





Wonderlust.

Please join us for a special Apple Event broadcasting from Apple Park.
Watch it online at apple.com.

September 12, 2023 10:00 a.m. PT





- As reported last month, Apple announced their new headset computer at WWDC23 called "Vision Pro"
- The Vision Pro starts at \$3,499, and won't be available until early next year
- This is a new product category that Apple refers to as "Spatial Computing"
- The easiest way to get a feeling for this is to see an video produced by Apple (https://www.youtube.com/watch? v=TX9qSaGXFyg)

Sion Pro



- Apple calls it a spatial computer because of its ability to blend digital content with the real world
- The Vision Pro is a mixed reality headset that displays content either 1-) overlaid on the real world around you, or 2-) presented in a completely immersive virtual content
- The headset is not see through, and everything you see is digital
- Apple uses cameras that map out what's in front of you, translating that into a digital image augmented by virtual elements



- Inside the frame, there are two micro-OLED displays that deliver over 4K resolution to each eye for a total of 23 million pixels
- There's also an external display called EyeSight this projects an image of your eyes so people can tell whether you're using the headset in an immersive mode, or if you can see what's going on around you



- For glasses wearers, there are prescription inserts that attach magnetically to the headset's lenses (not included in price)
- There are no controllers for Apple Vision Pro the headset is instead controlled by eye tracking, hand gestures, and voice commands
- An app can be navigated to and highlighted by looking at it and then opened with a tap of the fingers
- Scrolling is done with a simple flick of the fingers

Apple Vision Pro Gestures



Тар



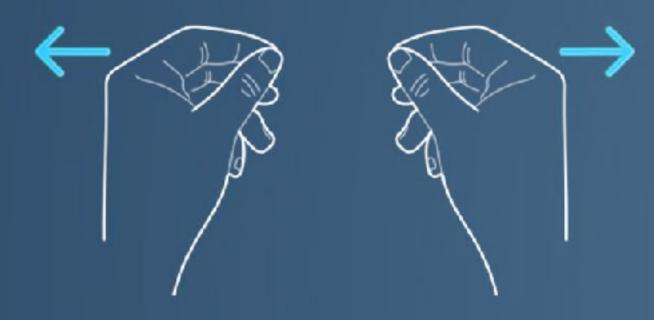
Double tap



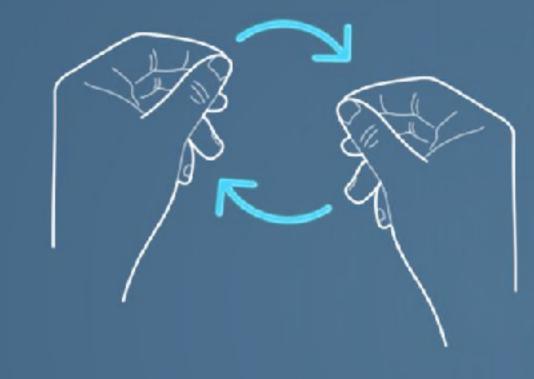
Pinch and hold



Pinch and drag



Zoom



Rotate



- Apple Vision Pro has 12 cameras and five sensors for monitoring hand gestures, eye tracking, and mapping the external environment
- Optic ID scans your iris with infrared lights and cameras, and is used for authentication, unlocking the device, making purchases, and as a password replacement
- There are two Apple silicon chips inside Vision Pro, including the same M2 chip that's in the Mac, and a new R1 chip
- The M2 chip runs visionOS, running the computer and providing graphics, while the R1 chip processes input from the cameras, sensors, and microphones



- Apple Vision Pro can take 3D photos and videos using a built-in camera that's powered by tapping on the top button of the device
- Due to weight constraints, Apple did not put a battery in the Vision Pro frame
- Instead, it is powered by a braided cable that is attached to a battery pack worn at the hip or plugged into an adapter
- The battery pack offers two hours of battery life on a single charge



- With Apple Vision Pro, content is displayed in the space around you
- You can position apps and windows anywhere in mid-air, rearranging them as you see fit, with multiple windows
- A visionOS operating system runs on Apple Vision Pro, and it will have a dedicated App Store, but it will also be able to run iPhone and iPad apps
- In addition, you can connect the Vision Pro to a Mac, with the headset serving as a display for the Mac



- FaceTime has been redesigned for Vision Pro: People on the call are shown in large tiles to the headset wearer, while the headset wearer is shown as an accurate digital recreation with no headset
- Spatial audio makes it clear who is speaking
- The Cinema Environment allows you to watch shows and movies at the original frame rate and aspect ratio chosen, or you can make the screen feel 100 feet wide
- Streaming services like Apple TV+ and Disney+ will be available on Vision Pro at startup



- There are speakers on either side of the headset, built into the straps that are connected to the frame
- The speakers feature dual-driver audio pods that are positioned next to each ear, and they are able to analyze a room's acoustic properties to adapt the sound to match the space
- The speakers support spatial audio for an surround sound experience
- There are also six microphones for phone calls, video calls, and voice commands

Vision Pro - My Take



- This is an incredible device with mind-blowing technology
- Questions in my mind:
 - Will people want to wear a device on their heads for any length of time?
 - While Viewing movies will be absolutely great (site and sound),
 it doesn't really support watching with others in same room
 - The \$3,500 will certainly be deterrent to a lot of people
- Remember: This is the first iteration of a brand new technology



My New Mac



Apple Studio Display with M2 Pro Mac mini



My New Mac



- For the last 6 years, I have loved using my 2017 27" iMac
- Unfortunately, it won't be able to run the new Mac OS (Sonoma)
 that comes out this fall
- I also can't replace my iMac because Apple no longer sells the 27" iMac so, what to do?
- I decided to replace my iMac with a Mac mini and get Apple's Studio Display monitor
- The Studio Display is the same size and quality as the 27" iMac (you could even think of it as a 27" iMac w/o the Mac)

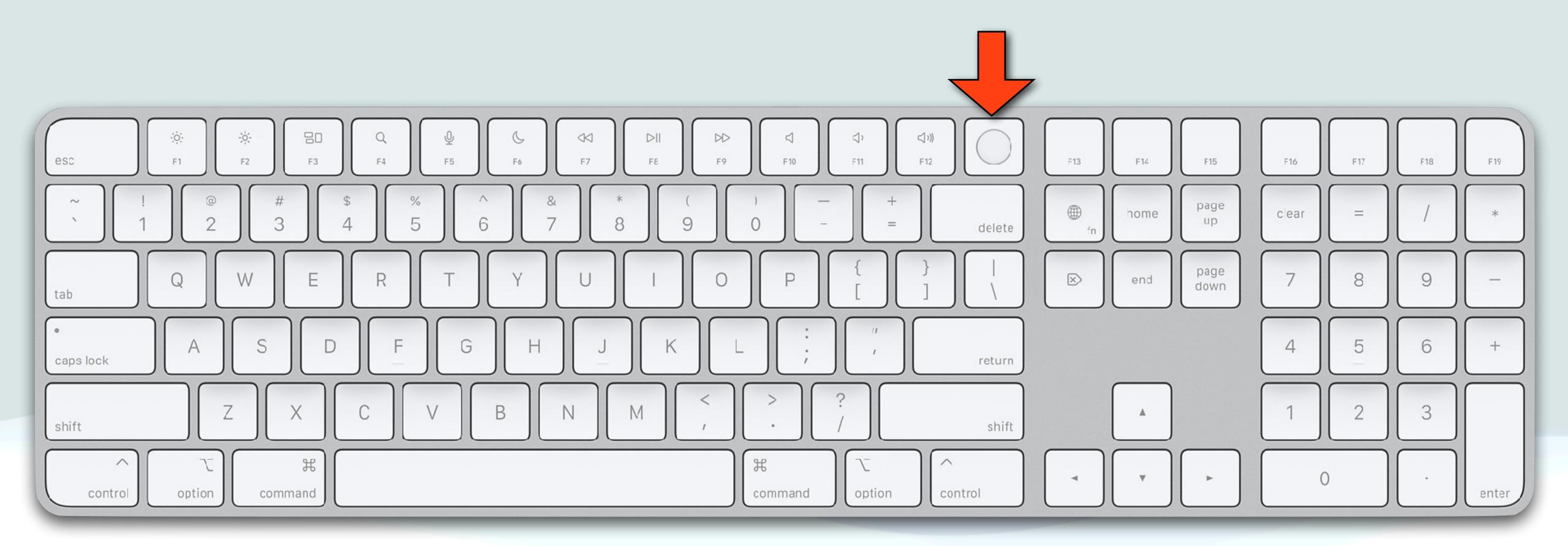


Tech Specs



- For the Mac part, I decided to go with the 2023 M2 Pro Mac mini
- I decided on the Pro model because it has 4 thunderbolt ports vs the 2 that comes with the standard M2 model
- I configured it with 16GB of memory and 2TB of SSD storage
- I also bought a new 8TB WD hard drive for Time Machine backups
- I decided to reuse the trackpad and mouse from the iMac, but I bought a new Magic Keyboard (with a numeric keypad) that supported TouchID (white is \$20 cheaper for some reason?)

