fdor other supported codecs. • A container file format used to deliver vedio over the internet using adobe flash player version 6-11. Flash Video content may also be embedded within SWF files. • Ususally contain material encoded with codecs following the Sorenson Spark or VP6 video compression formats. The most recent public releases of Flash Player also support H.264 video and AAC audio. Flash Video is viewable on most operating systems, via the widely available Adobe Flash Player and web browser plugin, or one of several third-party programs.	

Basically, lossless image compression means all the data from the original file is preserved. Lossy compression, on the other hand, removes some data from the original file and saves the image with a reduced file size.