## **Digital Decluttering**

By now, most of us have gigs and gigs of data on our hard drives (be they on our phones, tablets, or computers) and no idea how to deal with all these pictures and songs and videos and files—many of which we'll never look at again.

Hopefully this will give you some ideas as to how to begin the process as well as systems that you could maintain to keep things from getting cluttered again.

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## File Organization

This is what gets everyone—including me. If you don't organize your files in a manner that makes sense to you, it will take you forever to find what you are looking for. It doesn't matter what anyone else tells you, the best organization structure is one that *makes sense to you*.

## Files reside in a specific location on your hard drive

This handout has an entire section for photo organization, which

shows one method you could use, because, what works well for photos might not be the best method for other files, so you may end up having ways of organizing different files.

Home

ተ

File

Share

<<

View

Here is one kind of file organization method:

Within **Documents** I have a folder for Bills & Statements, and within, there are subfolders for each bill.

This allows me to easily compare the gas bill from July to December.

#### **Documents > Gas Bill**

Another organization method:

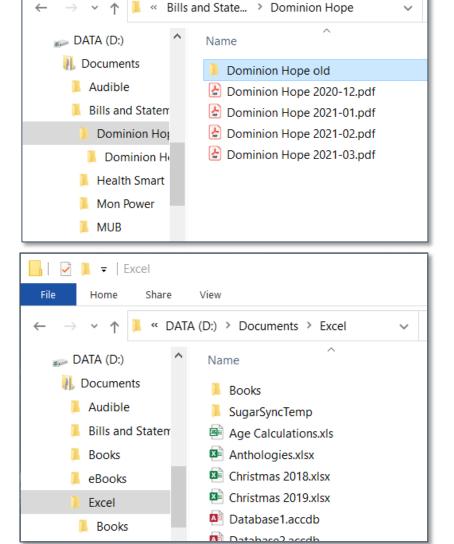
Within **Documents** I have subfolders for Excel and Word, and within those folders I have (obviously) Word and Excel documents.

I do this because I may forget the *name* of a document but remember what kind it was.

## **Documents > Excel**

Remember: you can use a combination of systems.

For example, you could save all new bills to a "current bills" folder then file individual bills to a different location after they are paid. You can have "current files" in one location,



and then when they are no longer current move them into long term storage. Such a system allows for ease of finding things for day-to-day use but reduces the clutter for things you don't use often.

Think about a paper filing system and then consider how you might replicate that electronically.

## File Explorer

File Explorer (also called Windows Explorer) is the window that opens to show you places and folders on your computer. Using it is akin to walking around the house and opening a drawer or cupboard to grab something.





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File Home Share	View		~ 🔞
Navigation 2 Panes	rge icons E Large icons n icons Small icons E Details Layout Current view	<ul> <li>☐ Item check boxes</li> <li>✓ File name extensions</li> <li>✓ Hidden items</li> <li>✓ Show/hide</li> </ul>	d Options
	is PC > Documents >	✓ Ö Search Documents	s p
🝐 Google Drive 🖈 ^	Name	Date modified 🛛 🗠 Type	Size 🔨
🔜 Desktop  🖈	Adobe	4/20/2021 3:45 PM File folder	
DD images	Custom Office Templates	4/28/2021 1:40 PM File folder	
📙 Digital Declutter		6/1/2021 12:06 AM File folder	
Tech Security	Michelle	6/17/2021 7:16 AM File folder	
Week at a Glance	My Data Sources	12/13/2020 11:24 File folder	
	My Kindle Content	12/13/2020 11:24 File folder	
o Creative Cloud Fil	🔤 OneNote Notebooks	12/13/2020 11:24 File folder	
OneDrive - Persor	Outlook Files	1/5/2021 8:25 AM File folder	
	Sound recordings	5/27/2021 11:57 AM File folder	
📥 OneDrive - WVU F	SugarSync Shared Folders	5/11/2021 1:33 PM File folder	
💻 This PC	Work	6/21/2021 8:42 AM File folder	
3D Objects	Zoom	6/21/2021 8:39 AM File folder	
Desktop	Database1.accdb	4/13/2021 1:53 PM Microsoft Acce	ss 352
	befault.rdp	3/5/2019 1:33 PM Remote Deskto	· · · · · · · · · · · · · · · · · · ·
Documents	Time.xlsx	6/21/2021 11:42 AM Microsoft Excel	W 235 <b>`</b>
15 items 1 item selected			

- **Navigation Pane** Allows you to view the folder structure of your computer, and quickly 1 access files and folders. You can "pin" frequently used folders to the Quick Access area of the navigation pane.
- Navigation Buttons These are the same as your Back and Forward buttons on your web browser. Additionally, if you have a "back" button on your mouse that you use for web browsing, this button also works in File Explorer.
- 3 Address / Location Bar – This answers the question, "where am I?" If you've clicked around so much you no longer have any idea where you are, this bar will tell you.
- **Search Box** Type into this book to search for a file by name, type, date created, etc. Search is 4 akin to yelling to someone in your house, "Have you see / do you remember where X is?" Except a lot faster, and quieter as well.
- Ribbon / View Tab of the Ribbon This is where you find your "menu" options. The View tab of the File Explorer window allows you to change how files are displayed, as well as to change sorting, grouping, and display columns.

## **Selecting and Moving Files & Folders**

One of the things you will do frequently as you organize your computer is to select multiple files or folders to move them to a different folder or delete them.

## **Selecting Files & Folders**

## On a Windows Computer

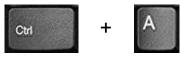
- 1. To select files/folders that are together, **left click** to select an item.
- 2. Press and hold the **Shift** key on your keyboard and **left click** on another item. All items between are selected.

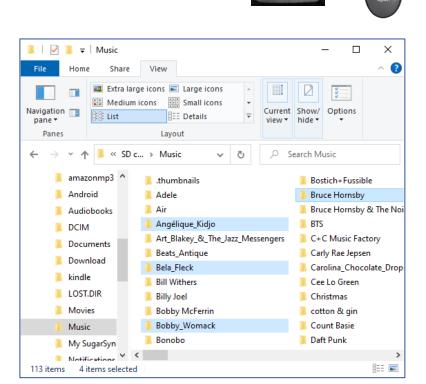
#### OR

- 1. To select non-contiguous files/folders, press and hold the **Ctrl** key on your keyboard.
- 2. Left click on every file/folder you want to select.

## OR

1. To select all the files in a window, use the keyboard command **Ctrl** + **A**.





#### On a Mac Computer:

To select items grouped together, **click** the first item, press the **Shift** key and **click** the last item.

To select non-contiguous files, press and hold the **Command** key, then **click** the items.

To select all items in a window, press Command-A.

You can move files from one location to another

**☆**Shift

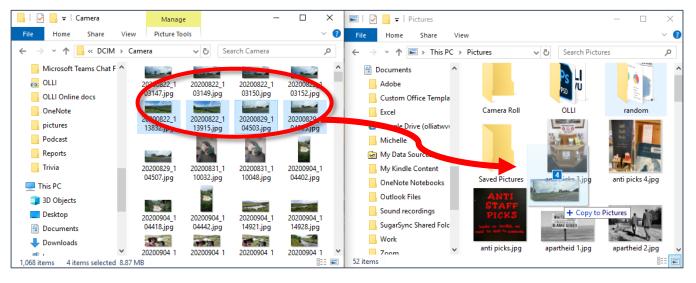
Ctrl



## **Moving Files & Folders**

On a Windows computer:

- 1. Open two file explorer windows side-by-side: The location where the items are now and the location where the items should go to.
- 2. **Select** the items to be moved.
- 3. Drag the items from one window to the other.



#### OR

- 1. Open a file explorer window.
- 2. Select the items to be moved.
- 3. **Cut** the items (**right click** and select **Cut** or use the keyboard command **Ctrl** + **X**)
- 4. Open the window where you want the items to be moved to.
- 5. **Paste** the items in the new folder (**right click** and select **Paste** or use the keyboard command **Ctrl + V**.)

#### On a Mac Computer:

Select the file(s) and drag them to the new folder location.

## **Finding Files**

The more complex your filing system is, the more likely you are to have trouble finding things. This is why knowing how to use Search is important.

#### Finding Files on a Mac Computer

**Use Spotlight**: Open Spotlight, enter the file's name in the search field, then double-click the file in the search results.

**View in the Finder**: Click the Finder icon in the Dock, click Recents in the Finder sidebar, then choose View > Group By > Date Last Opened.

**View the Recent Items list**: Choose Apple menu > Recent Items, then choose the file from the list (if it appears there).



## **Files in Windows**

#### Sort

Sorting is a way to help you find files at a glance. If you know the *name* of your file in a specific folder, sorting alphabetically can help you find it quickly. If you know when you created / modified a file, sorting by date is helpful. There are

multiple ways to sort.

#### Sorting

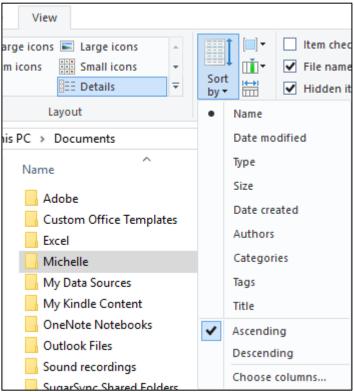
- 1. Open File Explorer.
- 2. Select the **View** tab.
- 3. Click the **Sort by** button.
- 4. Select your sort method from the dropdown menu.

#### OR

- 1. **Right click** in the main area of File Explorer.
- 2. From the pop-up menu select your desired method.

#### OR

1. If you are viewing by **Details**, click the column head by which you want to sort.



## Search

If you have no idea *where* you stored your file, you're going to need to use search. If you haven't used search before, know it does a lot more than letting you look for a file name.

Search is used when you have no idea where something is but maybe you know its name or when you worked on it.

There are two primary places to search: **<u>File Explorer</u>** and the **Start** menu from the **<u>Taskbar</u>**.

I just used that file! Where did it go?!