Extended Keyboard with Touch ID





Ordering



- I ordered the devices on line from Apple using their military store which gives you with a 10% discount on everything in the store
 - A similar education discount is also available to college students and their parents, as well as faculty and staff of all grade levels
- The military store verifies you're a veteran using id.db, and looks and works exactly like the standard Apple Store except for the prices
- I also used Apple Pay with my Apple Card credit card to get an additional 3% cash back
- The Display was available for immediate pickup, but The Mac mini had to be custom built and took about a week before it was available



Pick Up



- I decided to pick up the device at the Apple Store rather than having it delivered to my house - I didn't want to worry about delivery dates or package theft
- The pickup process worked great!
 - When it was ready to be picked up, Apple sent me an email with a QR code that you could add to your iPhone wallet
 - At the store, I was directed to a special desk where I showed them the QR code - they immediately brought the item out for me - Very efficient and quick



Migration



- I was a bit apprehensive about migration since this was going between two completely different architectures (Intel and Apple Silicon)
- While I've done this migration many times in the past, I usually anticipate some issues with a few applications
- I usually do the migration device to device, either over a wire or wifi, but this would tie up both the old and new machines during the migration process
- So instead, I decided to do a restore from my old Time Machine backup disk instead



Migration



- I needed to migrate a little over 1 TB of user data from the iMac to the Mac mini
- I used Apple's Migration Assistant software that started automatically when the new machine was booted
- It took about 6 hours to complete the migration
- Migration assistant worked perfectly with <u>zero</u> issues
- I had to reenter my network account passwords but that was about it - Could not have gone any smoother





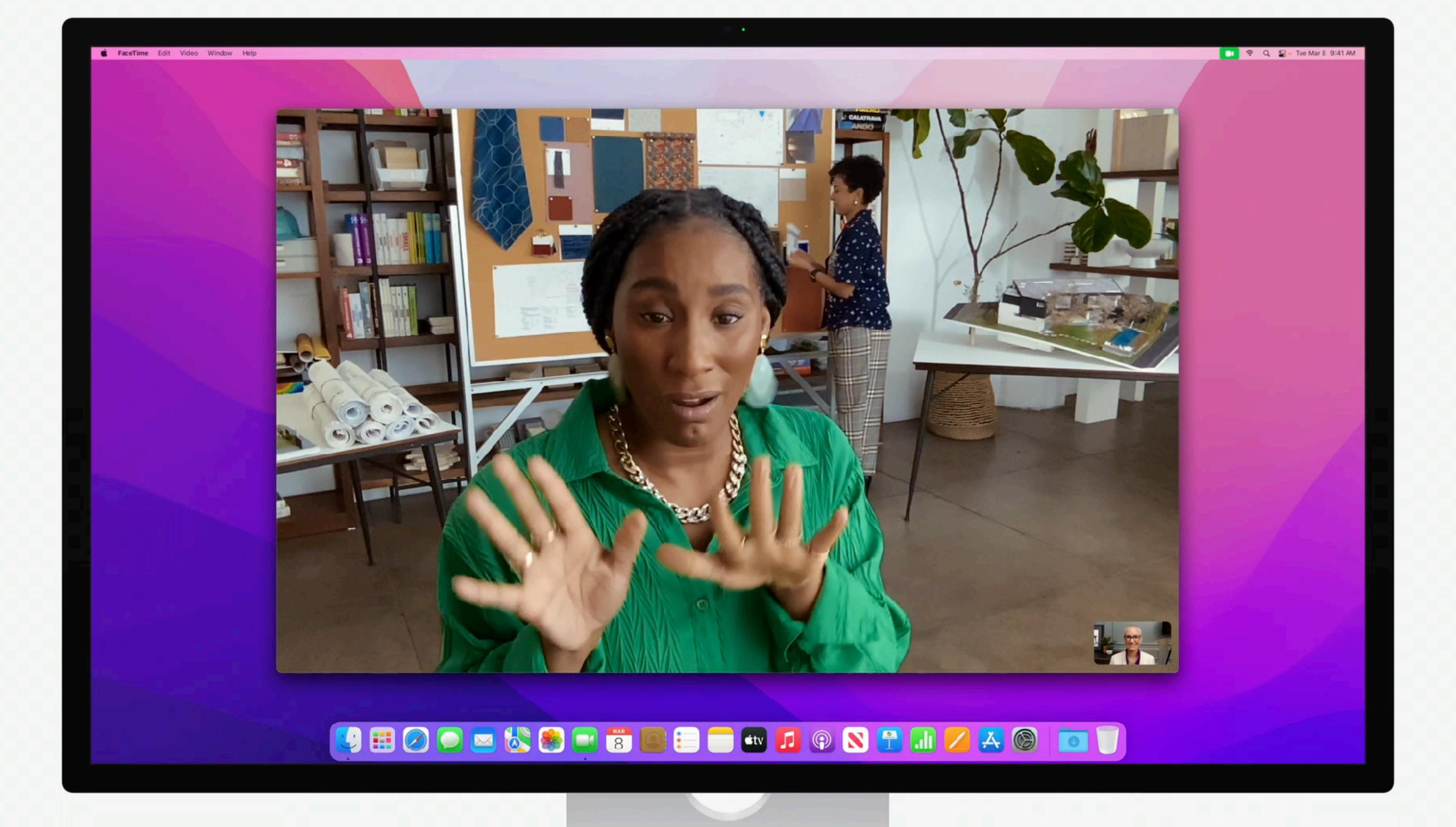
- The new system feels exactly like a 27" iMac
- In the future, upgrades to the computer and monitor can be done separately (the monitor should last much longer than the computer)
- The Studio Display's speakers, surprisingly, sound as good as the Bose speakers I was using on my iMac
- They support spacial audio and listening to spacial audio with the Apple Music app is amazing (better than Bose)
- The new display is beautiful exactly the same screen size as the iMac, but physically smaller due to smaller bezels and no chin







- Putting your finger on the Touch ID button on the new keyboard, logs you in instantaneously and mostly eliminates the need to use passwords on the computer and web sites
- The new display has a 12MP Ultra Wide built in camera that had noticeable better quality for FaceTime and Zoom than the iMac
- It supports Center Stage on video calls so the camera follows you as you move around, and if someone else joins you, the camera pulls back to include both of you
- This occurs automatically and is pretty amazing







- I have the old and new Macs sitting side by side and because of continuity features, I can link my mouse and keyboard to the iMac
- This allows me to use the same mouse and keyboard on both computers simultaneously just by moving the mouse beyond the edge of the screen
- The cursor then moves right over to the old machine, and when this happens the keyboard is active on the old machine
- I also found I can drop and drag files between computers using the same technique





- The Mac mini attaches to the Studio Display with an included thunderbolt cable
- The Studio display has an additional 3 USB-C ports (10GB/sec)
- The new machine is faster of course, applications start almost instantaneously
- Interestingly, while normal operation seems a bit more responsive, most activity is not that much faster
- I believe this is because most things I do on the computer are not very CPU intensive



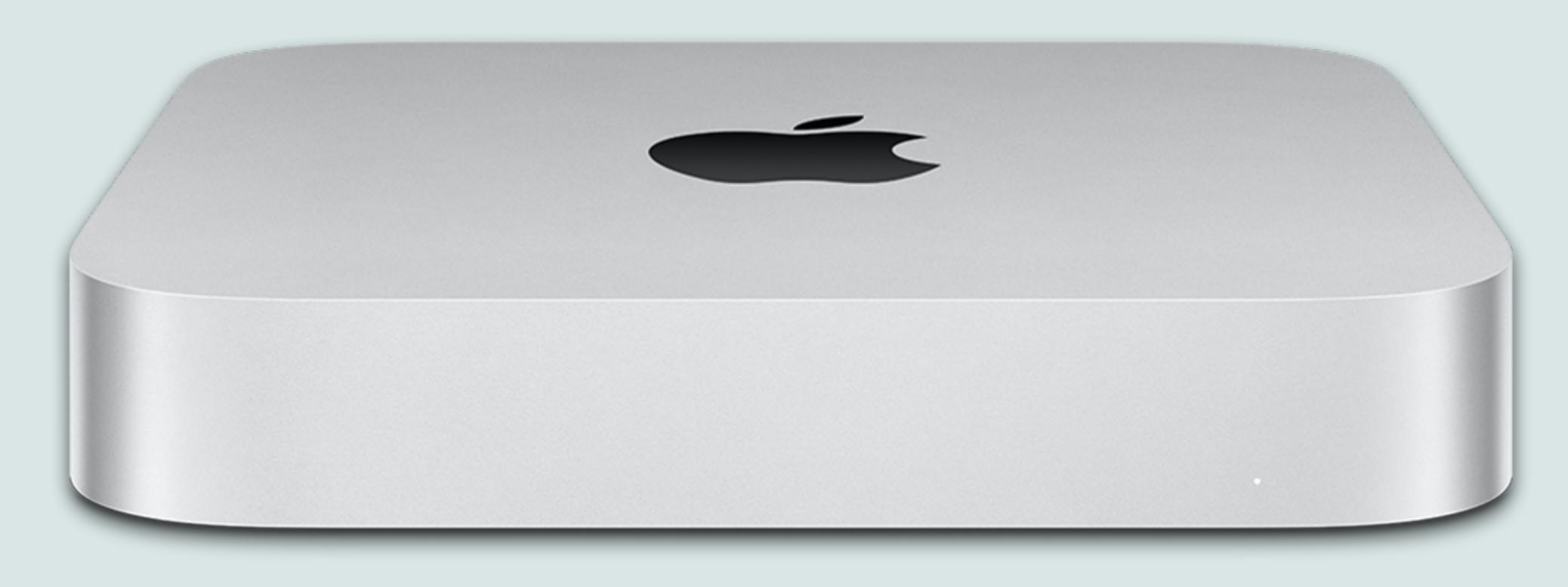


New Mac



- I'm using my old iMac now as a Plex server
- This allows me to view my movies and TV shows on any of my other Apple devices or TVs (like my own private streaming service)
- I also expect to use it to generate before and after pictures once I migrate to Mac Sonoma
- Overall, I'm pretty happy with the entire process, from ordering, picking up, migration, and of course the final results



