

## Quiz 2 for MIS class

List down 10 file types each for Video, Image and Sound. You also need to describe the detail of each types.

- **Video:**

1. WEBM

- **Description:** Like the WEBP image file, WEBM was created by Google as an efficient means of disseminating media to a large audience. WEBM video files are relatively small in size, and as such are not as high in terms of quality as some of the other file types on this list. The WEBM video file format is used for HTML5 video streaming sites, such as YouTube.
- **First time published:** In 2011
- **Size:** Less or equal 200 MB
- **Window software use to open this file:** Google Chrome, Opera, Firefox and Edge, etc.

2. MP2

- **Description:** MP2 files can play audio/video media, or simply audio. They are low in file size but also relatively low in quality. They also have lossy compression, meaning their quality will degrade after being edited numerous times. MP2 files are best used when video will be recorded once and never edited.
- **First time published:** 1993
- **Window software use to open this file:** Widow Media Player, Microsoft Corporation ...

3. OGG

- **Description:** OGG files are an open-source alternative to MP2 files, and are used for high-quality videos to be streamed via the internet. Though .OGG files are used for streaming, they are higher in quality than .WEBM files – meaning they will take longer to be delivered to the end-user. Due to OGG files being open sourced, they can be used in a variety of applications, including GPS receivers and media players (both desktop and portable).
- **First time published:** in 1993
- **Size:** Less or equal 200 MB
- **Window software use to open this file:** Web Media Extension

4. MP4

- **Description:** MP4 is similar to MPG files in that they can contain audio and video, or can simply be solely audio files. MP4 is used for streaming video

via the internet. They are generally higher in quality than .WEBM files, but tend to be larger in file size.

- **First time published:** In 2001
- **Size:** That's variable.
- **Window software use to open this file:** Google Chrome, Firefox, Edge, Movie & TV...

## 5. AVI

- **Description:** AVI files are one of the oldest and most compatible video file formats. Many different codecs can be used with an AVI file, which means that this format has more flexibility in choosing a balance between quality and size. However, these files tend to be larger than the previously mentioned formats, which makes it less ideal for the web and more ideal for storing movies on a computer.
- **First time published:** November 1992
- **Size:** Maximum 2 GB
- **Window software use to open this file:** Video Player, VLC Player ...

## 6. WMV

- **Description:** WMV is a video file format created by Microsoft and stands for Windows Media Video. The codec used by these files results in small file sizes but poor quality. This format is useful if you are sending video to someone with an older Windows computer.
- **First time published:** 1999
- **Window software use to open this file:** VLC Player, DivX Player, KMPlayer, MPPlayer...

## 7. MOV

- **Description:** MOV files were developed by Apple to use with its QuickTime player. These files are of high quality but large in size. And they have poor compatibility with non-QuickTime players. This format is useful if you intend to archive a high-quality video on an Apple computer.
- **First time published:** 1998
- **Size:** Maximum is 3GB
- **Window software use to open this file:** VLC Player, Window Media Player, Elmedia Player...

## 8. FLV

- **Description:** FLV files were designed by Adobe as the video file format for Flash. The use of these file formats has declined rapidly as Flash has become less popular, especially after Flash support ended for iOS devices. The use of these formats is only recommended if you need to support a legacy system that can only accept this type of file.
- **First time published:** 2003
- **Size:** Variable
- **Window software use to open this file:** VLC Player, FLV Player, ...

## 9. AVCHD

- **Description:** AVCHD or Advanced Video Coding High Definition files are the format generated by many digital camcorders. These files use the H.264/MPEG-4 video codec and are similar to an MPG file.
- **First time published:** 2011
- **Size:** Variable
- **Window software use to open this file:** AVCHD Playback, Media Player, ...