## Search from the Task Bar (Windows 10)

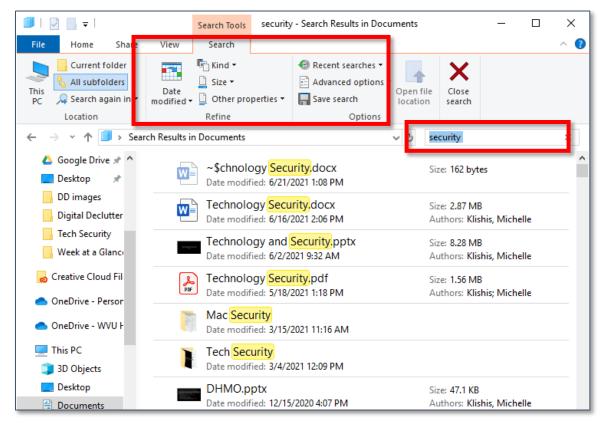
You can search from the taskbar using the Windows / Start icon. This will typically search your entire system.



Click on the icon (or tap the Windows key on your keyboard) and type in your search term.

## Search from File Explorer

If you are in <u>File Explorer</u>, the simplest search is to type the term you're looking for into the *search box*. This will search the *current* folder and all *subfolders*, which can be faster than searching your entire computer.



Once you have clicked in the search box, the **Search Tools** tab of the ribbon appears, allowing you to refine your search.

#### **Common File Extensions**

Extensions are used when know what *kind* of file you are searching for.

Audio	.mp3 .wav .wma
Excel	.xlsx .xls
Image	.jpg .gif .png .tif
Portable Document Format	.pdf
Text	.txt
Video	.avi .mpg .wmv
Word	.doc .docx

Where did I put all those Excel files?

Where is that

file I worked on

yesterday?

#### **Date Values**

These are important because you can sometimes remember *when* you worked on a file, but maybe not what you named it. You can give an exact date or a general date.

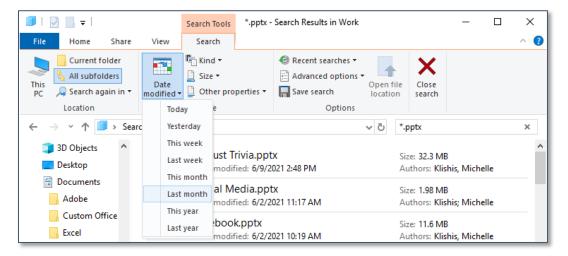
today, yesterday, last week, past month, past year, 3/15/2020

## **Basic Boolean Operators**

<u>Boolean</u> is a notation system that denotes logical propositions. These operators allow you to be more precise in your search.

()	All words in any order	(security tech)
"	Exact phrase	"tech security"
AND	Find both	Technology AND security
OR	Find either item	technology OR tech
date:>	Find items after a date	Date:>3/15/2020
date:<	Find items before a date	date: <today 15="" 2020<="" date:<3="" td=""></today>
modified	Find items by when they were last saved	modified:last week
NOT	Find one without the other	security NOT tech
*	Wildcard (often used with extensions)	*.docx *.pdf

Once you've got all these basics, you can use all or none of the options to help you refine your search. Let's say you can't find a PowerPoint presentation you worked a month ago.



In the search box we entered **\*.pptx** because we are looking for a PowerPoint File. In the **Search** tab, from the **Date modified** icon, we can select **Last month**. The search results should return every presentation we worked on during the previous month. All these refinements allow you to find a specific file without looking through every subfolder on your computer.

## **File Naming**

One of the best things you can do is to name your files in a way that lets you know what that file is. You can search by contents, but in the long run it will be easier if your files have helpful names like: "2022 tax info" or "2023-06 resume" or "Family history 2021 update".

'IMG\_163511' What on *earth* is that picture of?

Where is the

presentation I

created last

month?

There are a <u>variety of programs you can use to batch rename files</u>, although many of those programs are created for images rather than Word or Excel documents.

## **Cloud Services**

<u>Cloud storage</u>—when you put files on a <u>server</u> so they are available from any device with an internet connection—is incredibly convenient. However, a free cloud service is not a good choice to store personal files such as tax files or genealogy records. Although these services are an excellent location for files you use all the time across multiple computers, such as an address book or recipe collection.

## **Backups**

Backups are where you can get into trouble. We want to make sure that if our computer dies, our important files are saved. But what is the best way to do this? And what is "important"?

The latter question is subjective, but you might want to consider "important" files those that only you have access to, and that other people might want. For example, scanned photos and genealogy

documents are probably files that are irreplaceable (or at least not easily replaceable) and others may want.

For these types of files, you want a backup that is not in your house.

I pay for a <u>backup</u> service because I take and have scanned a lot of digital pictures, *and* I constantly add more pictures. I subscribe to a service that automatically encrypts and backs up selected folders on my computer which can then be restored in the event my computer dies or is lost.

Another option is to back your important files to external storage and put that in a safe place or give them to a family member. This would be good for something like a completed genealogy project. If the house burns down, your files are still safe, and you can restore them at your leisure.

External storage uses items like an external hard drive, a <u>thumb drive</u>, an <u>SD card</u>, or a <u>DVD</u> to save your important files. However, these media (especially CDs and DVDs) can degrade over time and are subject to physical damage. So don't create a single backup medium and assume everything will be ok.

You should also remember to update your backup after you have added new files. Over the winter holidays is when I try and organize and backup my pictures for the year.

How can I get that picture from my phone to my computer?

If my computer crashes, how do I keep from losing everything?

## Email

This section is going to be familiar for anyone who has taken tech security, but bears repeating.

If you're like most people, your email box is so full you don't read most of what you receive, and maybe sometimes miss important messages.

This may not be intuitive, but it is extremely useful to have *multiple email accounts*.

You want different email accounts for different purposes, such as an account for friends and family, an account for online shopping, and an account for bills and banking. This adds an additional layer of security to your logins, since <u>phishing</u> emails sent to your personal account are obviously fake.

Multiple email addresses are easy to set up with free online services, and you can generally create as many accounts as you want.

How do MORE email addresses to check help you declutter? They help because different types of email go to different mailboxes.

When you open your bills & banking email, you are prepared to pay bills and reconcile accounts.

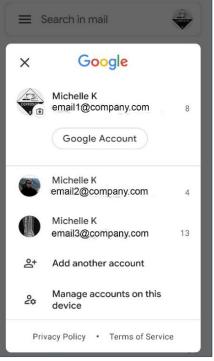
When you open your friends & family email, you know you're probably going to have some chatty messages to read, and maybe a long message to reply to.

When you open your junk or newsletter email, you are going to be looking at coupons and updates from organizations.

This means that instead of opening your email and feeling overwhelmed, you are instead dealing with *one type of thing* at a time.

It also helps because if you receive a message from your credit card company in your junk email, you know it's fake.

-	907		1200	Made Street Street Street	14.000
-		☆	$\Sigma$	Backcountry	Prom
14.		\$	$\Sigma$	Columbia Sportswear	Prom
*		☆	-	Goodreads	Socia
0		Å	$\Sigma$	Panera, me 2	Upda
		\$	-	USAA Member Forum	Upda
		\$	$\Sigma$	SugarSync Customer .	Upda
		*	D	Humble Bundle	Prom
Ť		\$	$\Sigma$	Reddit	Upda
	::□	☆		Ambient Weather	Prom
~		☆	-	Planet Money	Prom
E.		*	$\Sigma$	Jeff Adams	Prom
		\$	$\Sigma$	The StoryGraph	Prom
		\$	$\Sigma$	The StoryGraph	Upda
		\$	$\Sigma$	DoNotReply	Prom
		\$	$\Sigma$	Libib Library	Upda
		*		Fitbit	Upda
		12	D	ParkMobile	Prom
		1		Neighborhood Enforc.	Upda
No.		~	-	Neighborhood, me 2	Requ



Cell Phone App

There are different ways to handle multiple email accounts.

One is to keep those accounts open on your <u>web browser</u> all the time. Most services will display an unread message number in the title, letting you know when a new message comes in.

(All browsers have an option to "Restore previous session" in their settings so they are just there when you open your browser.)

Another option is to install an <u>email program</u> on your computer. This lets you download all your mail onto your computer, within a single program.

Smart phones have an email program installed by default, but there are third party applications for phones and tablets.

An email program (app) allows you download all your messages into a single location, and gives you the option to view a single mailbox at a time (although you can view all your mail in a combined mailbox as well).

Once you get your new accounts created, next time you go to pay a bill, change your email address for that bill (and change your password while you're at it). When you shop from an online store, change your email address (and your password) there. It'll take a while, but eventually all your important emails will be in their new accounts, and you won't be overwhelmed when you open your mail.

You can also take some time to go through all your junk mail, and unsubscribe from that coupon site you never use, and ask the cooking site to send you a monthly wrap-up instead of a daily message.



Web Mail

Mail		
~ ☆	Favorites	
	All Inboxes	79
(L)	Unread	824
	Flagged	56
~ 0	email1@co.com	
	Inbox	14
$\triangleleft$	Sent	
Ē	Trash	
$\Box$	Drafts	
X	Junk E-mail	
	All Mail	24
>	More	
~ 🔊	email2@co.com	
	Inbox	3
$\triangleleft$	Sent	
Ē	Trash	27

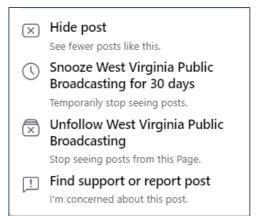
**Email Software** 

## Social Media

Most of us aren't willing to unfriend people we know on <u>social</u> <u>media</u>—especially Facebook. But you can *unfollow* that one family member who has the political posts that make you want to drop a house on them, or that other friend who posts nothing but pictures of their pet rock.

Next time you open <u>Facebook</u>, take a few minutes to go through your feed and snooze, hide, or unfollow the people, groups, and companies that fill up your feed.

You can find step-by-step instructions on how to do this in the Facebook handout available from the <u>OLLI website</u>.



<u>Notifications</u> are updates you can receive about what has happened on social media. By default, these companies want you to know ABSOUTELY EVERYTHING ALL THE TIME. This is designed to keep you using online and can be overwhelming. You can turn these notifications off or allow some notifications but not others.