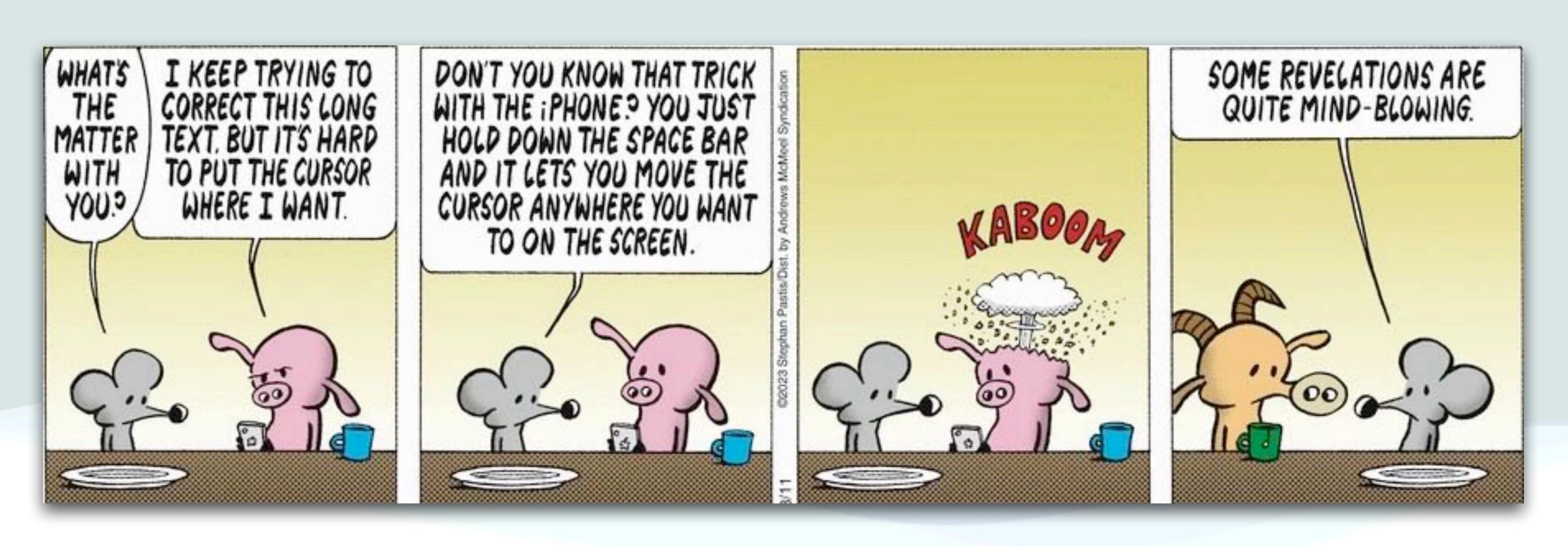




Mac M2 Pro Mini



Quick Tip in the Comics



How Long will an Apple Product Last?





iPhone 1

Apple 1 Computer

Apple Life Spans AMARIA



- First, you have to define what you mean by how long a device lasts?
- You can use it until it no longer works and that can be a long time
- Vintage Products (defined by Apple):
 - Products are considered vintage after Apple stopped distributing them for sale more than 5 and less than 7 years ago
 - Vintage products can get limited service subject to availability of parts

Apple Life Spans AMARIAN



- Obsolete Products (defined by Apple):
 - Products are considered obsolete when Apple stopped distributing them for sale more than 7 years ago
 - Apple discontinues all hardware service for obsolete products, and service providers cannot order parts
- Another definition could be when a product no longer can run the latest operating system (ex: my iMac)
- These definitions are important to know if you decide to buy an older device either used or new

iPhone OS Ranges Historical

iPhone	Release Date	Initial OS	Final OS	Years
5	2012	6	10	5
5 s	2013	7	12	6
5c	2013	7	10	4
6	2014	8	12	5
6s	2015	9	15	7
7	2016	10	15	6
SE (1st)	2016	9	15	7
X	2017	11	16	6
8	2017	11	16	6

iPhone OS Ranges (Estimated)

	iPhone	Release Date	Initial OS	Est Final OS	Current OS until ?
	XS	2018	12	17	2024
	XR	2018	12	17	2024
4	11	2019	13	18	2025
	SE (2nd)	2020	13	18	2025
	12	2020	14	19	2026
	13	2021	15	20	2027
	SE (3rd)	2022	15	20	2027
	14	2022	16	21	2028
	15	2023	17	22	2029

Questions?





iPhone 1

Apple 1 Computer

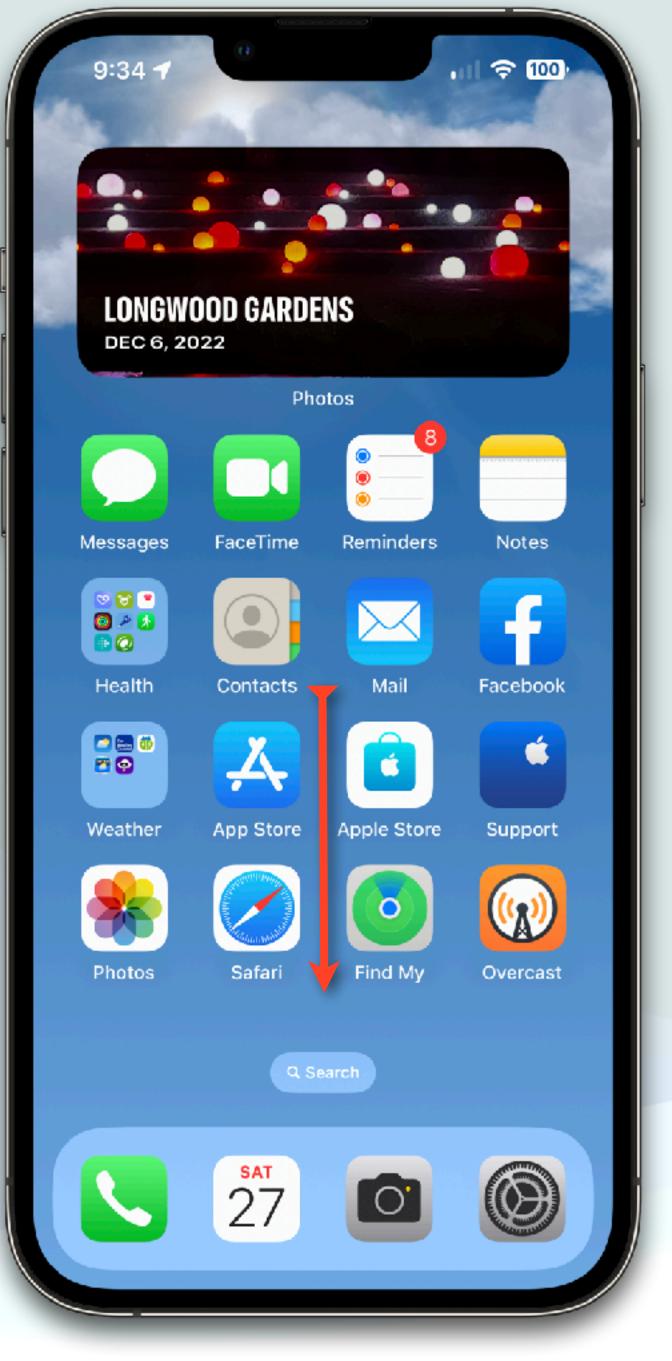
Finding your Apps



Finding your Apps

- During a previous presentation, I talked about the Apple Tips and the Apple Support app that run on iOS
- Several people wanted to know if they had the apps on their phone, and how to find them
- It's easy on the iPhone, as there is a search button at the bottom of any screen that you can tap
- On an iPad, you pull down on a blank spot on your screen to expose the search field
- Then just type in the name of the app in the search field



