



Media Management

Avon Lake Public Library

What is file size?

A unit of data is eight binary bits known as a byte.

Giant strings of bytes make up a file.

Small - Large

Kilobytes (**KB**) = 10³ or 1,000 Bytes

Kilogram

Megabytes (**MB**) = 10⁶ or 1 Million Bytes

Milliliter

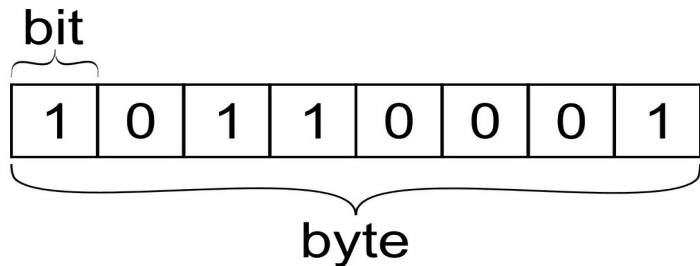
Gigabytes (**GB**) = 1,000 MB or 1 Trillion Bytes

Gallon

Terabytes (**TB**) = 1,000 GB or 1

Ton

Just understand the abbreviations and remember the scale from small to large.



ASCII Code: Character to Binary

0	0011 0000	O	0100 1111	m	0110 1101
1	0011 0001	P	0101 0000	n	0110 1110
2	0011 0010	Q	0101 0001	o	0110 1111

File sizes based on items

Song = 4 MB (depends on quality)
1 MB per minute

Video Streaming = 200MB to 3GB
1 GB per hour
3 GB per hour for HD

Pictures = 10MB to 1.4GB (posters)
Depends on number of pixels
based the photo's resolution.

Documents = 29 MB for 300 pages
Depends on how many pages and
content. Usually 10 MB

How much can a GB store?

1 Gigabyte =
7 minutes of HD-TV Video

2 Gigabytes =
20 Yards of Books

4.7 Gigabytes =
Size of a Standard DVD



Internal Hard Drive:

External Hard Drive

Solid-State Drive:

Memory Cards:

USB Flash Drive:

Cloud Storage:

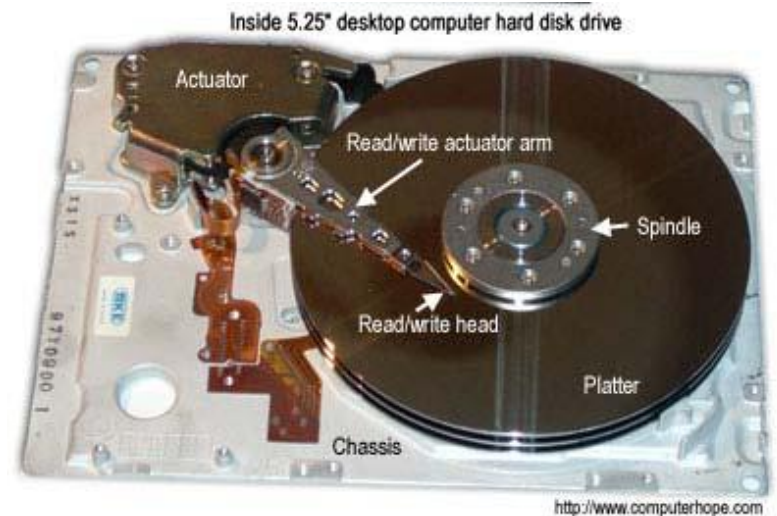
Optical Disc:

Hard disk drive

(abbreviated **hard drive**, **HD**, or **HDD**)

Permanently stores and retrieves data on a computer. A hard drive consists of one or more platters to which data is written using a magnetic head that writes data on to the discs. All inside of an air-sealed casing.