What Notifications You Receive	
Comments Push only	•
These are notifications for comments on your posts and replies to your comments.	
Where you receive these notifications	
The Push	On 💽
Email	Off
Q) SMS	Off

## **Mobile Devices**

Now that cell phones are no longer out of date 15 minutes after purchase, it's common to be notified that you are "running out of space". Luckily, there are things you can do to free up space on your device.

## **Micro SD Cards for Androids**

Some <u>Android</u> phones come with a <u>micro SD card</u> slot, which allows you to increase the amount of storage available on your device.



First you need to determine if your device has a micro SD slot. You can do this by going to your device settings and searching for "storage". Then you need to find out the maximum size your device can use. You can discover this by searching online for the model of your phone and "micro sd size limit".

After that, all you need to do is purchase a card and install it.

**Warning**: These cards are *tiny* and the process can be fiddly. I recommend finding someone with small and agile fingers to add the card for you if you get easily frustrated.

Once you've done that, the first thing you'll want to do is change the default storage location of your camera to SD card. Open your settings and search for "Camera" and look for "Camera settings" and you should find an option to change the storage location.

You can use "My Files" on your phone to move the location of existing pictures from Internal storage to the SD card.

You can also use a micro SD card to transfer files from your phone to your laptop or desktop. Remove the micro SD card from your phone, slip it into an adapter, and then put that into the SD card slot of your computer.

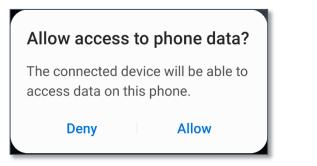


<	Storage	
	5.7 GB Used tem memory: 17.7 GB	
0 M	В	128 GB
	Photos and vide	eos 441 MB
₽	Music and audi	0 130 MB
<b>A</b>	Games	0 MB
	Movie and TV a	<b>pps</b> 125 MB
••	Other apps	11.3 GB
	Files	260 MB
	SD card	3.9 GB / 119.3 GB

## Copying Files via USB Cable on a PC

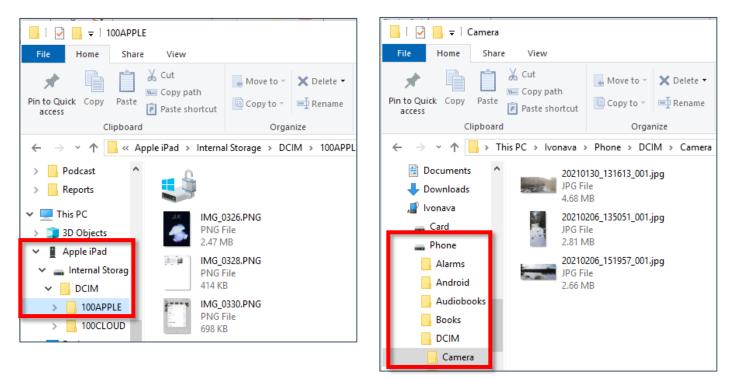
Another way to make space on your mobile device is to move files (especially pictures) from your phone to your laptop or desktop.

Start by plugging <u>your cable</u> (micro-USB, USB-C, or lightening) into your phone, and then plug the other end into your computer.

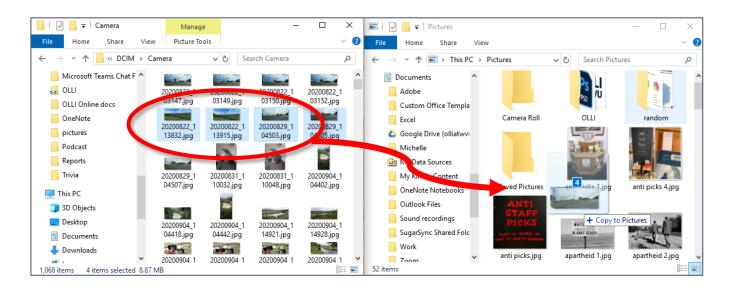




Once the device is plugged in, agree to any prompts. Then open <u>Windows Explorer</u> and copy the files from the device into a folder on your computer.



You can do this by opening one instance of windows explorer for your device, and another window for the location on your computer where you are storing your files (such as the "pictures" folder). Select the files in the "phone window" and the drag (or copy and paste) to the "storage window".



## **Cloud Services**

<u>Cloud</u> storage—when you put files on a server they are available from any device with an internet connection—is incredibly convenient. It allows you to put your files in one location and access those files from multiple devices—and for any changes made to a file it will be updated across all devices, assuming you have internet access.

#### **Cloud Services as Backups**

Unless you use a paid service, a <u>cloud service</u> is not likely to have enough storage space for you to back up all your files. Additionally, a free cloud service is **not** a good choice for personal files but **is** an excellent location for files you use across multiple computers or share with others.

Most free services give 5 to 15 GB of space. For comparison, on my computer I have 120  $\underline{GB}$  of music, and 1.40  $\underline{TB}$  of photos.

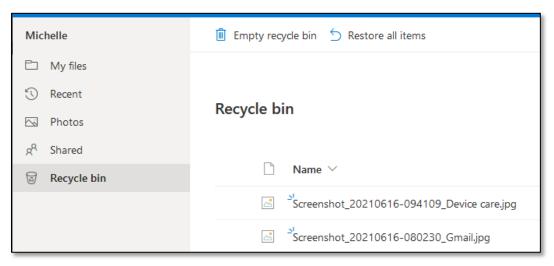
#### Copying / Moving Files via the Cloud

Cloud services may not be the best for long-term backups, however, they are excellent for moving files between devices.

Just keep two things in mind.

1. Know and follow your process. Once you've copied pictures into your cloud drive, move them *immediately* into the designated folders on your computer.

2. You may need to occasionally log into your <u>cloud service</u> on the web to delete "removed" items. For example, if you use a cloud service to move videos from one device to another, even when those videos are "deleted" items in the recycle bin still counts against your limit.



If a service says you are low on space, the first thing you should do is empty your recycle bin / deleted files by accessing the web site for the app.

Although every cloud service is different, the setup and transfer are very similar.

## Transferring Files via a Cloud Service

- 1. Select the file(s) you want to copy.
- 2. Select the appropriate "share" icon for your device.
- 3. Browse until you see your cloud service.
- 4. If desired, you can save files directly to a sub-folder.
- 5. Log into your computer.
- 6. Open <u>File Explorer</u>, and browse to the folder for your cloud service.
- 7. Drag and drop the files to the location on your computer where you want to save them.

## **Digital Photos**

If you take a lot of pictures—with your phone or a dedicated camera—you are going to have an overwhelming number of pictures.

## Naming Conventions

I have an important recommendation here, which is that all your pictures should start with the date they were taken, and dates should be formatted YEAR-MONTH-DAY. The reason is because computers sort files and folders alphabetically.

2020-01	2020-April	Feb-2020
2020-02	2020-Feb	Feb 2021
2020-03	2020-Jan	Jan 2020
2020-04	2020-Mar	Jan 2021

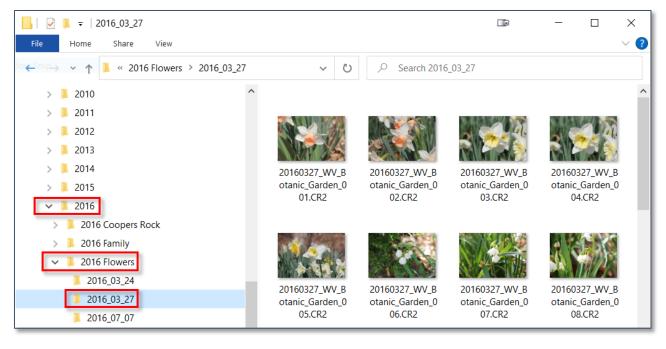
You can see that using words instead of numbers quickly becomes confusing.

## Photo Organization

After deciding upon your naming convention, you need to set up your method of organization. This is going to be time consuming, so if nothing else, create a structure and start using it immediately. Then go back later and organize older pictures.

The best organization structure is *the one that works for you*. This is my organization method, but what works for <u>you</u> is what *you* should use.





My photo folder structure is: Year > Subcategory > Day

2016 > 2016 Flowers > 2016\_02\_07

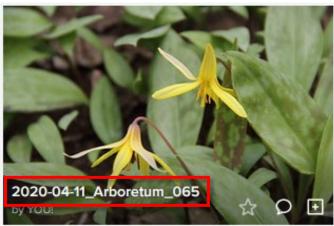
Within each subcategory, I'll usually append a location or subject, to make finding things easier.

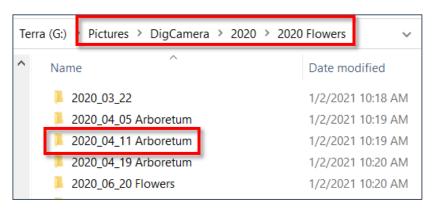
I created a specific naming convention for my pictures, ie, date\_subject\_number.

This lets me quickly find a specific photo because the file name gives me all the information I need to locate it.

There are a <u>variety of programs you can use to</u>

<u>rename your photos</u>, from software that comes with a digital camera to windows explorer. The important thing is to pick a naming convention and stick with it.





## Process

If you want a system to work, you must keep up with it. That means creating a process for regularly renaming and organizing your images. Again, *what* system you use doesn't matter; you just need to keep up with it.

Here is my process: After taking pictures, I download them from my camera to a computer folder named with the date taken. (Luckily, many camera software programs do this automatically.) Pictures taken on a phone are moved onto my computer via a <u>cloud service</u>. Once the pictures are in the correct folder(s), they are <u>renamed</u>, and (if I want) edited. Good pictures are processed and uploaded to a <u>photo sharing site</u> or shared with family members via a private folder on a <u>cloud service</u> (**be especially wary** of publicly posting pictures of kids).

Because I generally process photos on my laptop, but store them on my desktop, once a month or so I transfer the images from my laptop to my desktop, via a cloud service. This is unnecessary if you have only one computer and is also how I end up with so many duplicate copies of images.