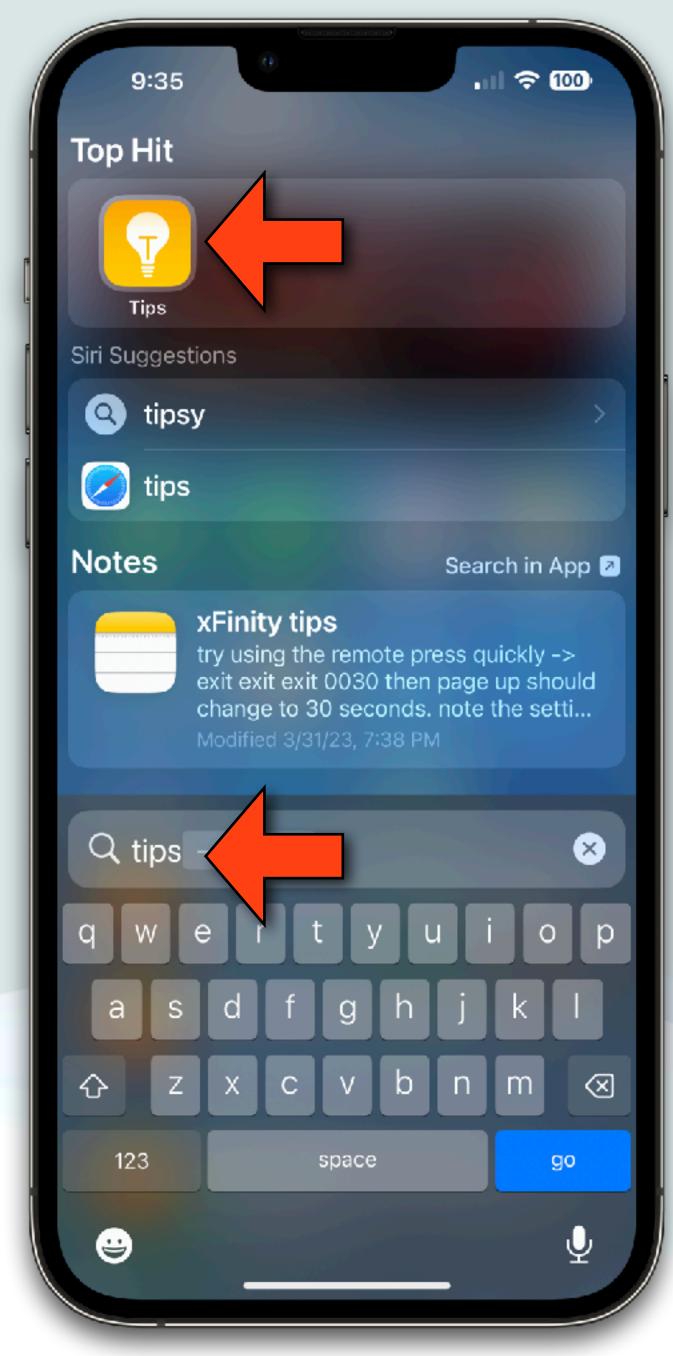


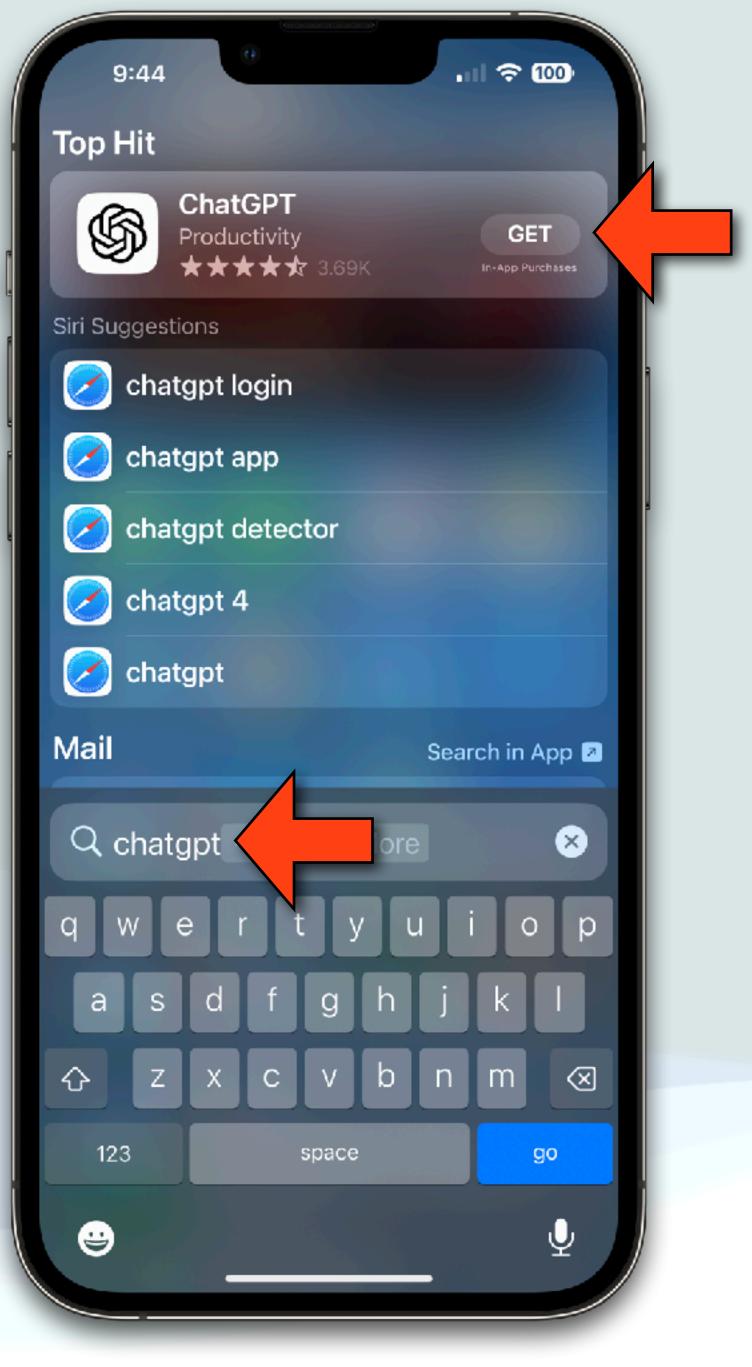
iPhone Only 45 iPhone or iPad

Finding your Apps



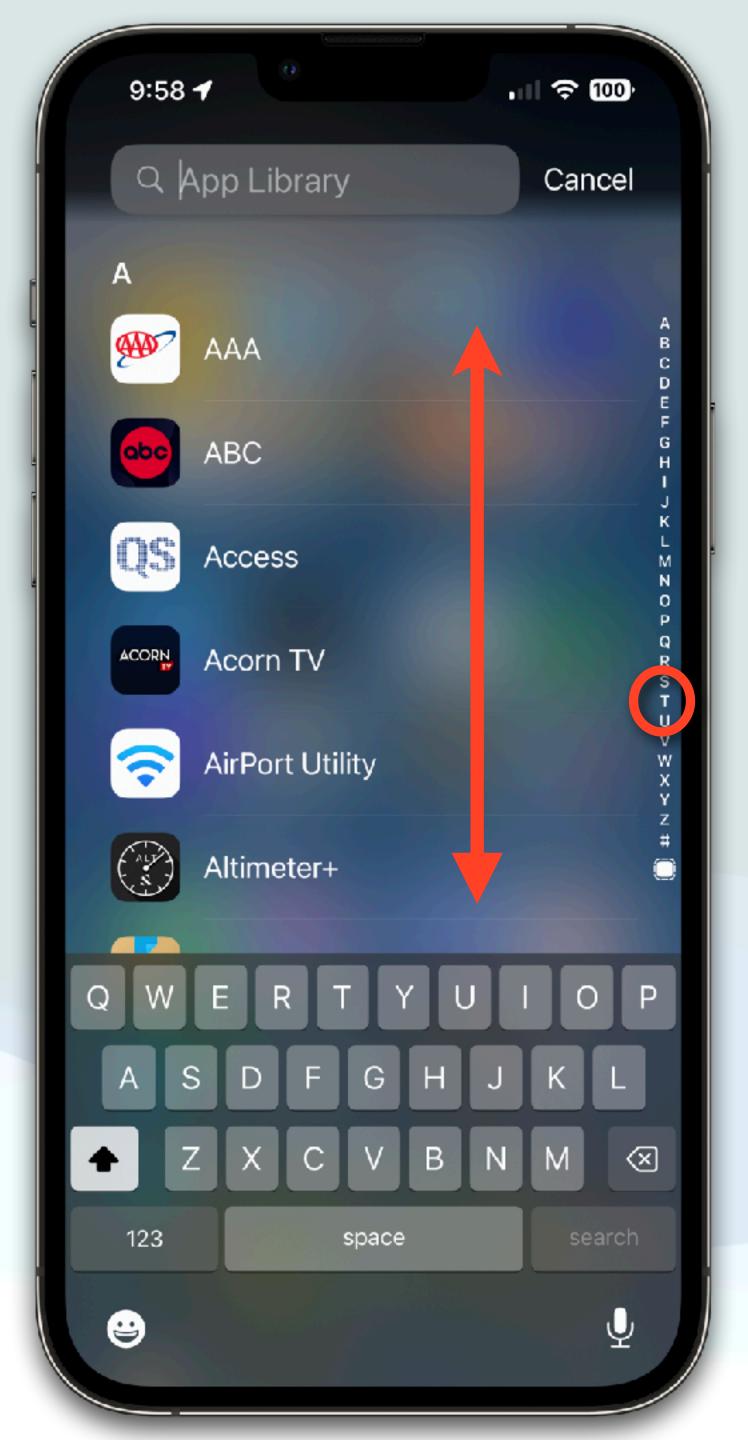
- If you have the app on your phone, it'll show at the top of the screen and you can just tap the icon to open it up
- If you don't have the app on your phone and it's in the app store, tapping on the icon will take you right to the app store
- Another way to find an app on your phone is to go to the App Library by scrolling all the way to the left
- Here, you'll see collections of apps, and if you tap the search field, you'll get an alphabetic list of your apps
- On this list you can also tap a letter on the side to go directly to that listing