From 16GB to 12TB



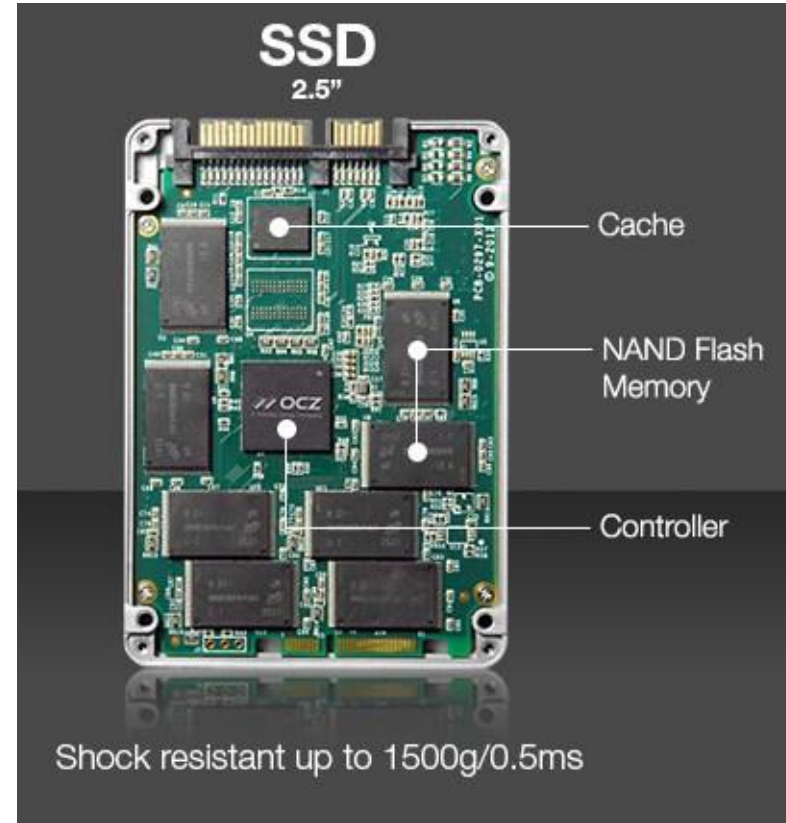
Solid-state drive

(aka **SSD** or **solid-state disk**)

Unlike a hard drive SSD has no moving parts which gives it advantages such as

- faster access time,
- noiseless operation
- higher reliability
- lower power consumption

From 250GB to 2TB, 4TB \$500



Flash Memory

Memory that retains data in the absence of a power supply. Does not require power to retain the data or program code stored.

SD Card (Secure Digital Card)

Over 400 brands of electronic equipment including digital camera, and cell phones. Considered the industry standard due to the wide use.

SD 32 mm x 23 mm x 2.1 mm

Mini SD 21.5 mm x 20 mm x 1.4 mm

MicroSD 15mm x 11mm x 1,0 mm



USB flash drive, (Universal Serial Bus)


- data stick
- thumb drive
- jump drive

Connects to a computer via USB port.
Easy way to store and transfer info
between computers and range

- 2 GB to 1 TB
- No movable parts
- Uses memory chip set
- Various designs and shapes





USB 2.0 Type C 
6.6Ft/2M ● ● ●



USB TYPE A

USB TYPE B



USB MINI A

USB MINI B



USB MICRO A

USB MICRO B



Type	Data Rate
USB 1.1 (Low Speed)	1.5 Mbits/sec
USB 1.1 (Full Speed)	12 Mbits/sec
USB 2.0 (High Speed)	480 Mbits/sec
USB 3.0 (Super Speed)	5 Gbits/sec



Lightning USB

- USB 2.0
- Reversible
- Item specific products

Firewire aka
IEEE 1394

Used for

- Scanners,
- Digital
- Camcorders



Organize files using file names and metadata

File naming best practices:

- Files should be named consistently
- File names should be short but descriptive (<25 characters)
- Avoid special characters or spaces in a file name
- Use capitals and underscores
- Use date format ISO 8601: YYYYMMDD
- Include a version number (Creamer et al.)

Elements to consider using in a naming convention are:

- Date of creation (putting the date in the front will facilitate computer aided date sorting)
- Short Description
- Work
- Location
- Project name or number
- Sample
- Version number

Do NOT use these symbols

# pound	/ forward slash
% percent	blank spaces
& ampersand	\$ dollar sign
{ left curly bracket	! exclamation point
} right curly bracket	' single quotes
\ back slash	" double quotes
< left angle bracket	: colon
> right angle bracket	@ at sign
* asterisk	+ plus sign
? question mark	` backtick
	pipe
	= equal sign









Keep these rules in mind:

- Don't start or end your filename with a space, period, hyphen, or underline.
- Keep your filenames to a reasonable length and be under 31 characters.
- Most operating systems use lowercase.
- Avoid using spaces and underscores; use a hyphen. This will also improve your search.