**NOTE**: Once kids are old enough I recommend asking them which pictures they want posted online. The Internet is *forever*, and a picture you think is cute, a kid might find embarrassing.

## **Duplicate Files**

Your computer is undoubtedly full of multiple copies of the same file. These files (especially pictures) can take up a lot of space and can make it difficult to find a specific file you're looking for.

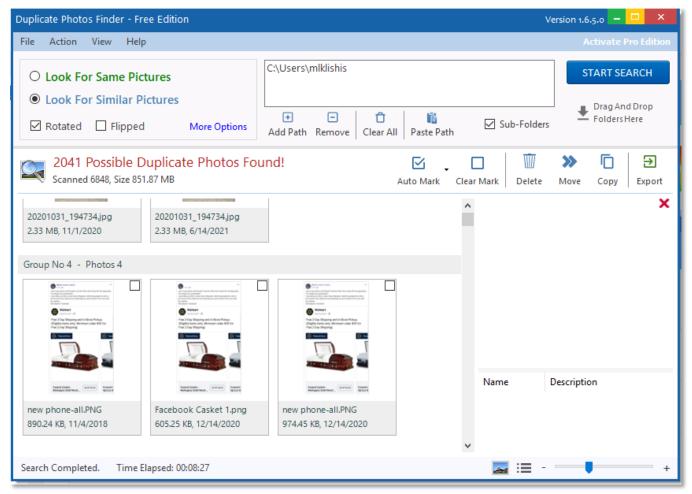
"Did I already download these pictures? I can't remember so I'd better download them again, just to be safe."

Unless you have multiple monitors, a really good memory, and a LOT of patience, this isn't something easy to do; you're going to need a program to help you ~ Me (countless times)

<u>find (and deal with) those dupes</u>. Be aware that a free program is going to *require you to <u>read</u>* <u>the manual</u> to figure out how to use it. If you do not have the patience for this, purchase a program with tech support.

A good <u>dupe finder program</u> should show you all the information about a file, as well as the ability to compare two images. A *really* good program will find pictures that are similar, but not exactly the same (such as a cropped picture).

#### **Duplicate Photo Finder**



#### **Dupe Guru**

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	itunes.PNG	C:\Users\mlklishis\Documents\		1536 x 2048	100	Folder		C:\Users\mlklishis\Documents\Work\Student Handouts\Apple\
	07052018_Maps_014.PNG		880	1536 x 2048	100	Size (KB)	787	787
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	07302018_Calendar_023.png	C:\Users\mlklishis\Documents\		153 x 154	100	Modification	2018/06/14 10:53:37	2018/06/14 10:53:37
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## I Have All These Pictures—Now What?

This is—as they once said—the \$64,000 question. If you have great pictures you should show them off!

Digital photo frames are popular, however, for many you have to upload the pictures you want to a device, so you'll want to make sure that's not a cumbersome process or something you'll have problems remembering how to do.

Another option is to print your pictures and frame them. This is great if you have a lot of empty wall or shelf space. However, not all digital images look good enlarged. You don't want to spend money to get a picture printed and then end up a blurry photo.

A third option is to create a photo book. There are tons of <u>different places that will print your books</u> for you, and the results are typically fantastic. Every year I make at least two photo books: one of my brother's kid and one for my aunt & uncle of their grandkids. I also created a book about my grandmother when she died and gave copies to my loved ones.



Another option is a <u>photo sharing site</u>. Just make sure you know the <u>EULA</u> for the site you are sharing your pictures to, if you do not want those images shared/used without your permission.

## So! Many! Cables!

You possibly have a drawer--or a box—that is full of cables. Cables you have bene collecting for the past twenty years. Cables you have no idea what to do with, because you don't know what they are or what they go to or if you need them.

How many micro-USB cables do I really, truly need?

Although I cannot tell you what that one funny cable that doesn't look like anything else goes to, I can tell you this: most phones and devices now use one of a handful of standard cables.

If you don't know what a specific cable does, put it in a box with the date, and if after a year or so you haven't found the device it goes to? Recycle it.

## Video / Monitor Cables

These are the cables that run from your computer to your monitor, or from your DVD player to your TV. Several of the video cables and ports out there are similar looking, so here is a close look at them to help you tell the difference.

## VGA

<u>VGA</u> (Video Graphics Array) was first introduced on the market with the early IBM (International Business Machine) computers in 1978, and was the standard for years.

VGA connectors carry analog RGBHV (red, green, blue, horizontal sync, vertical sync) video signals.

#### DVI

DVI (Digital Visual Interface) is a video display interface developed by the Digital Display Working Group (DDWG). DVI came onto the market in 1999. It was designed to create an industry standard for the transfer of uncompressed digital video content and be a replacement for the analog VGA.

Cable length is generally limited to 15 feet for higher resolution display.

## HDMI

<u>HDMI</u> (High-Definition Multimedia Interface) is a proprietary interface for transferring uncompressed digital video content AND compressed or uncompressed audio. HDMI was developed in 2002 by seven different companies, and went onto the market in 2003.

The biggest advantage of HDMI is that is carries both audio and video signal, meaning you don't need multiple cables. Cables can be up to 15 meters without signal degradation. Unlike VGA, there is no loss of fidelity between DVI and HDMI.

## Mini-HDMI

There are also mini-HDMI ports and cables. These are (as expected) smaller than HDMI, and are used most often for portable devices, such as DSLR (Digital Single-Lens Reflex) cameras and portable monitors.

## DisplayPort

<u>DisplayPort</u> (DP) is s a digital display interface developed by a consortium of manufacturers and standardized by the Video Electronics Standards Association (VESA).

It can carry video, audio, USB and other signal types. DisplayPort cables can be up to 2 meters in length without any signal degradation.











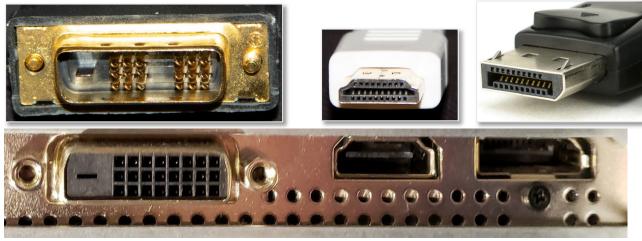
## Mini-DisplayPort

There is also mini-DisplayPort, which was developed by Apple and went into production in 2008.

You will find mini-DisplayPort on Apple products and some laptops.

## Video Cables & Ports

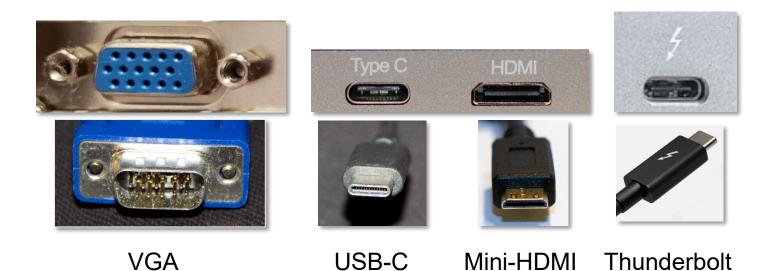
Even once you can see the difference between different types of cables, it can still be hard to tell the different types of ports at a glance, so here are some video cables and the ports into which they go.

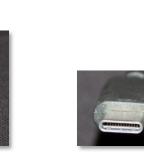


DVI

HDMI Displ

Display Port





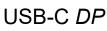


**HDMI** 





**USB-A** 



**Display Port** 











## **Network Cable**

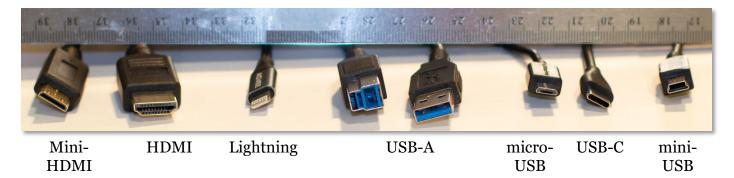
A network cable is used to connect your computer to your modem and looks like an extra-wide phone cable.

Even if your computer is wireless, it's often helpful to have a network cable, both for network security and for testing if your wireless goes out.



## Cable Size Comparison

Here are several different types of cables side by side, with a ruler, to help you figure out which specific cable you have.



## Other Cables

## **USB-A** Cables

USB-A was the standard for many years. Printers still mostly use



USB-A to physically connect to a computer.

Frustratingly, there are different versions of USB-A cables. USB 2.0 cables are generally white, while USB 3.0 cables are typically blue, and the "fatter" connector is taller.

It's always good to have a spare USB-A cable.

## Micro-USB Cables

Micro-USB cables were the standard data and charging cables for most Android phones, and are still the common in things like speakers, headphones, & rechargeable mice, because the port is so slim.

Micro-USB cables are just the tiniest bit wider on the bottom, and you have to look closely to see that. I recommend using nail polish or a sharpie to mark the "top" (smaller side) of the cable, to make it easier to plug in. I keep micro-USB cables at each computer and in my bags.

## Mini-USB Cables

Mini-USB cables are frequently used with cameras and small external hard drives. Mini-USB cables are wider on the bottom than on the top, are a bit taller than micro-USB cables. I keep a mini-USB cable at each computer and in my camera bag.

## USB-C



USB-C is the new standard for Android phones, and many new devices because they transfer data and power, and can be used to replace multiple cables. Unlike earlier USB cables, you can't put them in upside down. I keep USB-C cables at my computers and in all my bags.

USB-C has several different flavors, including super speed (SS) and DisplayPort (DP)

## Thunderbolt



Thunderbolt cables are cross compatible with USB-C cables. They also carry data and power, and are used most frequently in docking stations. The primary difference between USB-C and Thunderbolt is speed—Thunderbolt is faster, which is why it is preferred for docking stations.

#### How do you tell the difference at a glance? Sometimes,

Thunderbolt ports and cables will be marked with a lightning bolt. When buying, Thunderbolt cables are more expensive.