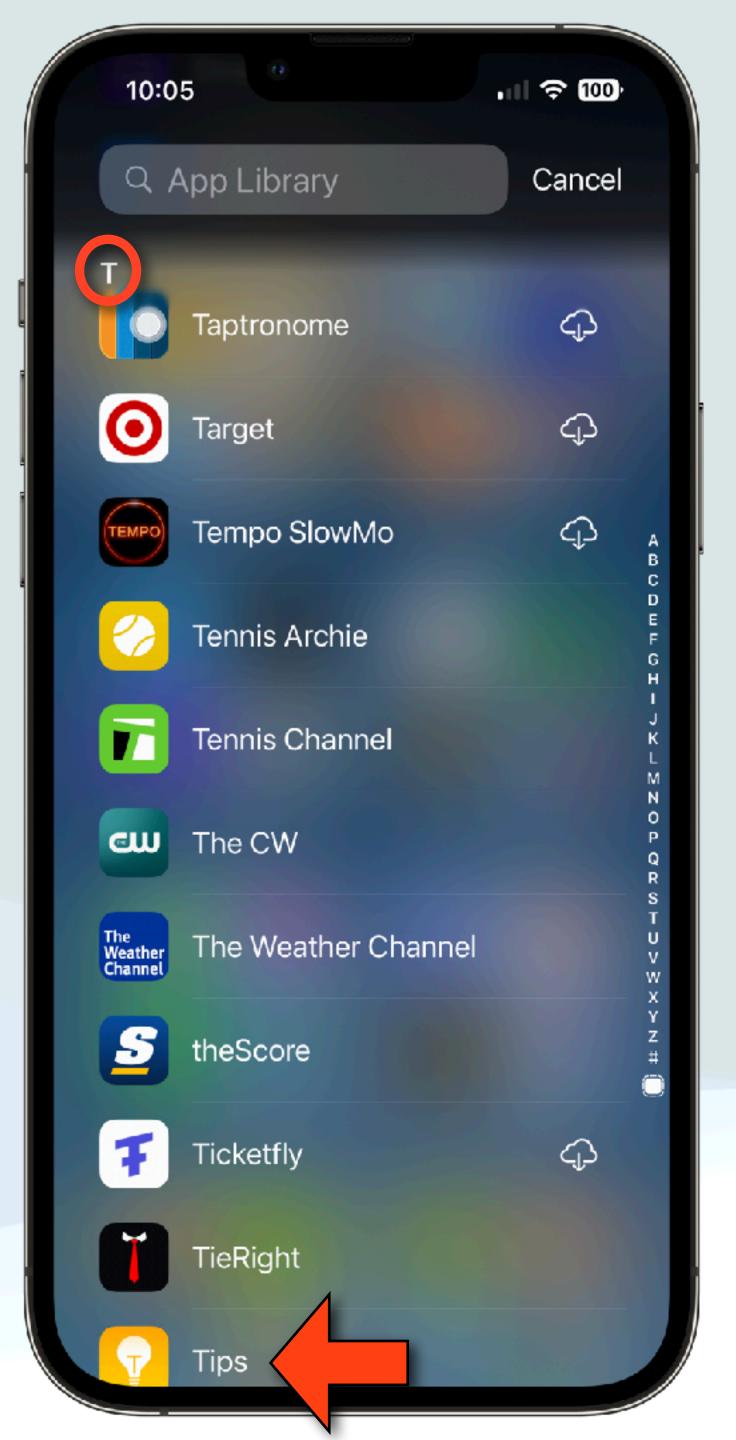




If an app is found

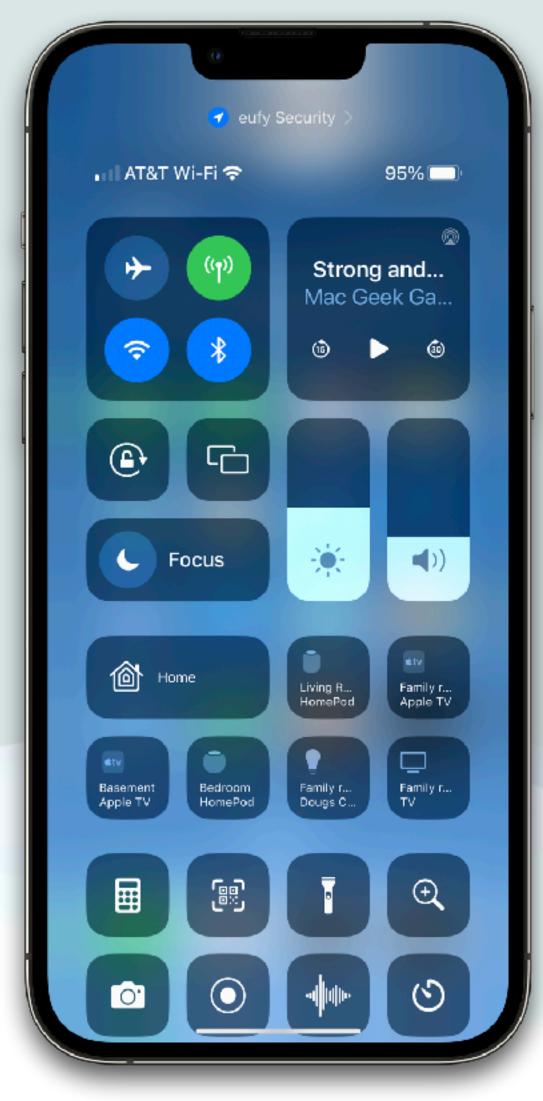


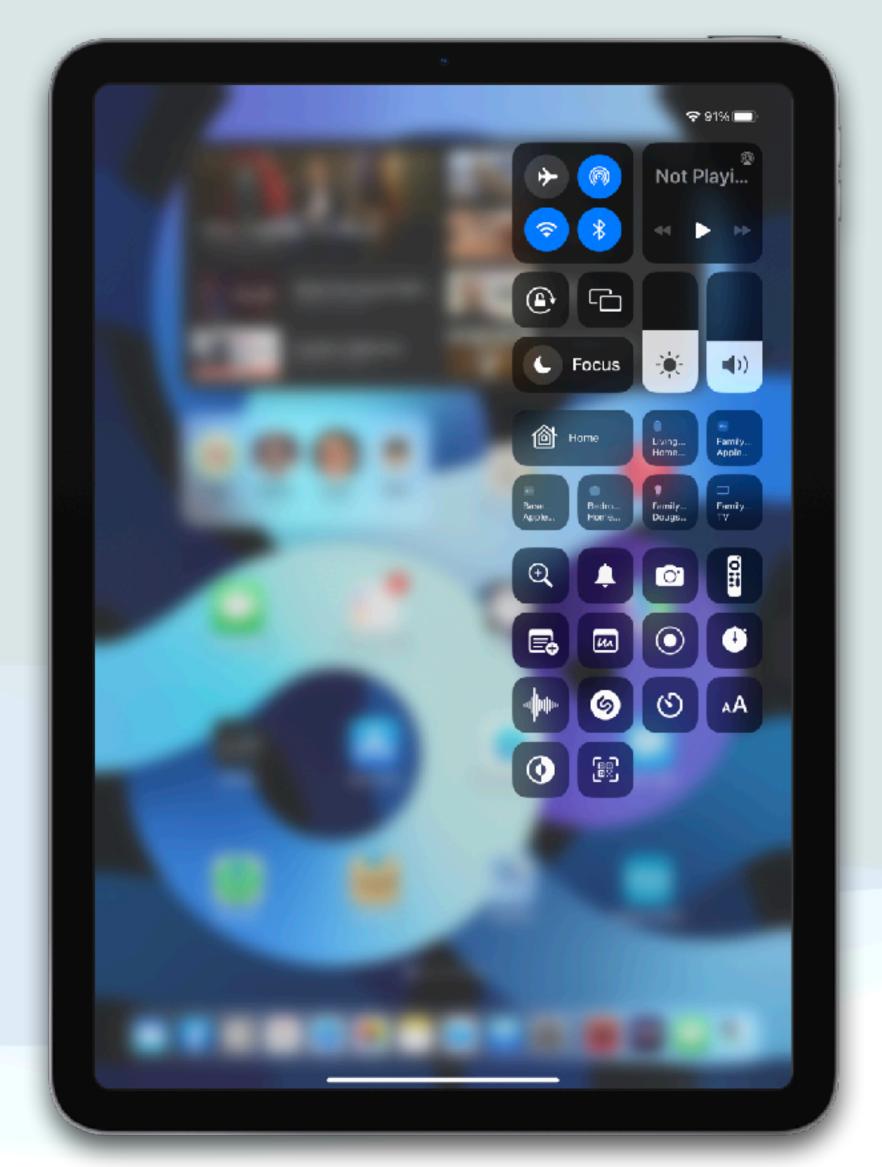




Questions?







iPhone

iPad





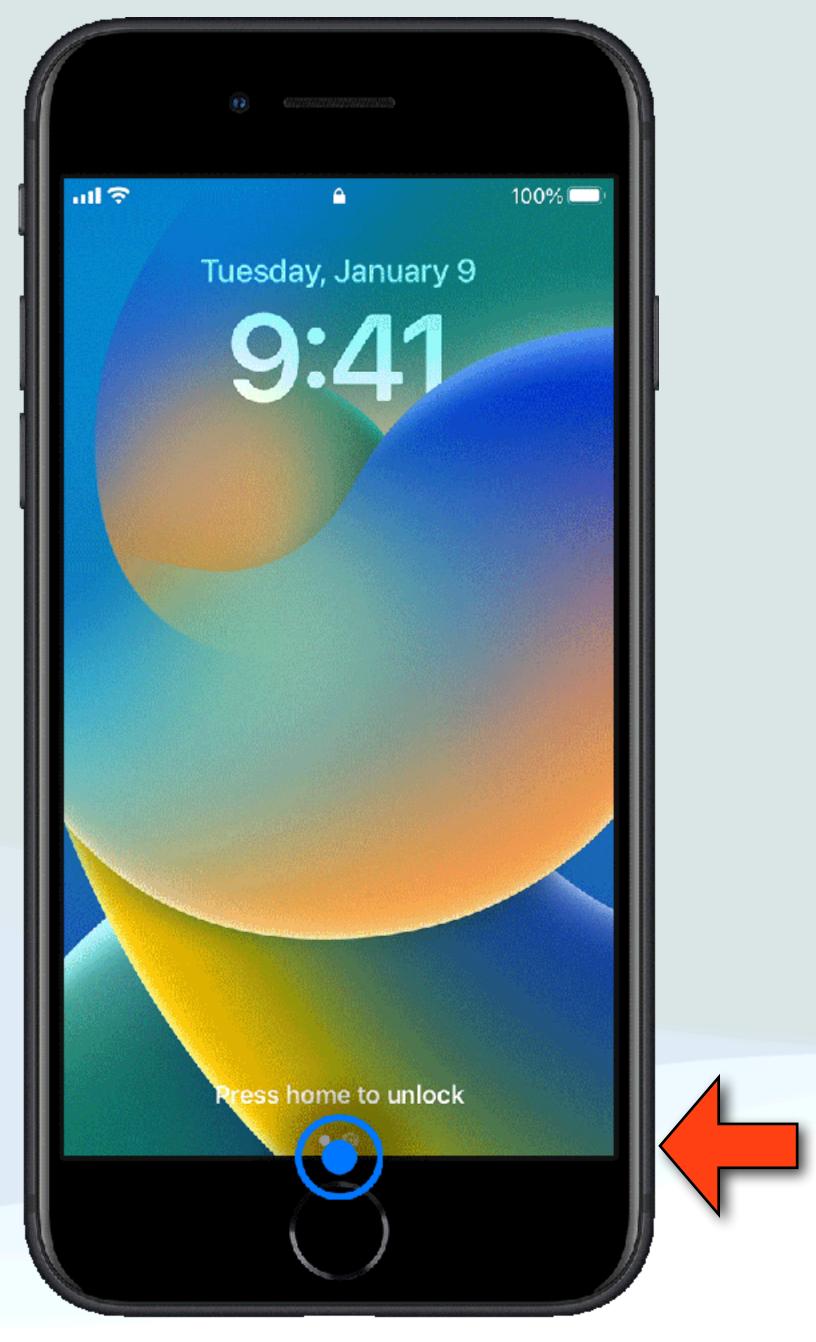
- The Control Center is a very important feature on your devices, that can make your life easier if you know what it can do, and how to use it
- Basically, the Control Center gives you instant access to the things you do the most
- You can instantly turn on airplane mode, Do Not Disturb (aka focus), turn on a flashlight, adjust the volume, initiate screen mirroring, and many more things
- I'll cover how to set up the iOS Control Center, and some of the things you can do in Control Center