## 10. SWF

- **Description:** SWF files were designed by Adobe as the video file format for Flash. The use of these file formats has declined rapidly as Flash has become less popular, especially after Flash support ended for iOS devices. The use of these formats is only recommended if you need to support a legacy system that can only accept this type of file.
- **Size:** Variable
- **Window software use to open this file:** Adobe Flash Player, Firefox, Internet Explorer

## - image:

### 1. JPEG (or JPG) - Joint Photographic Experts Group

- **Description:** It works best with photographic images (as opposed images of text) because it relies on the blending of color. It is a “lossy” format, it reduces the file size of an image by blending “redundant” image pixels. As the image is compressed blurriness appears around edges of objects in the photo.
- **First time published:** in 1986
- **Size:** 65,535×65,535 pixels
- **Windows software use to open this file:** Chrome or Firefox...

## 2. PNG - Portable Network Graphics

- **Description:** PNG supports palette-based images (with palettes of 24-bit RGB or 32-bit RGBA colors), grayscale images (with or without alpha channel for transparency), and full-color non-palette-based RGB or RGBA images. The PNG working group designed the format for transferring images on the Internet, not for professional-quality print graphics; therefore, non-RGB color-space such as CMYK are not supported.
- **First time published:** 1977 and 1978
- **Size:** Variable
- **Window software use to open this file:** Photoshop, Illustrator, ...

## 3. GIF - Graphics Interchange Format

- **Description:** GIFs are most common in their animated form, which are all the rage on Tumblr pages and in banner ads. It seems like every day we see pop culture GIF references from Giphy in the comments of social media posts. In their more basic form, GIFs are formed from up to 256 colors in the RGB colorspace. Due to the limited number of colors, the file size is drastically reduced. This is a common file type for web projects where an image needs to load very quickly, as opposed to one that needs to retain a higher level of quality.
- **First time published:** 15<sup>th</sup> June 1987
- **Size:** Variable
- **Window software use to open this file:** Adobe Photoshop, Illustrator, CorelDRAW, ...

## 4. TIFF - Tagged Image File

- **Description:** A TIFF is a large raster file that doesn't lose quality. This file type is known for using "lossless compression," meaning the original image data is maintained regardless of how often you might copy, re-save, or compress the original file. Despite TIFF images' ability to recover their quality after manipulation, you should avoid using this file type on the web. Since it can take forever to load, it'll severely impact website performance. TIFF files are also commonly used when saving photographs for print.
- **First time published:** 1986
- **Size:** Maximum 4GB

- [Window software use to open this file](#): Microsoft Photos, Microsoft Windows Photo Viewer, Microsoft Paint, Microsoft Paint 3D, Adobe Photoshop, ...

## 5. PSD - Photoshop Document

- [Description](#): PSDs are files that are created and saved in Adobe Photoshop, the most popular graphics editing software ever. This type of file contains "layers" that make modifying the image much easier to handle. This is also the program that generates the raster file types mentioned above. The largest disadvantage to PSDs is that Photoshop works with raster images as opposed to vector images.
- [First time published](#): 19<sup>th</sup> Feb 1990
- [Size](#): Variable
- [Window software use to open this file](#): Adobe Creative, Adobe Photoshop, ...

## 6. PDF - Portable Document Format

- [Description](#): PDFs were invented by Adobe with the goal of capturing and reviewing rich information from any application, on any computer, with anyone, anywhere. I'd say they've been pretty successful so far. PDFs were invented by Adobe with the goal of capturing and reviewing rich information from any application, on any computer, with anyone, anywhere. I'd say they've been pretty successful so far. If a designer saves your vector logo in PDF format, you can view it without any design editing software (as long as you have downloaded the free Acrobat Reader software), and they have the ability to use this file to make further manipulations. This is by far the best universal tool for sharing graphics.
- [First time published](#): 15<sup>th</sup> June 1993
- [Size](#): Maximum 128MB
- [Window software use to open this file](#): Adobe Reader, Free Files Viewer, ...

## 7. EPS - Encapsulated Postscript

- [Description](#): EPS is a file in vector format that has been designed to produce high-resolution graphics for print. Almost any kind of design software can create an EPS. The EPS extension is more of a universal file type (much like the PDF) that can be used to open vector-based artwork in any design editor, not just the more common Adobe products. This safeguards file transfers to designers that are not yet utilizing Adobe products, but may be using Corel Draw or Quark.
- [First time published](#): 1995
- [Size](#): Variable

- [Window software use to open this file](#): Edgecam Part Data, WebSphere Development Studio Client Profile.