## Apple Cables

Apple has always had proprietary cables, so if you have been part of that eco-system, you likely have cables that only work for those devices. In recent years, however, Apple has moved to the Thunderbolt, which is cross compatible with USB-C and many mother devices.





If you have an old iPod, iPad, or iPhone, you may have a 30pin cable for those devices.

After the 30-pin came the Lightning cable, which is reversible, but cannot be used with USB-C

## **Cable Management**

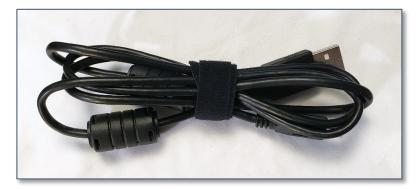
If you are not a fan of cable-spaghetti—especially when you need a cable *right now*—I recommend taking some time to organize your cables.

For bonus points, bind each cable with a Velcro tie.

Although you can use the coated metal twist ties, Velcro ties you can use that are superior on all counts. (For instances, most can be semipermanently attached to the cable which is excellent for cables you use frequently.

For bonus points, get colorful Velcro ties, and use specific colors for different cables. (Red for USB-C, green for micro-USB etc.)

For *double* bonus points, separate your extra cables into labeled Ziploc bags and store them all into one box so you can easily find the precise cable you are looking for next time you need one.





## Music

If you have the option, it's a fantastic idea to  $\underline{rip}$  all your old CDs and then store the discs CD binders.



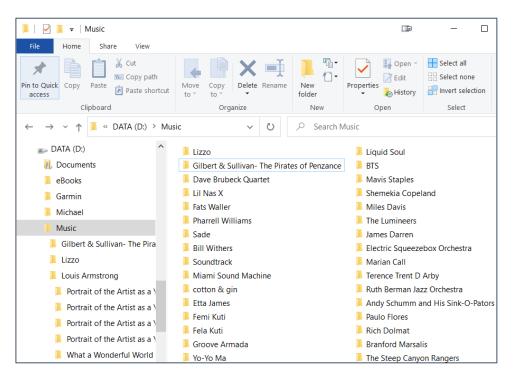
~148 CDs in a 13" x 23" x 3" space. With a handle.

Once you've done that, you will want to make sure your <u>digital music is organized</u> in a way that will allow you to find the albums / artists / songs you want to hear. (I don't rip DVDs but still put them in books similar to the above.)

For the most part, when a CD is ripped, information is appended to each song, including, artist, album, genre, song length, etc. If all the information doesn't come over, there are programs that will do this for you, though the process can be time consuming.

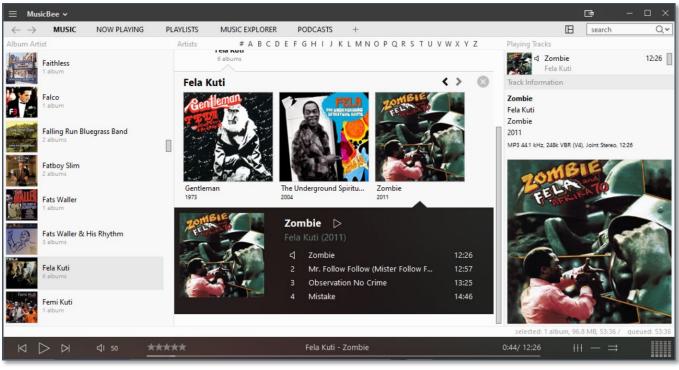
Name	Length	Title	Contributing	Album	#`	Year	Genre
Red Cross.mp3	00:03:08	Red Cross	Charlie Parker	Charlie Parker	27	2015	Jazz
The Grass Looks Gre	00:02:48	The Grass Looks Green	Dr. John	High Priest of	24	2014	Rock
o Aint I a Woman.mp3	00:03:32	Sojourner Truth (Ain't I	Katy Moffatt	Up Close & P	16	2006	Folk
Goodbye My Coney	00:02:39	Goodbye My Coney Isl	Car Talk	Cartalk: Tales	14	2009	Comedy
o1-12- Requiem for	00:02:37	Requiem for a Mountain	Kathy Mattea	Calling Me H	12	2012	Country
12 - Lord McDonald	00:02:25	Lord McDonald / Cum	Tim O'Brien	The Crossing	12	2020	Country
01-11- Now Is the C	00:03:27	Now Is the Cool of the	Kathy Mattea	Calling Me H	11	2012	Country
o 10 - I Could Have D	00:03:55	I Could Have Danced A	Marni Nixon	My Fair Lady	10	1992	Soundtracks
o1-07- Calling Me	00:02:31	Calling Me Home	Kathy Mattea	Calling Me H	7	2012	Country
o1-06- Hello, My N	00:03:01	Hello, My Name Is Coal	Kathy Mattea	Calling Me H	6	2012	Country
o1-03- Keep Your Di	00:03:25	Keep Your Dirty Lights	Darrell Scott,	Memories an	3	2013	Alt Country
o 02 - A Mountaineer	00:03:27	A Mountaineer Is Alwa	Tim O'Brien	The Crossing	2	2020	Country
Rats.mp3	00:01:09	Rats	Tom Howe,H	The Amazing	2	2022	Soundtracks
Ya Got Trouble.mp3	00:04:00	Ya Got Trouble	Robert Preston	The Music M	2	2014	Soundtracks

If you purchase music electronically, you will want to make sure all your music files are stored in the same place (instead of allowing each service to save music files in its own folder, making it hard to find songs later).

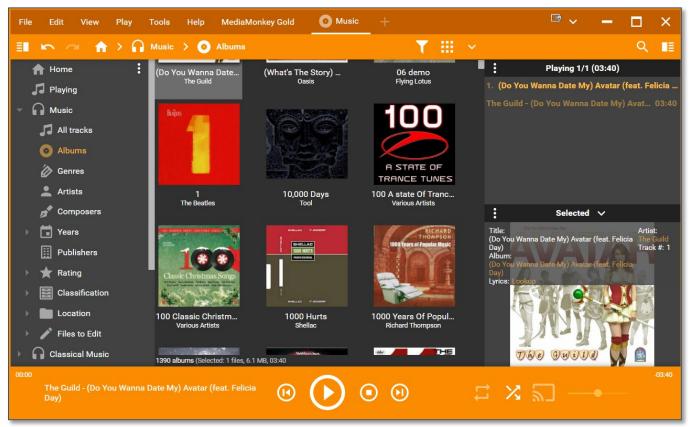


Although all Apple devices come with iTunes, you can use other programs to play, organize and edit your music metadata (for example, adding the genre "Christmas" to all Christmas albums) create play lists, update albums covers, and more.

Just to give you an idea of what you might find with these programs, below are screen captures for two different digital music programs: Music Bee and Media Monkey.



#### **Music Bee**



#### Media Monkey

## Mobile Device Music Apps

There are a variety of different programs you can use on your smart phone to play all your digital music.

Apple devices automatically come with iTunes. Android phones come with Google Music. Additionally, you also have the option to install a different app for playing music on your phone. There are plenty of alternatives out there, which allows you to find one with the features you prefer.

<u>Best music player apps for Android</u> <u>Best Music Apps for Android</u> <u>The best music and audio apps for iPhone</u> <u>The Best iPhone Music Apps and Alternative Music Managers for iOS</u>

Because the nice thing about smart phones is that if you don't like the app that comes with your device, you can always find a different one.

## Adding Music to Your Mobile Device

Copying music files to your phone is similar to <u>copying photos from your phone</u>.

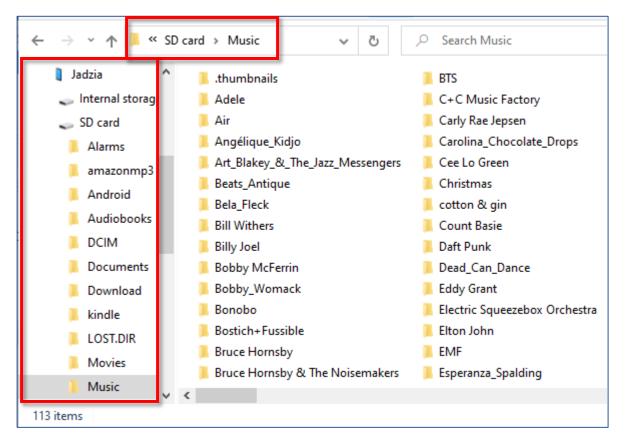
Start by plugging <u>your cable</u> (micro-USB, USB-C, or lightning) into your device, and then plug the other end into your computer. (You can also use Bluetooth for this, if both devices have Bluetooth, but it can be a bit more fiddly.)

Allow access to phone data?			
The connected device will be able to access data on this phone.			
Deny Allow			

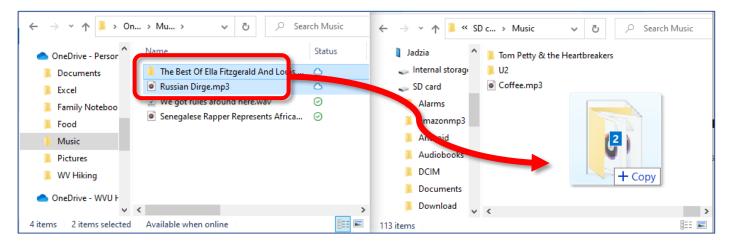
Once the device is plugged in, agree to any prompts.



Open two copies of <u>Windows Explorer</u> and find the music folders on both devices. If your Android device has an SD card, that is the best place to put your music files. If a music folder doesn't exist on your SD card you can make one.



Select the files in the "music window" on your computer and drag (or copy and paste) then to the "music folder" on your phone.



Music apps should find your mp3 files automatically, however, they may also have options for looking in specific folders or searching for files.