- First of all, to access Control Center:
 - For iPhones w/o a home button and all iPads: swipe down from upper right corner
 - For iPhones with a home button: swipe up from the bottom
- To close Control Center, just hit the home button or swipe up from the bottom

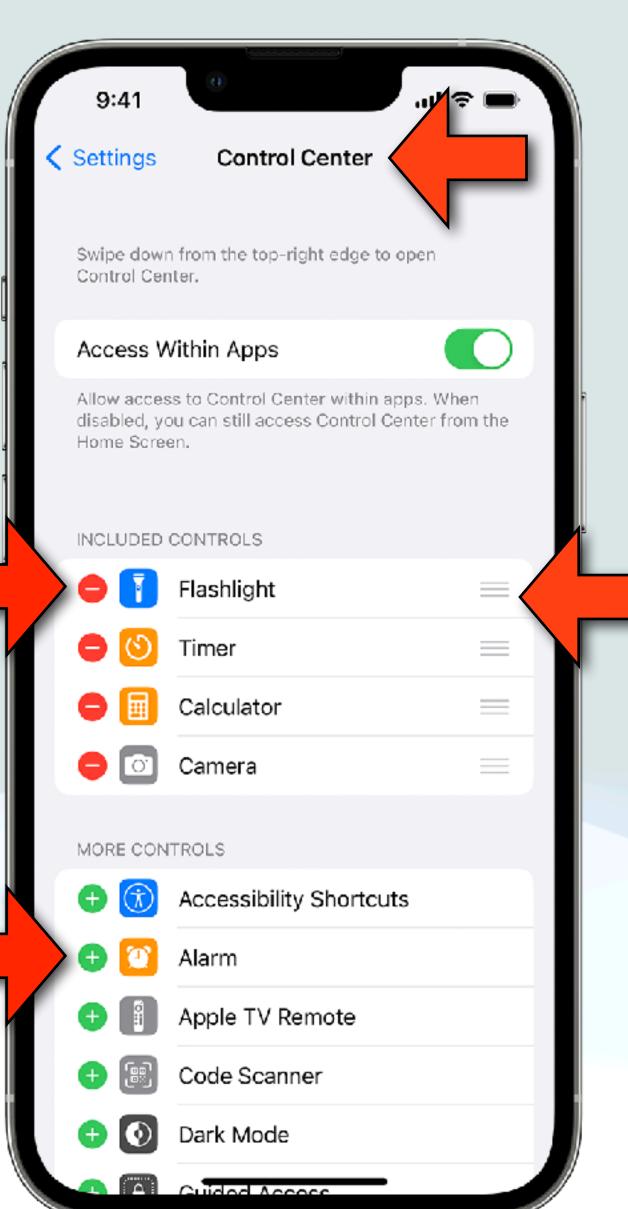




iPhone X or later 53 iPhone 8 or earlier







- To Customize the Control Center:
- Go to Settings > Control Center
- To add or remove controls, tap or next to a control.
- To rearrange controls, touch ≡ next to a control, then drag it up or down to a new position
- What's available in the control center?





- Calculator*: Brings up the calculator app
 - Tip: rotate your iPhone to landscape, and it turns into a scientific calculator with advanced functions
- Code Scanner: Uses the camera to scan a QR code to quickly access websites
- IF Flashlight*: Turns the LED flash on your camera into a flashlight (Touch and hold the flashlight to adjust the brightness)
- Magnifier: Turns your iPhone into a magnifying glass allowing you to zoom in on objects

* iPhone only





- Camera: Brings up the camera app (Long Press for a menu to: take a picture, a selfie, or record video)
- Screen Recording: Tap to record your screen (Long Press to turn Microphone on/off)
- Voice Memos: Creates a voice recording with the built-in microphone (Voice Memos sync to all your other Apple devices)
- Timer: Drag the sliders up or down to set the duration of time, then tap Start (Long press for timer shortcut)





- Stop Watch: Sets a stop watch, but you can access anything in the clock app from here (World Clock, Alarm, or Timer)
- Notes: Create a new Note (Long press for options to create a new checklist, a new photo, or to scan a document)
- Quick Note: Creates a new quick note in the Notes app
- Wallet*: Brings up the Wallet app where you can access cards for Apple Pay, boarding passes, movie tickets, or anything else that might be in the Wallet app





- Music Recognition (Shazam): You can quickly find out what music you're listening to with a single tap, then see the results at the top of your screen
- Dark Mode: Toggle Dark Mode on/off
- Home: Opens the Home app where you can control any devices that support HomeKit
- Apple TV Remote: Brings up an app that can be used to control your Apple TV





- Portrait Orientation Lock: Keeps your screen from rotating when you move your device
- Screen Mirroring: Stream music, photos, and video to an Apple TV and other AirPlay-enabled devices (ex. your smart TV)
- Turns Airplane Mode on/off
- Turns cellular data on/off



- Your device disconnects from the network that you're connected to and auto-join is disabled for any nearby Wi-Fi networks
- Disconnects from any Bluetooth device (not **#** Watch or Pencil)





WATCH Control Center





WATCH Control Center

- 57% **93**9
- Check your battery power and turn on Low Power Mode
- Play a sound if you can't find your iPhone, or touch and hold to flash your phone's light ()
- Theater Mode: This turns on Silent Mode and the screen stays dark until you tap or press a button You can also wake your watch screen gradually by turning the Digital Crown
- Turn availability for Walkie-Talkie on or off
- Turn Silent Mode on or off

WATCH Control Center



- Toggle Do Not Disturb/Focus (also affects your phone)
- When you set Do Not Disturb, you'll have several options:
 - On Do Not Disturb remains on until you turn it off.
 - On for 1 hour Do Not Disturb automatically turns off after 1 hour
 - On until this evening Do Not Disturb automatically turns off until 7:00 p.m.
 - On until I leave Do Not Disturb automatically turns off after you leave the current location
 - On until end of event Do Not Disturb automatically turns off after the current calendar event (if you have one)

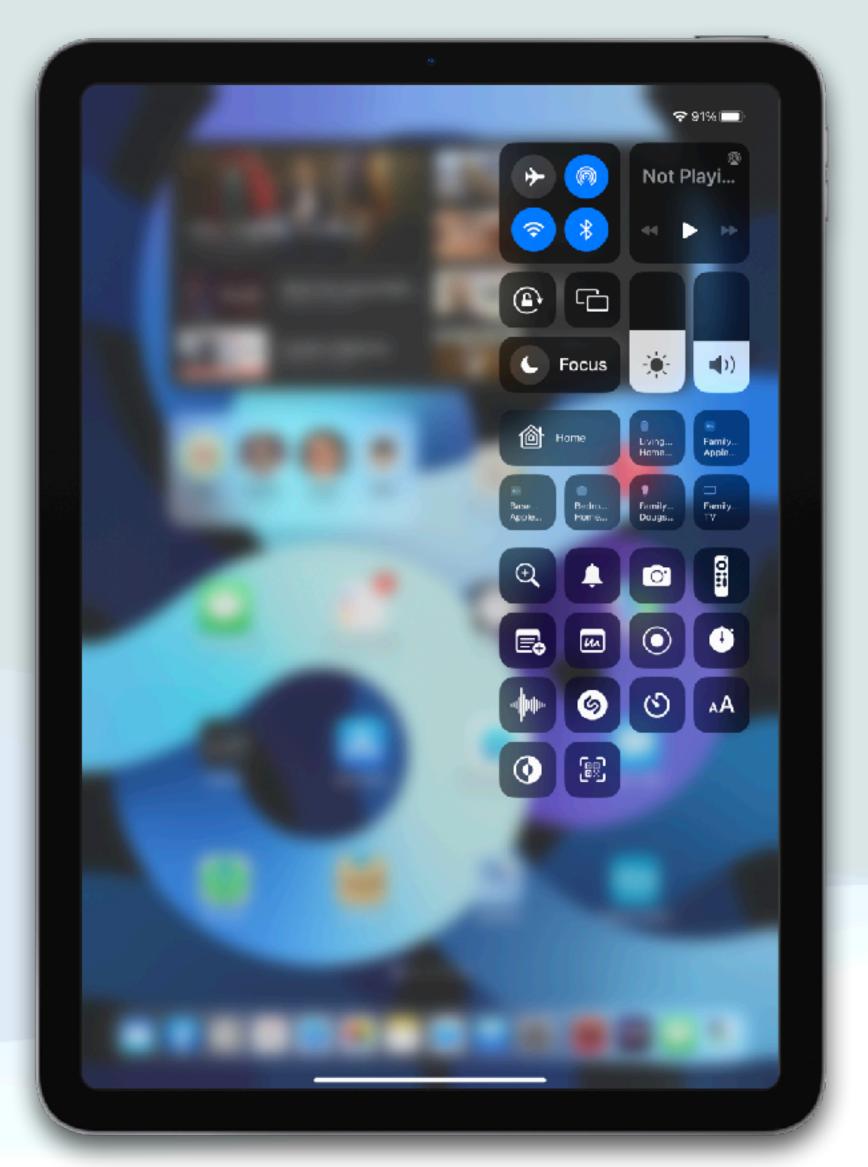
Rearrange Control Center



- To add/subtract or re-order icons in Control Center:
 - Scroll to the bottom of the screen.
 - Tap Edit to make the buttons jiggle.
 - Touch and hold a button, then drag it to a new location.
 - Hit to delete or to add items
 - When you're finished, tap Done or press the Digital Crown



Questions?



