## 10 types of files in:

## Video:

- .WEBM: WEBM video has small files size and they are not as high in terms of quality compared to other video file types. The .WEBM video file format is used for HTML5 video streaming sites, such as YouTube.
   It was created by Google and was published on May 18, 2010.
   WEBM files are supported by most web browsers since the format is sometimes used on HTML5
- .WMV: it stands for Windows Media Video. The codec used by these files results in small file sizes but poor quality. It is very useful if you are sending video to someone with an old computer.
   This was created by Microsoft and was published in 1999.
   There are many software that can play WMV files such as Window Media player, VLC media player and a lot more.
- AVCHD: 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.
   AVCHD was created combinedly by Sony and Panasonic in 2006 and it can be opened using a window media player.
- .MP4, .M4P, .M4V: are similar to .MPG files that contain audio and video, or can simply be solely audio files. .MP4, .M4P, and .M4V are used for video streaming. They have higher quality than .WEBM files, but larger in file size. M4V files are iTunes files that share the same qualities of .MP4 and .M4P files.
  - MP4 files were created under the ISO/IEC 14496-12:2001 standard by the ISO/IEC and Motion Picture Experts Group (MPEG) and almost all software supports MP4 files.
- .AVI: AVI stands for Audio Video Interleave, they are one of the oldest and most compatible video file formats. This format has more flexibility in choosing a balance between quality and size. The drawback is that it is a

large file size, therefore, it is less ideal for the web and more ideal for storing movies on a computer.

It was created by Microsoft in 1992.

- .MOV and .QT: These files are of high quality but large in size. It is not efficient to use with other media players beside Quicktime players. This format is useful if you intend to archive a high-quality video on an Apple computer.

These files were developed by Apple in 1998 for one purpose that is to use with it's Quicktime player.

OGG: These files are used for high-quality videos to be streamed on the internet. In comparison to .WEBM files .OGG files are higher in quality, however, they will take longer to be delivered to the end-user.
.OGG (also called OGG Vorbis) was created by Chris Montgomery in 1993 and was maintained by the Xiph.Org foundation and there are many software that support .OGG files such as VLC, Miro, MPlayer, Xion Audio Player, Window Media Player and a lot more.

## Image:

- .TIFF: TIFF or Tagged Image File Format are lossless images files which image compression is not needed.
  - It is a high quality image file that was created by Aldus and Microsoft Corporations in 1986, these files can be accessed via Window Photo Viewer and Photos which they all included with the different versions of Windows.
- .PNG: PNG (Portable Network Graphics) files are a lossless image format which means compressing the size of the image without losing quality PNG files can be used as transparent images, due to this PNG files are commonly used for photoshopped.
  - .PNG file was created by an Internet working group led by Thomas Boutell in March 1997. PNG file is a widely supported file, so almost every software can open it such as Adobe Photoshop, ImageMagick, Inkscape and so on.
- .GIF: GIF (Graphics Interchange Format) is currently used almost everywhere whether it is on social media platforms, slides and sometimes it is even used in videos. This image file needs to load very fast which is

different from any other image files where their priority is a high quality picture.

GIF was created in June 1987 by **Steve Wilhite**, These files can be opened using Adobe's Photoshop Elements, CorelDRAW, Illustrator programs and so many more.

- .PDF: PDF (portable document format) is a format that is widely used to save files and images that can not be modified but still need to be easily shared and printed.
  - It was first published by Adobe in 1993. PDF files can be opened using google drive, web browser, PDF reader and other various types of software.
- .JPEG: JPEG stands for "Joint Photographic Experts Group" It is an image format for containing lossy and compressed image data. It is unbelievable as to how it still holds up the image quality despite the huge reduction in file size.
  - .JPEG file was created by the **Joint Photographic Experts Group** in 1992. This can easily access through Adobe Illustrator *CC*, Adobe Photoshop and Picasa
- .PSD: PSD (Photoshop Document) files can hold image data up to 30,000 pixels as height and width and 2 gigabytes in terms of size file. These files are mostly used as templates which are print ready formats like PNG or JPG. This file was originally created by Thomas and John Knoll in 1988. The Best software for opening .PSD files are Adobe Photoshop and Adobe Photoshop Elements, as well as CorelDRAW and Corel's PaintShop Protool.
- .WEBP: .WebP is a derivative of WebM video format which is mentioned above. It has the ability to reduce image file size up to 34% smaller than JPEG and PNG images while keeping a good quality picture. What is more this file also supports animated images and it is expected to support more image features in the future. It is developed by Google and was first released on 30 September 2010.