#### 8. AI - Adobe Illustrator Document

- [Description](#): AI is, by far, the image format most preferred by designers and the most reliable type of file format for using images in all types of projects from web to print, etc. Adobe Illustrator is the industry standard for creating artwork from scratch and therefore more than likely the program in which your logo was originally rendered. Illustrator produces vector artwork, the easiest type of file to manipulate. It can also create all of the aforementioned file types. Pretty cool stuff! It is by far the best tool in any designer's arsenal.
- [First time published](#): 1987
- [Size](#): 101.2 MB or variable
- [Window software use to open this file](#): CorelDraw Graphic, Adobe Creative, Adobe Illustrator, ...

#### 9. INDD - Adobe InDesign Document

- [Description](#): INDDs (InDesign Document) are files that are created and saved in Adobe InDesign. InDesign is commonly used to create larger publications, such as newspapers, magazines and eBooks. Files from both Adobe Photoshop and Illustrator can be combined in InDesign to produce content rich designs that feature advanced typography, embedded graphics, page content, formatting information and other sophisticated layout-related options.
- [First time published](#): 31<sup>st</sup> Aug 1999
- [Size](#): Variable
- [Window software use to open this file](#): Adobe InDesign, Adobe InCopy, QuarkXPress, ...

#### 10. RAW - Raw Image Formats

- [Description](#): A RAW image is the least-processed image type on this list -- it's often the first format a picture inherits when it's created. When you snap a photo with your camera, it's saved immediately in a raw file format. Only when you upload your media to a new device and edit it using image software is it saved using one of the image extensions explained above. RAW images are valuable because they capture every element of a photo without

processing and losing small visual details. Eventually, however, you'll want to package them into a raster or vector file type so they can be transferred and resized for various purposes.

- **First time published:** 2004
- **Size:** Depend on size of the sensor and camera types
- **Window software use to open this file:** Microsoft Windows Photos, Able RAWer, GIMP, RawTherapee, Adobe Photoshop

- **Sound:**

1. M4A

- **Description:** The M4A is a mpeg-4 audio file. It is an audio-compressed file used in the modern setting due to increased quality demand as a result of cloud storage and bigger hard drive space in contemporary computers. Its high quality keeps it relevant, as users who need to hear distinct sounds on audio files will need this over more common file types.
- **First time published:** 2001
- **Size:** Variable
- **Window software use to open this file:** File Viewer, iTunes, QuickTime, Roxio Popcorn, ...

2. FLAC

- **Description:** The FLAC audio file is Free Lossless Audio Codec. It is an audio file compressed into a smaller size of the original file. It's a sophisticated file type that is lesser-used among audio formats. This is because, even though it has its advantages, it often needs special downloads to function. When you consider that audio files are shared often, this can make for quite an inconvenience to each new user who receives one. What makes the FLAC so important is the lossless compression can save size and promote sharing of an audio file while being able to return to the original quality standard. The near-exact amount of storage space required of the original audio file is sixty percent – this saves a lot of hard drive space and time spent uploading or downloading.
- **First time published:** 20<sup>th</sup> July 2001
- **Size:** Variable
- **Window software use to open this file:** Barillo Barcode, NCH Software, BSPlayer, ...

3. MP3

- **Description:** The MP3 audio file is an MPEG audio layer 3 file format. The key feature of MP3 files is the compression that saves valuable space while maintaining near-flawless quality of the original source of sound. This

compression makes the MP3 very popular for all mobile audio-playing devices, particularly the Apple iPod. MP3 continues to be relevant in today's digital landscape because it's compatible with nearly every device capable of reading audio files. The MP3 is probably best used for extensive audio file sharing due to its manageable size. It also works well for websites that host audio files. Finally, the MP3 remains popular because of its overall sound quality. Though not the highest quality, it has enough other benefits to compensate.