iPhone

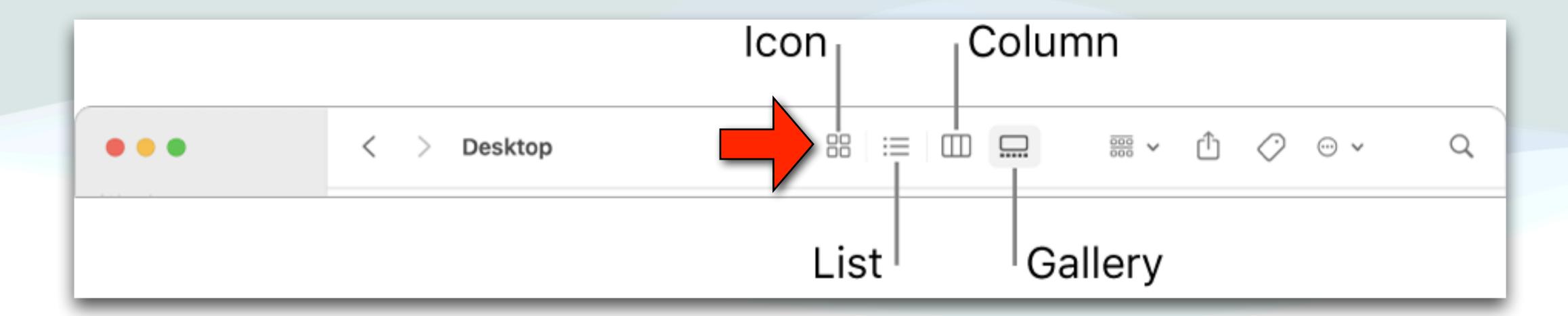


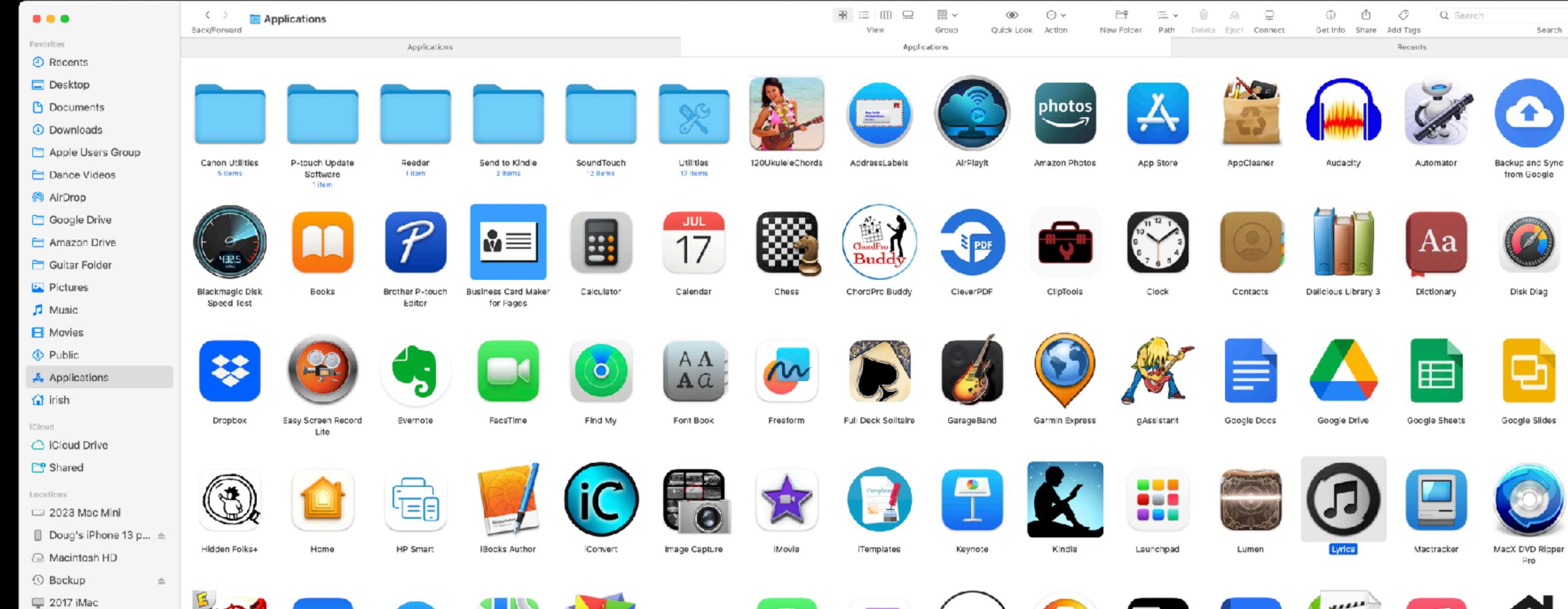


- The Mac Finder is the application that allows you to view and organize your documents, media, folders, and other files on your Mac
- To open a Finder window on your Mac, click the Finder icon in the Dock
- When you see a document, app, or other file that you want to open, just double-click it
- The files can be moved by dragging them to a new location or into a folder



- The Finder has 4 different ways to look at your files called views: Icon, List, Columns, and Gallery views
- You can choose whatever view you'd like in the Finder toolbar
 - Icon view: Items are shown as icons arranged in a grid









Backup Guru LE

Disk Scope









Mahjong Deluxe

Network

Spreadsheets

Important

All Tags...

Red

Monthly Spreadsheets

Tags



Mall



Malwarebytes



Maps



Meme Generator











Mimeo Photos



Mission Control





video

PrimeVideo







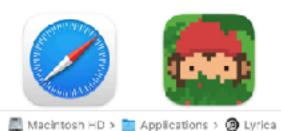




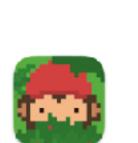








Notes



Numbers

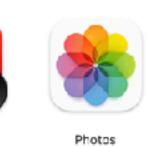








Memory Clean



lcon View 👺

Messages



Pixelmator

Microsoft OneNote





MILK Books













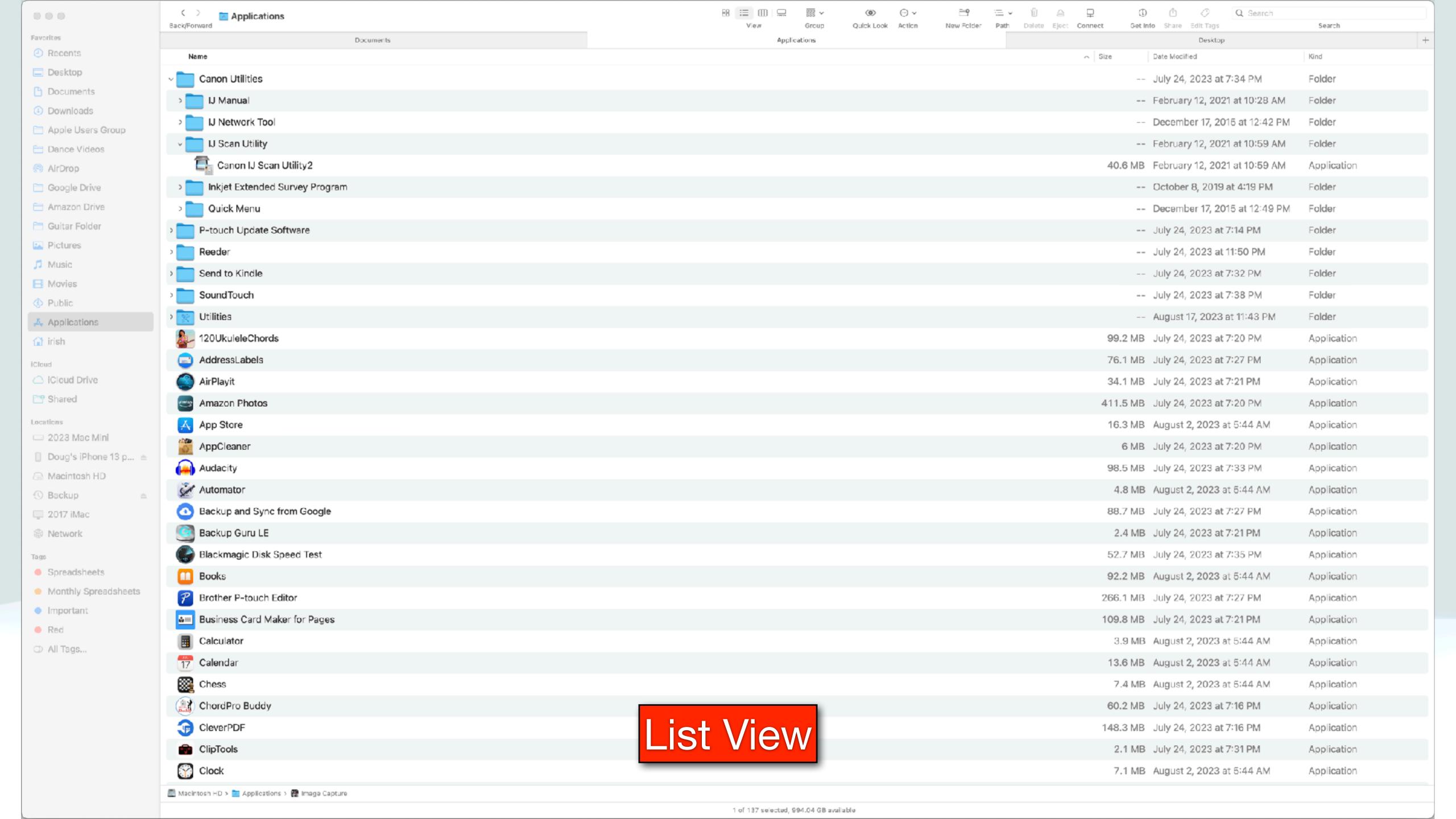


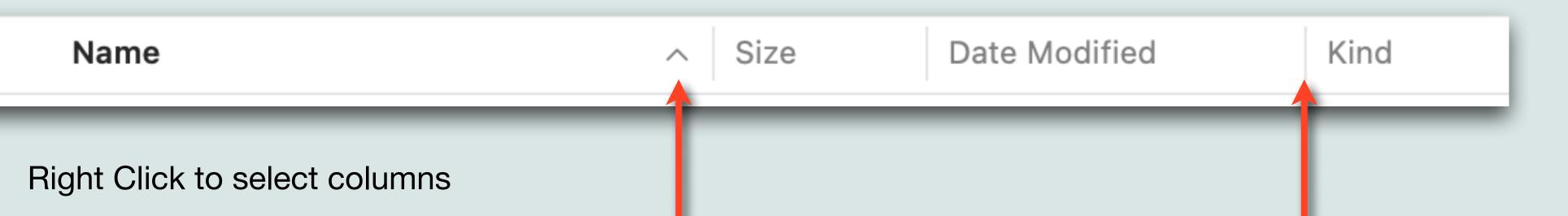






- In List View, items are arranged by name in a list, while other columns show additional information (size, date added, etc)
 - To sort the list, select the column header you wish to sort and click the (^) sign - click it again to sort in the opposite order
 - To choose which columns are shown, Right-Click any column header, then choose the columns you want to show or hide
 - List view is very good at looking for large or recent files