These files are supported in Google Chrome, Firefox and various other more.

- .BMP: BMP file contains raster graphics data which are independent of display devices due to this reason graphics adapter is not needed for BMP file. This file is commonly used for storing 2D digital photos. This image

format was developed by Microsoft in 1986 and has a maximum file size of 4 GB.

- .PS: This file has two names, it can be called Adobe PostScript or PS in short. It has a compatibility of displaying both text and picture on the same page, this file is more like a program language than your common image since it contains a type of instruction for the printer to display different objects on the same page.
  - It was created by Adobe systems in 1982. This file can be opened using CorelDRAW and many more file formats.
- .EMF: Enhanced MetaFile is a file format that is mostly used for printing. This file has a high detail quality and has more color compared to others, due to this EMF files are used as cached data as printing. EMF file was created by Microsoft in 1992, this file supports many software such as Graphics Converter Pro, Adobe Illustrator CC, CorelDRAW Graphics Suite.

## Sound:

- MP3: This file is the most popular sound format because this file works on almost every single device. It was created by Karlheinz Brandenburg and published in On 7 July 1994. MP3 produces a file size of roughly one MB per minute.
- AAC: Advanced Audio Coding is a type of file which takes up very little space and great for streaming. Requiring less than 1 MB per minute of music and sometimes it sounds greater than MP3, this format is used by iTunes/Apple Music, YouTube, and Android.
  - AAC was developed by Bell, Fraunhofer, Dolby, Sony, Nokia, LG Electronics, NEC, NTT Docomo, Panasonic and was released in 1997. There are many software that support this file format such as RealPlayer, VLC Media Player, KMPlayer.
- **ALAC**: ALCA (Apple's Lossless Audio Codec) is a lossless compression file format that works only on Apple devices. ALAC supports files of up to 32 bits in size. It was published in 2004.
- Ogg Vorbis: This file format is used by Spotify because it is an open-source audio codec. It is very good for streaming. It is considered to be more efficient than MP3 since it has better sound. Ogg Vorbis can store up to

- 16kbps to 128kbps in file size. It was created by Xiph.Org Foundation and released on May 8, 2000. This file can be used with VLC media player and MPlayer
- PCM: PCM (Pulse-Code Modulation) is mainly used for CDs and DVDs, PCM has a file size around 10 MB per minute, and it was created by Alec H. Reeves in 1939. Adobe Audition CC is used to run this file format.
- AIFF: AIFF (Audio Interchange File Format) was created by Apple and published on 21 January 1988. This file is capable of delivering all of the original sound but it takes up more space than MP3s. Its size is rather small since it can be stored under 4GB.
- **DSD:** These are high-resolution audio formats. These files encode sound using pulse-density modulation. They are 64 times larger in size compared to our regular audio CD. These files were created by Sony and they were released in the early 2000s.
- FLAC: FLAC stands for Free Lossless Audio Codec which is a lossless compression that offers bit-perfect copies of CDs but at half the size. It was developed by Xiph.Org Foundation, Josh Coalson, Erik de Castro Lopo and released on 20 July 2001. This file is compatible with many software such as VLC media player, winamp and more.
- WAV: WAV(Waveform Audio File) able to keep all the original data, therefore, it is good for sound engineers. It was created by IBM and Microsoft and it was launched in August 1991. WAV can store up to 4GB in file size.
- WMA: Windows Media Audio files was created by Microsoft to challenge MP3. It is a lossy audio file that was released in 1991, it used up space of 2.6MB in a 5 minute audio file. We can use VLC Media Player to open these files.