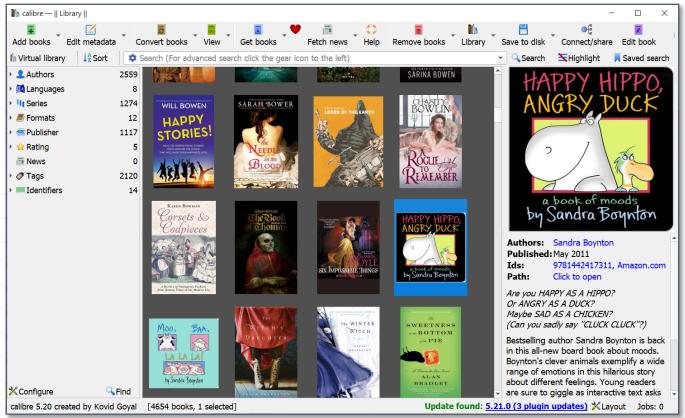
## eBooks

If you use an eReader, I strongly recommend downloading your digital library and storing those files on your computer. There are a variety of complicated reasons for this, but a short answer is that it's good to have access to all your books even if the internet is down.

There are different kinds of programs you can use to organize your digital library. One program (Alfa) even allows you to (relatively) easily create a database for your *physical* books by scanning the <u>ISBN</u> code with a smart phone <u>app</u>. (NOTE: This is just the names of your books, it does **NOT** create electronic copies of those volumes for you to access on an eReader or on your computer.)

And don't forget that you can borrow ebooks and audio books from your local public library.

Charleston Public Library: <u>https://www.ccpl.org/ebooks-magazines</u> Marion County Public Library System: <u>http://mcpls.org/elibrary</u> Morgantown Public Library: <u>http://morgantown.lib.wv.us/WV\_DELI.html</u>



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## Alfa

**NOTE:** <u>ISBN</u> scanners do not work for old books.

You can check whether your ISBN matches the bar cold on the back of the book.





## Miscellaneous

## Documents you need to keep physical copies of for all eternity.

- Birth and death certificates
- Tax file numbers
- Superannuation documents
- ID cards and passports
- Marriage certificates
- Business licenses
- Insurance policies
- Wills and powers of attorney
- Vehicle registration and loan documents
- House deeds and mortgage documents

However, having a scanned copy of these documents is an excellent idea.

#### Documents that can be purged after a time.

- Tax records and notice of assessments (keep for five years)
- Pay stubs and bank statements (keep for a year)
- Home purchase, sale or improvement documents (keep for at least six years after you sell)
- Medical records and bills (keep at least a year after payment in case of disputes)
- Warranty documents and receipts (keep as long as you own the items to which they correspond)
- Bank statements
- Annual insurance policy statements

Just as you should with paper documents, you should set aside some time every year to get rid of electronic documents you no longer need. Did you replace your washing machine? Ditch the old owner's manual and make sure you have the new one. When you do your taxes, go back and delete all the files older than five years.

To be completely clear, this is **not** going to be a quick and easy project. Expect it to take time. Give yourself months, rather than days, to complete some aspects of your decluttering.

And remember to keep up with whatever processes you decide to use, so things don't get so overwhelming in the future.

## **Resources & Links**

## File Renaming Software

Advanced Renamer	https://www.advancedrenamer.com	Free *
Bulk Rename Utility	https://www.bulkrenameutility.co.uk	Free *
Easy File Renamer	https://www.sorcim.com/easy-file-renamer.html	Free *
EF Multi File Renamer	https://www.efsoftware.com/mr/e.htm	\$14.50

\* Free for Personal Use

## **Duplicate File Finder Software**

DupeGuru	https://dupeguru.voltaicideas.net	Free <sup>1</sup>
Duplicate Photo Finder	<u>https://www.ashisoft.com/duplicate-photo-</u> finder.htm	\$39 / yr
Duplicate Photos Fixer Pro	https://www.duplicatephotosfixer.com	\$69.95
Easy Duplicate Finder	https://www.easyduplicatefinder.com	\$39.95 / yr

\* Free for Personal Use <sup>1</sup> Open Source

## **Music Management Software**

Foobar2000	https://www.foobar2000.org	Free
Helium	https://www.imploded.com	Free / \$39
Media Monkey	https://www.mediamonkey.com	Free / \$29.95
Music Bee	https://getmusicbee.com	Free

## eBook Management Software

Alfa eBooks Manager	https://www.alfaebooks.com	epub, mobi, pdf	\$9.97
BiblioteQ	https://biblioteq.en.lo4d.com		Free <sup>1</sup>
Calibre	https://calibre-ebook.com	epub, mobi, pdf	Free <sup>1</sup>
Data Crow	https://www.datacrow.net		Free

<sup>1</sup> Open Source

## **EPUB Reader Software**

Adobe Digital	https://www.adobe.com/solutions/ebook/digital-	epub, pdf	Free
Editions	editions.html		
Alfa	See above		
Calibre	See above		
Ice Cream	https://icecreamapps.com/Ebook-Reader	epub, mobi, pdf	Free /
EPUB Reader			\$39.95
Kindle	https://www.amazon.com/kindle-dbs/fd/kcp	epub, mobi, pdf	Free
Kobo	https://www.kobo.com/us/en/p/ereaders-apps	epub, mobi, pdf	Free

## **Photo Sharing Sites**

500px	https://500px.com	Free, \$47.90 / year
Flickr	https://www.flickr.com	Free, \$71.99 / years
PhotoBlog	https://www.photoblog.com	Free, \$19.95 / year
Photobucket	https://app.photobucket.com	\$60 / year
SmugMug	https://www.smugmug.com	\$110 / year

#### **Photo Book Services**

Artifact Uprising	https://www.artifactuprising.com	Starting \$20
Blurb	https://www.blurb.com	Starting \$12
Mixbook	https://www.mixbook.com	Starting \$15
Picaboo	https://www.picaboo.com	Starting \$25
Shutterfly	https://www.shutterfly.com	Starting \$25
Snapfish	https://www.snapfish.com	Starting \$15

## **Cloud Services**

Service	Free?	Website	Price
Sync.com	5GB	https://www.sync.com	2TB - \$8/month
SugarSync	0	https://www.sugarsync.com	100 GB - \$7/49/month
pCloud	4 GB	https://www.pcloud.com	500GB - \$49.99/year
OneDrive	5 GB	https://onedrive.live.com	100GB - \$19.99/year
MEGA	25 GB	https://mega.nz	2TB - \$10.98/month
iDrive	10 GB	https://www.idrive.com	100 GB/\$2.95/year
iCloud	5 GB*	https://www.icloud.com	50GB - \$0.99/month
Google Drive	15 GB	https://www.google.com/drive	100GB - \$1.99/month
Dropbox	2 GB	https://www.dropbox.com	2TB - \$12/month
Box	10 GB	https://box.com	100GB - \$5/month

## **Desktop Email Programs**

eM Client	https://www.emclient.com	\$60
Mailbird	https://www.getmailbird.com	\$50
Outlook	https://www.microsoft.com/en-us/microsoft-365	\$70 / year
Spark	https://sparkmailapp.com	Free, \$60/year
Thunderbird	https://www.thunderbird.net	Free

# **NOTE**: "Free" is usually more complicated, so if you do not have the patience to <u>read a manual</u>, go for a paid software package.

## **Technology Glossary**

## Add-on

An accessory piece of software designed to increase the capability of the software to which it is appended.

## Address Bar

In a web browser or windows explorer, it is a rectangle, usually towards the top of the window, that shows you the current location or address of your web page or file.

#### Address Book

#### See Contacts

Alexa

Amazon's virtual assistant.

## Algorithm

A set-of rules to be followed in calculations or problem-solving operations. Algorithms are frequently used to manipulate data sets.

## Android

Googles mobile operating system, built on open source software.

## Anti-Virus

A program that protects you from malicious software. Most anti-virus programs have options for purchasing additional security measures such as firewalls, email scanning, etc.

## App

Short for <u>Application</u>.

#### Apple ID

This is the username and password that you create with Apple to link a specific device to your Apple account. If you have an iPad and an iPhone, you use the same Apple ID with both of those devices.

#### Apple

Technology company that designs and develops hardware and software.

## Application

An application is a piece of software that lets your device do something, like play music or give directions. An application is the same thing is a program.

#### Autocorrect

Auto correct is when your phone automatically changes what you were typing to what *it thought* you wanted to type.

## Autoplay

When you visit a website and music or video starts playing without asking.

#### AVI

Audio Video Interleave. A multimedia format for audio and video files.

#### Backup

A copy of computer data that is taken and stored somewhere else, to be used in the event of data loss.

## BCC

Blind carbon copy. Covertly send a copy of the message to a third party. The primary recipient cannot see the person was added.

## Biometric

Unique physical characteristics that are be used for recognition. The most common types of biometric identifiers are fingerprints, voice, face, iris, and palm/finger veins.

# Blockchain

Also Block Chain. A list of records (blocks) linked using cryptography. These records are a cryptographic hash of the previous block, a timestamp, and transaction data. Blockchains are generally used on a peer-to-peer network. Data in one block cannot be altered without changing all other blocks.

#### Bluetooth

A wireless technology that allows data to be shared over short distances using short-wave UHF radio signal. The name comes from Harald "Bluetooth" Gormsson, king of Denmark and Norway, who united the Scandinavians.

#### Boolean

A system of logical propositions. Common Boolean operators: AND, OR, NOT, "", (). Based on the work of George Boole.

## **Browser Add-on**

See Browser Extension.

#### **Browser Extension**

A small software module that is used to customize a web browser.

#### Browser Hijack

Where a malicious piece of software modifies a web browser's settings without your permission.

#### Browser

Short for <u>Web Browser</u>.

#### **Brute Force Attack**

Where a hacker tries many passwords for passphrases in an attempt to break into an account. The longer the password (or passphrase) the harder it is for someone to succeed with this type of attack.

#### Byte

A unit of digital information that consists of eight bits. A byte is the number of bits used to encode a single character of text.

#### Cache

Temporary storage space that allows your computer to quickly bring up information, such as previously viewed web pages.

#### **Cambridge Analytica**

A British political consulting firm that used misappropriated digital assets, data mining, and other processes to influence political elections around the world.

#### CC

Carbon copy. Send a copy of the message to someone else. The primary recipient can see this person received the message.

#### Cellular Data

The connection a cell phone makes to a cell tower that allows you to do things like surf the internet, download emails, and send MMS messages.