File Extensions

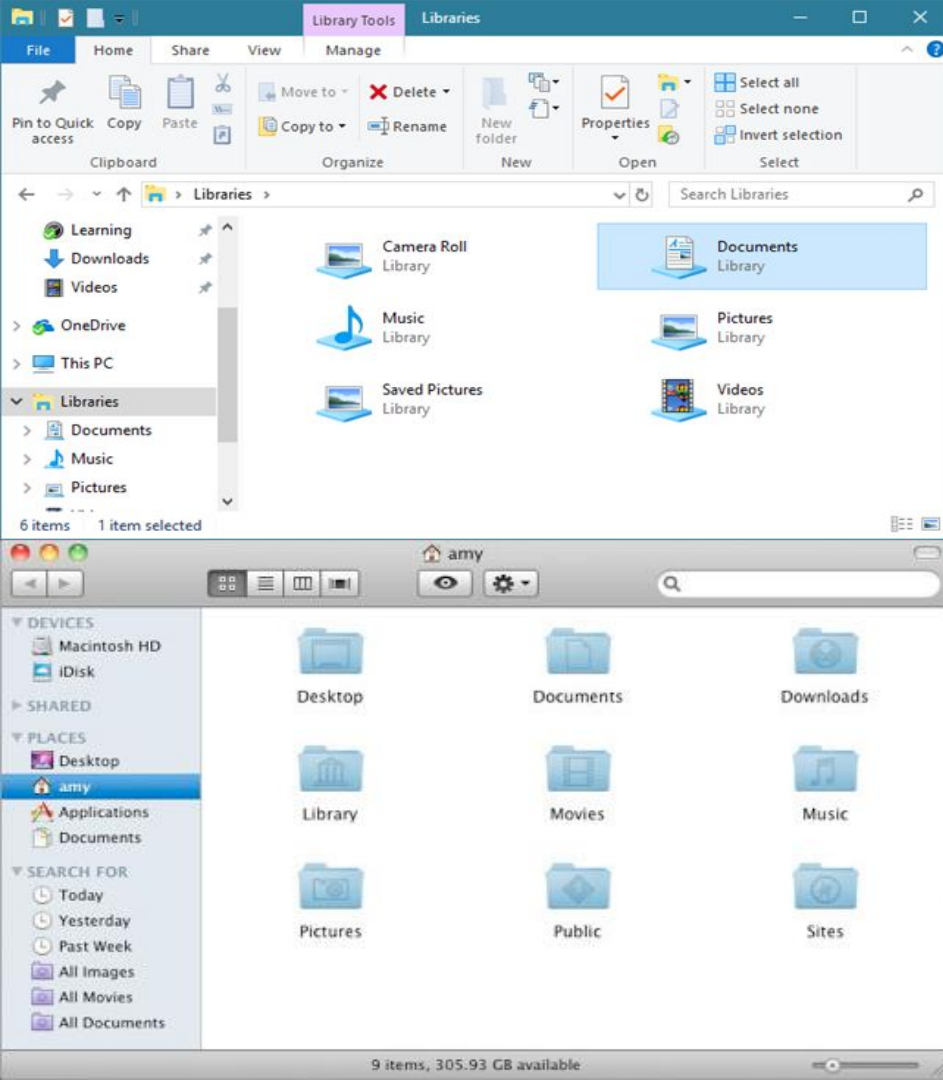
File extensions are used to identify what programs are associated with file types— in other words, what app opens when you double-click the file.

Name	Date	Type	Size	Tags
 Company Fun Facts.txt	2/6/2019 5:12 PM	Text Document	6 KB	
 Company Plan.pptx	2/6/2019 5:05 PM	Microsoft PowerPoint Presentation	0 KB	
 Employee Lunch Schedule .xlsx	9/15/2006 8:00 PM	Microsoft Excel Worksheet	7 KB	
 Lost Dog Handout.pub	2/6/2019 5:04 PM	Microsoft Publisher Document	59 KB	
 Ninite_Updater.exe	2/6/2019 5:08 PM	Application	416 KB	
 Profits_up.jpg	2/6/2019 5:07 PM	JPG File	92 KB	
 Tax Work 1980.docx	2/6/2019 5:11 PM	Microsoft Word Document	12 KB	
 Tech Database.accdb	2/6/2019 5:06 PM	Microsoft Access Database	484 KB	

File Extensions

- *.EXE - Executable - A program file (don't delete — uninstall!)
- *.MP3 - MPEG Audio - Music or sound file
- *.PDF - Portable Document Format - Adobe Acrobat document
- *.WAV - Waveform Audio File - Music or sound file
- *.ZIP - Compressed Folder - Zip file archive (delete carefully!)
- *.JPEG - Joint Photographic Experts Group - Compression for digital images
- *.EPUB - Electronic Publication - Supported by many e-readers and software
- *.DOC or . DOCX - Microsoft Word Document - Works with other Microsoft Office programs

Organize files using libraries,
folders, and sub-folders



Think of a library as a virtual collection of folders on your system.

It is virtual because it does not exist as a real folder.

A library is a reference to one or more folders on your computer and the files found inside those folders.

This can aid in productivity when you work with lots of files split into many locations.