- **First time published:** 1993
- **Size:** Variable
- **Window software use to open this file:** Audio MP3 Editor, VLC, iTunes, ...

#### 4. MP4

- **Description:** An MP4 audio file is often mistaken as an improved version of the MP3 file. However, this couldn't be further from the truth. The two are completely different and the similarities come from their namesake rather than their functionality. Also note that the MP4 is sometimes referred to as a video file instead of an audio file. This isn't an error, as in fact it's both an audio and video file. An MP4 audio file type is a comprehensive media extension, capable of holding audio, video and other media. The MP4 contains data in the file, rather than code. This is important to note as MP4 files require different codecs to implement the code artificially and allow it to be read.
- **First time published:** In 2001
- **Size:** That's variable.
- **Window software use to open this file:** Google Chrome, Firefox, Edge, Movie & TV...

#### 5. WAV

- **Description:** A WAV audio file is a Waveform Audio File that stores waveform data. The waveform data stored presents an image that demonstrates strength of volume and sound in specific parts of the WAV file. It is entirely possible to transform a WAV file using compression, though it's not standard. Also, the WAV is typically used on Windows systems. The easiest way to envision this concept is by thinking of ocean waves. The water is loudest, fullest and strongest when the wave is high. The same holds true for the waveform in the WAV. The visuals are high and large when the sound



increases in the file. WAV files are usually uncompressed audio files, though it's not a requirement of the format.

- **First time published:** 1991
- **Size:** Variable
- **Window software use to open this file:** Windows Media Player, Winamp, iTunes, VLC, QuickTime, ...

#### 6. WMA

- **Description:** The WMA (Windows Media Audio) is a Windows-based alternative to the more common and popular MP3 file type. What makes so beneficial is its lossless compression, retaining high audio quality throughout all types of restructuring processes. Even though it's such a quality audio format, it's not the most popular due to the fact it's inaccessible to many users, especially those who don't use the Windows operating system.
- **First time published:** 1999
- **Size:** 206 - 411 MB
- **Window software use to open this file:** VLC Player, NCH Player, ...

#### 7. AAC

- **Description:** The AAC (Advanced Audio Coding) is an audio file that delivers decently high-quality sound and is enhanced using advanced coding. It has never been one of the most popular audio formats, especially when it comes to music files, but the AAC does still serve some purpose for major systems. This includes popular mobile devices and video gaming units, where the AAC is a standard audio component.
- **First time published:** 1997
- **Size:** Variable
- **Window software use to open this file:** Roxio Toast 11 · Roxio Creator NXT Pro 2 · Applian Replay Converter · Adobe Audition CC · XMMS ...

#### 8. AIFF

- **Description:** AIFF stands for Audio Interchange File Format. Similar to how Microsoft and IBM developed WAV for Windows, AIFF is a format that was developed by Apple for Mac systems back in 1988. Also similar to WAV files, AIFF files can contain multiple kinds of audio formats. For example, there is a compressed version called AIFF-C and another version called Apple Loops which is used by GarageBand and Logic Audio. They both use the same AIFF extension.
- **First time published:** 4<sup>th</sup> Jan 1989

- **Size:** 10MB per minute
- **Window software use to open this file:** Roxio Toast 11 · Apple QuickTime Player · Roxio Creator NXT Pro 2 · Adobe Audition CC, ...

#### 9. ALAC

- **Description:** ALAC stands for Apple Lossless Audio Codec. It was developed and launched in 2004 as a proprietary format but eventually became open-source and royalty-free in 2011. ALAC is sometimes referred to as Apple Lossless.
- **First time published:** 28<sup>th</sup> April 2004
- **Size:** Variable
- **Window software use to open this file:** Windows XP, Vista & 7, ...

#### 10. DSD

- **Description:** A DSD file is a high-quality format that is encoded in an entirely unique way. Unlike uncompressed files that use a sampling rate and bit depth, DSD files use only 1 bit, but samples that bit 2.8 million times a second to recreate the audio file.
- **First time published:** 1990
- **Size:** Variable
- **Window software use to open this file:** File Viewer, File Opener, ...