#### Cloud

Storage that is physically somewhere other than where you are. Cloud storage is generally accessible from multiple devices, because those files are stored on a hard drive that belongs to a company that hosts the cloud service. Cloud storage is like a self-storage unit for your electronic files, except you can access your stuff from anywhere.

#### **Cloud Service**

A service provided by a third party or company that allows you to provide access to files and applications remotely.

#### Codec

A device or program that encodes/decodes a data stream, such as an audio file, for storage.

# **Contacts / Contact List**

A collection of screen names and the various data associated with them, such as email addresses and telephone numbers.

#### Cookie

A piece of data that a website saves on your computer. Cookies were designed to save user information such as preferences or logins but can sometimes be read by third parties. Cookies are also used to collect browsing data long-term.

#### Cortana

Microsoft's virtual assistant.

#### CPU

Central Processing Unit. The bit of a computer or electronic device that processes information. **Cryptocurrency** 

A digital asset that uses strong cryptography and is designed to work as a form of money. They used decentralized control, or a public financial database to keep track of who owns what.

#### Cryptography

Greek for "hidden writing", it is the study of secure communication—creating protocols to keep third parties from reading private messages.

#### Data Breach

The release of secure or private information. A data breach can be accidental or malicious, such as when an individual hacks into a system to steal information.

#### Database

An organized collection of information. Complicated databases link information between multiple tables allowing for analysis of the contained information. An address book is a basic database.

#### **Denial of Service Attack (DOS)**

A cyber-attack where the malefactor seeks to make a network resource (such as a website) unavailable by flooding the target with requests or visits.

#### Directory

A system that catalogs / organizes computer files.

#### Displayport

A high-quality audio-visual cable capable of transmitting HD and 4k.

#### DNŠ

Domain Name System. The phonebook of the Internet.

#### **DNS Hijacking**

Where a malefactor redirects visitors from a valid website to a different destination—often one that exists to steal data.

#### Domain Name

The string of text that identifies a place on the Web. A basic domain name is a word or abbreviation followed by a period followed by the domain extension: wvu.edu

#### Domain

The sometimes arbitrary grouping that designates what a website does or where it is based. The most common domains are .com .net .edu and .org. The domain is what you should check first when you want to verify the authenticity of a website.

#### Download

To move data and files from the internet or a server to your computer or mobile device.

#### DRM

Digital Rights Management. A format that protects electronic media from being illegally copied. **DVD** 

Digital Video Disc / Digital Versatile Disc. A digital optical disc data storage system.

# DVI

Digital Video Interface. A video display interface that connects your computer to your monitor. **Email Header** 

The portion of an email message that contains the routing information. The header can be used to help determine if a message is fraudulent.

# Email

Email is an electronic letter sent from one email address to another email address. Email addresses always have an @ (at sign) in them. Sending an email on your phone requires the use of cellular data. Each email address is unique, and email addresses are often used as unique identifiers or login credentials by databases.

# Emoji

Small images used to represent emotions, ideas, or expressions.

## Emoticons

Representations of facial expressions using keyboard characters. These are used to portray moods or feelings. For example, a smiling face could be :) or

## Encryption

The encoding of data so that only authorized persons or devices can read/view the information. The stronger the encryption, the more unlikely it is that a malfeasant could decode the intercepted data through a brute force attack.

## EPUB

Electronic Publication. A digital book format that allows you to read your eBook on any electronic device. EPUB files are reflowable.

## eReader

eBook reader that use black and white eInk screens that give a similar reading experience to physical books.

## Ethernet

Wired networking technology that allows multiple computers to talk to one another via a protocol (set of rules). Ethernet is used when speed, stability, and security are needed.

## EULA

End-User License Agreement. The legal contract between a software vendor and the user of that software. It specifies the rights and restrictions which apply to the use of the software.

## **External Storage**

Devices that store data outside of a computer or other electronic device. They are often removable, such as USB thumb drives.

## Facebook

An online media and networking company.

# **Facial Recognition**

Technology capable of identifying or verifying a person from a digital image. Facial recognition can be used to unlock an electronic device.

## **File Extension**

Also called a filename extension or file type, is the identifier suffix for a computer file name, and tells you the kind of program needed to open the file. By default, these extensions are hidden, but can still be used in search. If you change a file extension, that file will most often break.

## Firewall

A security system that monitors incoming and outgoing network traffic to prevent unauthorized access to a system.

## Folder

See <u>Directory</u>.

# Follow

Choose to see another user's posts in their content feed.

## Force Stop

A way to completely stop an app that is running in the background. An app that has been closed may still have bits active and collecting data.

## GB

Gigabyte. A computer memory unit equal to 1000 megabytes. The prefix giga means 109.

## GIF

Graphics Interchange Format. An image format that is often used in logos and animated pictures. **Google** 

A technology company that specializes in services and products related to the internet. **GPS** 

Global Positioning System is a piece of hardware that allows a device to contact a satellite to determine the location of the device in latitude and longitude. On most devices, software makes these data points usable to the end user by placing them on a map.

## GUI

Graphical User Interface (pronounced gooey). The windows, icons, menus, and pictures that allow you to interact with your computer using your mouse. Windows 10 and Mac OS (Big Sur) are operating system GUIs.

## Hard Drive

A data storage devices that stores and retrieves digital data. In your computer, this is where all your programs are installed and files saved.

## Hardware

The electronic components of a device; the bits you can touch. A cell phone, a keyboard, and a CPU are all hardware.

## HD

High Definition. Generally a higher resolution and quality than standard definition video. **HDMI** 

High-Definition Multimedia Interface. Audio/video interface for transmitting uncompressed data. Cable that connects your computer to your monitor, or your DVD player to your TV.

# HDR

High Dynamic Range. A photographic process where a camera takes multiple pictures at different exposures and combines them into a single image—this allows all areas of your image to be well-exposed, but can also look unreal if used too much.

## Heat Map

A heat map is a visual representation of data that allows you to see phenomenon as clusters or over space.

## **Home Screen**

The main screen of a computer or mobile device. Home screens are typically personalized by the user so that no two home screens will look alike.

## Hotspot

A type of Wireless Access Point. A device that allows you access the internet from a public place. Hotspots are generally open and unsecured and you should assume any data you submit is visible to people with ill-intent.

## Hover text

When you hold your cursor over a hyperlink, the document should display the URL for that link. This allows you to verify links.

## http

Hypertext Transfer Protocol is how data is moved between a website and an end user.

# https

Hypertext Transfer Protocol (Secure) is an encrypted form of http. This protects against interference or snooping by third parties.

# iCloud

Apple's cloud service.

# Icon

A graphic representation of a program, file or function.

# Information Security

The protection of data and the mitigation of risks, generally on computer networks.

# Install

A process that writes the code used to run the program (application) onto the hard drive of your device. Installing a piece of software embeds it into the device and allows it to work.

# Internet

A system of inter-connected computer networks.

## iOŠ

Apple's mobile operating system.

# iPad

Apple's tablet computer, running iOS.

# iPhone

Apple's cellular phone, running iOS.

# iPod

Apple's music player. The iPod is general similar to an iPhone, only without cellular service. **ISBN** 

International Standard Book Number. A numeric commercial book identifier that is unique for every edition and variation of a book.

# ISP

Internet Service Provider. Company you pay so you can have internet at home.

# iTunes

Apple's music service.

## JPG / JPEG

Joint Photographic Experts Group. A <u>lossy</u> compression format for digital images.

# Keylogger

Keystroke logger (also keyboard capture). A piece of hardware or a software program that can record every key struck on the keyboard.

# LAN

Local Area Network. A group of computers / devices that share a common communications line. **Location Bar** 

## See <u>address bar</u>.

# Location Services

Information from GPS, wireless access points, cell towers, and Bluetooth devices that helps your phone know where you are.

# Lock Screen

The opening screen or interface of an operating system. A lock screen keeps unauthorized users from accessing the data and information on a device.

## Lossless Compression

A form of data encoding that maintains the original quality of the file but at the cost of having a large file size.

# Lossy Compression

A form of data encoding used to reduce file size at the cost of data quality.

# Mbps

Megabits Per Second. The speed of your internet service.

# Messenger

An app that allows users to send text messages and images to other users in a system.

# Metadata

A data set that give you information about other data. A card catalog contains metadata. **Micro-SD** 

Micro-Secure Digital Card. Smaller size SD card, used in phones and lightweight devices. Comes with an adapter that allows for the transfer for files from a portable device to a computer.

## MMS

Multimedia Messaging Service is a kind of text messaging that allows you to send text messages that contain pictures or audio, as well as messages longer than 160 characters or to multiple people.

# MOBI

Mobipocket. The proprietary ebook format for the Amazon Kindle. MOBI files are reflowable. **Mobile Carrier** 

A wireless service provider that allows users to connect portable devices (such as phones) to the internet through a cellular service.

# Mobile Data

Wireless internet access through a cellular data connection.

# MP<sub>3</sub>

Moving Pictures Experts Group Laver-3. A coding format for digital audio.

## MP4 / MPEG4

Moving Pictures Experts Group Layer-4. A coding format for digital multi-media, commonly video. MPEG

Motion Picture Experts Group. A standard for encoding and compressing video.

# NDA

Non-Disclosure Agreement. A legally binding contract where parties agree not to share sensitive or confidential information.

# Network

A group of computers connected for the purpose of sharing resources. A network can be as small as two computers or as vast as the Internet.

# **News Feed**

The main page of Facebook, where you see content posted by users you have chosen to follow. These content can be text or images.

# Notification

A message displayed by an electronic device to provide an alert, reminder, or other communication.

## **Online Chat**

Real time communication over the internet through (generally short) text messages. **OS** 

Operating System. The base upon which software and apps are added. An Apple device generally uses iOS (iPhones) or macOS (laptop computers). PCs typically used the Windows OS, but there are other operating systems, such as Linux that can be installed. Non-Apple cell phones frequently use some form of the Android OS. How your device looks and works is dependent upon the operating system installed.

## P<sub>2</sub>P

Peer-to-Peer

## Passcode

This is the secret code to get into a specific device. If you have an iPhone and an iPad, they can have different passcodes. You can sometimes use a fingerprint instead of a passcode to get into a device.

## Password Manager

A program that stores electronic passwords.

## Password

The secret code to access a restricted resources. Passwords are usually required to use a minimum of eight characters, and contain special characters, such as numbers or upper case letters.

#### PayPal

A method of online money transfer and payments.

#### PDF

Portable Document Format. Once an Adobe proprietary format, now one of the most common formats for sharing digital documents.

#### Peer-to-Peer

A distributed that shares tasks or work between devices of the same level.

## Phishing

A fraudulent attempt to gain personal or sensitive information, by sending an email or creating a website that pretends to be from a real company or person, but is not.

#### **Play Store**

Goggle's app store, where users can download or purchase programs to run on their Android devices.

## PNG

Portable Network Graphics. A <u>lossless</u> compression type for digital images.

## Podcast

A digital audio file made available on the Internet for downloading to a computer or mobile device, typically available as a series, new installments of which can be received by subscribers automatically.

## Post

A message, comment, image, or other item that is placed on the internet, generally on a website. **Predictive Text** 

An input technology that guesses what you want to type both from what you are currently typing and, if you have allowed the software to learn, from what you have typed in the past. Predictive text makes typing faster and easier if you have good software on the back end.

#### Privacy

The information that is shared between your device and the external resources to which it is connected, as well as how that information is used, and with whom that information is shared.

#### Program

A program is a piece of software that lets your device do something like send a text message or video chat. A program is the same thing as an application.

## Public Network

An electronic connection where the traffic between devices is visible to anyone.

## Reflowable

An ebook format that layout depending upon the output device. MOBI and EPUB are reflowable formats, which means the number of words on the page change, depending upon the page / text size.

## **Reply All**

A response to an electronic message that is returned to ALL recipients of the original message. **Reply** 

A response to an electronic message.

# Ripping

Extracting digital content from a container, such as a CD or DVD. Ripping a CD means that the music is copied without loss from the CD to your computer.

# **ROT-13**

One of the most basic forms of encryption; a substitution encryption where characters are rotated 13 places.

## Router

A networking device that forwards data between networks.

## RTFM

Read The *Fantastic* Manual.

# Scraping

Web scraping, web harvesting, web data extraction is extracting data from websites—gathering up information available on a public website.

## SD

Standard Definition. The lowest quality rating for digital streaming.

## SD Card

Secure Digital Card. Removable memory that is used in devices like cameras, because it can be easily switched out when full. Allows for easy transfer of files from device to computer without a cable.

## Search

A computer command that allows you to find specific files on your computer that meet a designated category, such as file type, or date modified.

## Search Engine

A software system designed to find information on the web. The results from a search engine can be webpages, files, or images. Generally, behind the scenes a program runs an algorithm that crawls through the web cataloging everything it sees. This catalog is then organized by a different program where pages are associated with various terms.

## Security

Protecting electronic systems from theft or damage. This can be protection from physical theft, but often refers to electronic damage, where systems can be disrupted or data stolen.

## Server

A device (or program) that allows you to access something not on the device you are physically touching. A mail server stores your email and drops it to your device upon request. A web server allows you to connect to the internet.

## Settings

An app that allows you to customize your computer, device, or program.

## Siri

Apple's personal assistant.

## Smart Device

An electronic device that connects to other devices or the internet through a wireless protocol such as Bluetooth or Wi-Fi.

## Smart TV

A television with a network port to allow you to watch streaming services (and other internet content) without having to use an additional device.

## SMS

Short Messaging Service. A brief message that is sent from one phone number to another phone number. SMS does not use cellular data.

## Snooping

Unauthorized listening in to data transmission.

## Snopes

One of the first internet fact-checking resources, Snopes started as a site to debunk urban legends, but expanded into general fact-checking. (https://www.snopes.com/)

# Social Media

Interactive computer technologies and websites that allow for the sharing of information. Facebook is the most famous social media site, and allows friends to connect automatically, but LinkedIn is another type of social networking site, that focuses on career and job networking.

## Software

The programs that run on your computer or phone. Can also be called an application.

## Sort

To organize information in a prescribed sequence, such as alphabetically, or oldest to newest.

## Spam

Unsolicited electronic messages (especially advertising).

# Spoofing

When a person or program pretends to be someone else, by falsifying data, to gain access to your account or data.

## Spyware

A piece of malicious software that secretly installs itself to gather information about the user or device.

# SSD

Solid State Drive. A storage device for your computer that saves data on chips instead of a mechanical platters.

## Status Bar

A graphical element, usually at the top or bottom of a device's screen, that displays information about the state of the device. Some settings commonly found on the status bar are sound/volume, time, and battery life.

# **Streaming Device**

An object, such as Roku stick or Fire stick, you purchase that plugs into your existing TV so you watch video through the device on your existing television.

# **Streaming Service**

An online provider of entertainment (music, movies, etc.) that delivers the content via an Internet connection to the subscriber's computer

## Sync

See synchronize.

# Synchronize

When a file is synced, changes to that file are saved are pushed from one device to all other devices with access to that file, via a remote server.

# Tag / Tagging

A keyword or term added to the metadata of a piece of information. In social media, when someone is tagged, they are alerted to a post made by another user.

# Taskbar

A graphical user interface (GUI) that is typically along the bottom of your window, and usually shows you what programs are actively running as well as important information about the operating system.

# ΤB

Terabyte. A measure of computer storage equal to 1000 gigabytes or trillion bytes. The prefix tera means 10<sup>12</sup>.

## **Terms of Service**

The rules you agree to abide by when you sign up use an online service.

## Text Message

A brief message that is sent from one phone number to another phone number via a protocol called SMS. Text messages are generally limited to 160 characters, and messages with more characters than that will be broken down into multiple messages when sent. Text messages are asynchronous: a message sent to someone whose phone is off is delivered when their phone is turned back on. Text messages generally do not require cellular data but do require a cellular connection.

#### Thumb Drive

<u>USB Flash Drive</u>

#### TIFF / TIF

Tag Image File Format. Lossless digital image format that was developed originally for scanners as an alternative to multiple proprietary formats.

#### Timeline

A display of items in chronological order. Twitter has a timeline; Facebook has a news feed.

#### TL;DR

Too Long, Didn't Read

#### TOS

Terms of Service

#### Trojans

A type of malicious computer virus that presents itself as a useful item, such as a document.

## Two-Factor Authentication

This is a way to make both your device and your account more secure. When you log into your Apple ID on a new iPad (or iPhone) for the first time OR you log into iCloud from a computer you have never used before, Apple wants you to verify that YOU are the person attempting to access your account.

#### TXT

<u>Text message</u>.

#### Unfollow

To stop seeing a user's posts in your timeline or news feed. On Facebook, you can unfollow someone by still remain friends with them.

## Uninstall

The removal or a software program or application from the operating system of a device. Although uninstall removes the visible aspects of a program, there are often bits and pieces of the program left behind.

#### **Unique Identifier**

A piece of data that is unique to a record. Telephone numbers and email addresses are often used as unique identifiers, because no two individuals have the same ones. Unique identifiers allow data records to be linked across databases.

## Upload

To move files from your computer to a cloud service or network.

## URL

Uniform Resource Locator is the address of a space on the web. Every website has a unique address, and that address can often tell you something about the web page you are visiting.

#### URL Bar

See <u>address bar</u>.

#### USB

Universal Serial Bus. This is the industry standard for cables that connect devices and their peripherals through a wire. This connection can be used for both communication and power. There are several types of USB connections: USB-A, USB-A 3.0, mini-USB, micro-USB, and the newest standard, USB-C.

# **USB Flash Drive**

Also: USB thumb drive. A small USB data storage device that is removable, rewritable, and can be easily carried in a pocket.

## User Data

Any type of data generated by people interacting with software programs. User data includes: Explicit Data, which is given by a user directly such as name, address, email, and phone number; Implicit Data, which is not provided by the user directly but gleaned through analysis of user interactions, such as pages visited, session duration, or type of device; and finally External Data which has been gathered from third parties with whom an organization has a relationship.

## Username

Also called account name, login ID, user ID. The credentials you use to access an electronic resources, such as your computer or a website. Every account on a website or device must be unique to that service, so as to keep account information separate.

## VGÅ

Video Graphics Array. A connector that takes video signal from a computer and takes it to the monitor (or projector).

## Virtual Personal Assistant

A software program that preforms tasks or services based upon verbal commands. Some of the most well-known services are Siri and Alexa.

## Viruses

A piece of malicious software that inserts itself into another software program that it uses to replicate itself. Ransomware is a software virus.

## WAV

Waveform Audio File Format. An audio file standard for uncompressed audio.

#### Web

Also called the World Wide Web, this is an information space on the Internet that is accessible from devices such as computers, cell phones, and tablets, using a URL as the address.

## Web Browser

A software program that allows you to access sites on the Internet, or web.

## Web Cookie

See Cookie.

## Website

a location connected to the Internet that maintains one or more pages on the World Wide Web **Wi-Fi** 

Short for wireless (the "fi" is an arbitrary syllable added on)

# Widget

A graphical element that displays information or provides quick access to certain parts of an app. Mobile devices frequently have a weather widget that is linked to your weather app, and which tells you the current temperature and forecast.

# Wireless Access Point

A device that allows your device to access the internet. If a wireless access point (or router) does not have a password, it is unsecure, and you should assume that anyone can see what you are doing on your device.

## Wireless Router

A piece of hardware that allows devices to connect to the internet without being plugged into the wall. Your wireless at home should be password protected, so that strangers cannot access all devices in your home using that wireless network.

#### Wireless

A technology that allows computers to connect to a network and/or the internet without using a physical connection. Wireless is available in an area when a wireless access point (also called a hotspot) has been created and made accessible to devices. Public wireless is less secure and caution should be used (ie, don't make purchases or send private emails over a wireless network). Private wireless networks (such as in your home) should be secured with a password.

#### World Wide Web

An information system on the Internet which allows documents to be connected to other documents by hypertext links, enabling the user to search for information by moving from one document to another.

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