✓ Date Modified

Date Created

Date Last Opened

Date Added

- ✓ Size
- ✓ Kind

Version

Comments

Tags

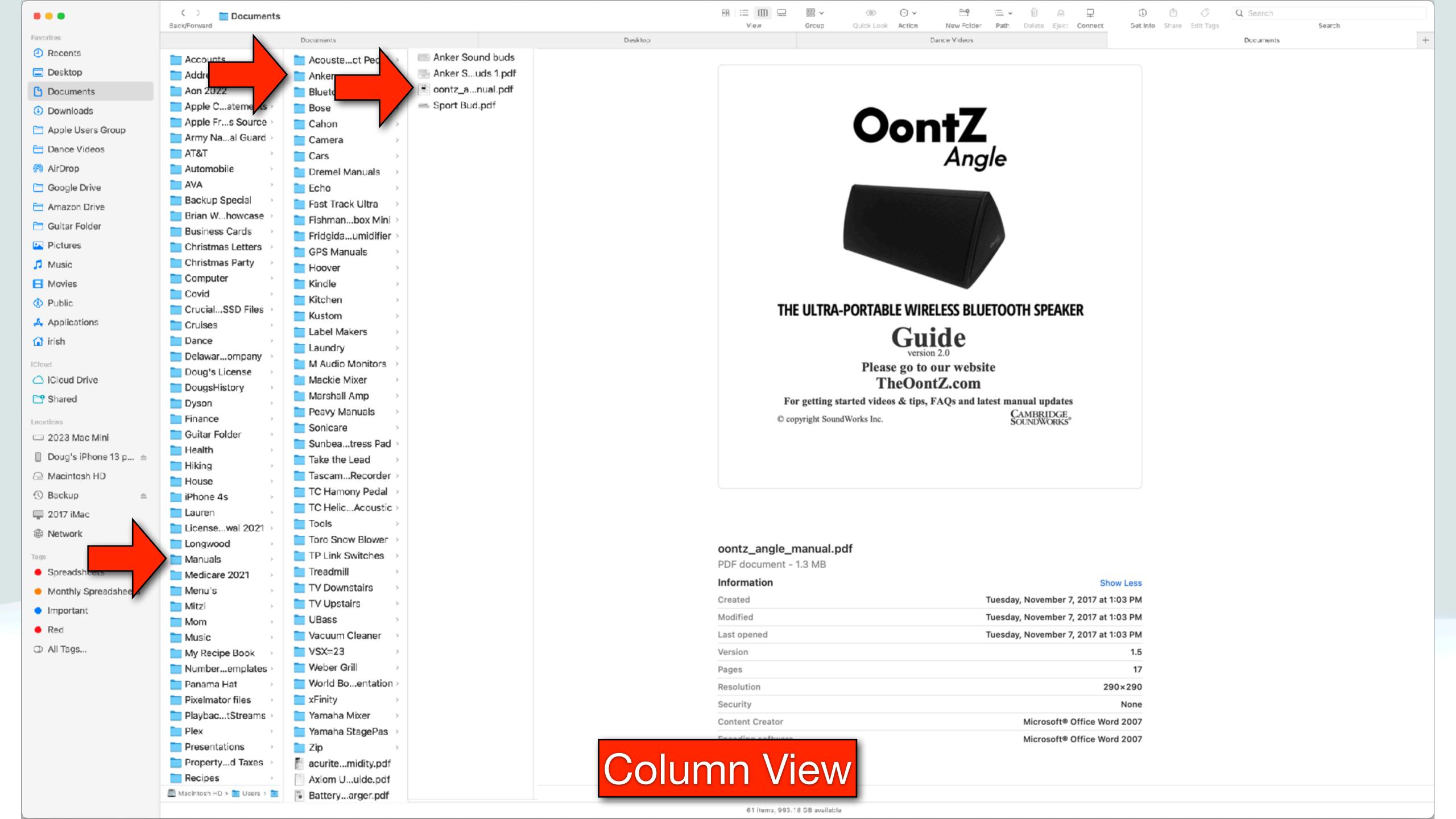
Click to Sort

Drag Line
To Resize

List View



- In Column View items are arranged in columns
 - If you select a folder, it will show that folder's content in the next column
 - If you select a file it will preview its thumbnail and details in the preview window
 - Column view is very useful in navigating folders looking for content





- In Gallery View items are arranged in a row along the bottom of the window
 - To browse the row, press the icon you wish to see or press the Left or Right Arrow key to navigate thru the contents
 - As you browse, a large preview of the current item is shown above the row, with its details in the preview column
- Gallery view is very good to view folders filled with pictures





iCloud























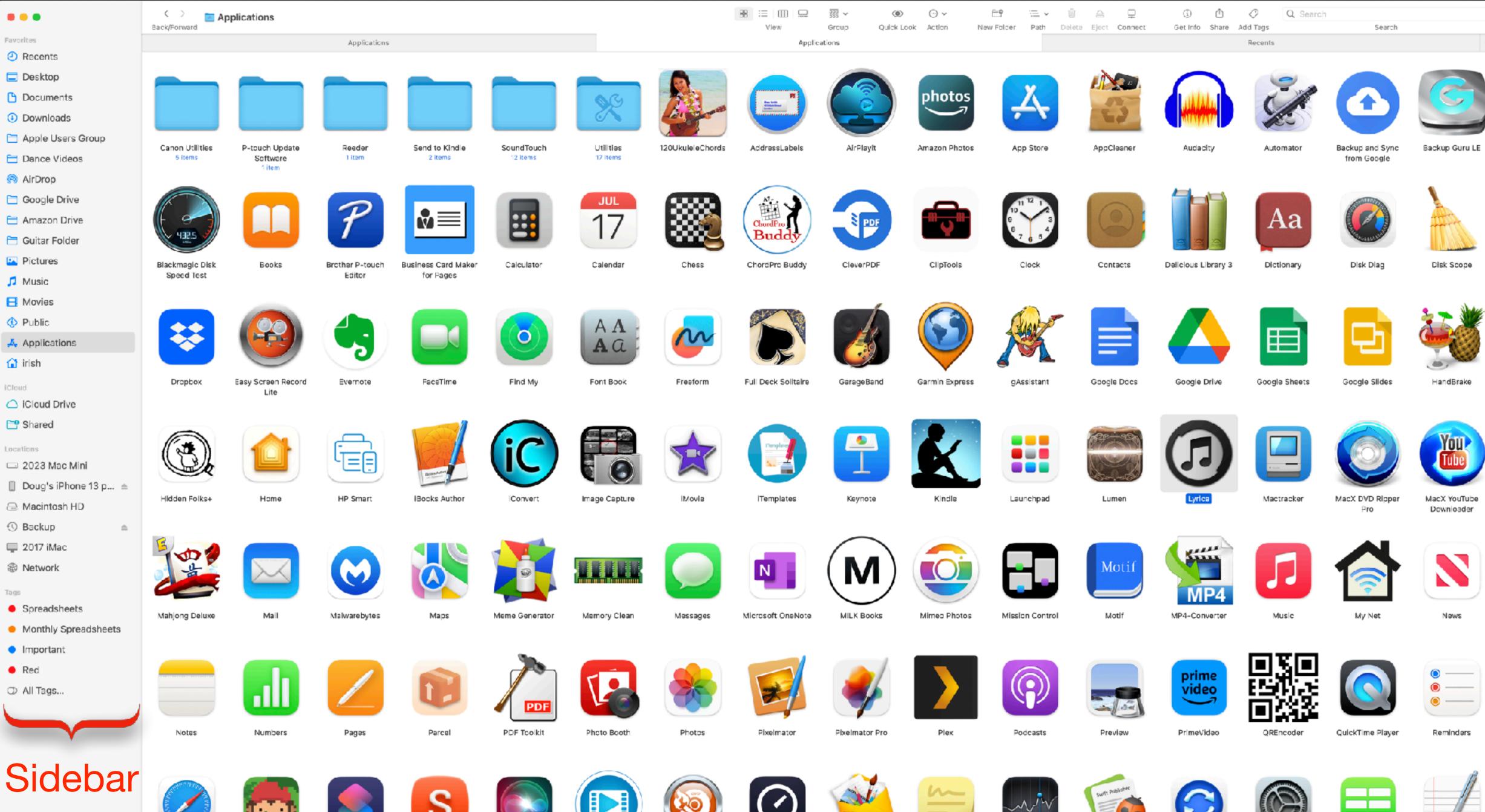




0 Rotate Left Markup More...



- On the left side of the screen, the Finder's sidebar contains the items you most frequently use (for easy selection)
 - You can determine which items you wish to have in the sidebar in the Finder Settings Menu
- The Finder sidebar is divided into four sections: Favorites, iCloud, Locations, and Tags
 - <u>Favorites</u>: Contain files, folders, and apps that you use most frequently
 - You can add folders just by dragging them into the Favorites section of the Sidebar
 - You can even add applications or individual files by Command-Dragging them to the Sidebar



Favorites

Recents

Desktop

Documents

Downloads

Dance Videos

Google Drive

Amazon Drive

Guitar Folder

Pictures

Music

Movies

Public

🔐 irish

iCloud

Applications

iCloud Drive

2023 Mac Mini

Macintosh HD

Backup

2017 iMac

Spreadsheets

Important

All Tags...

Red

Network

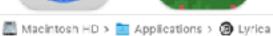
Shared

Locations

AirDrop

Apple Users Group





























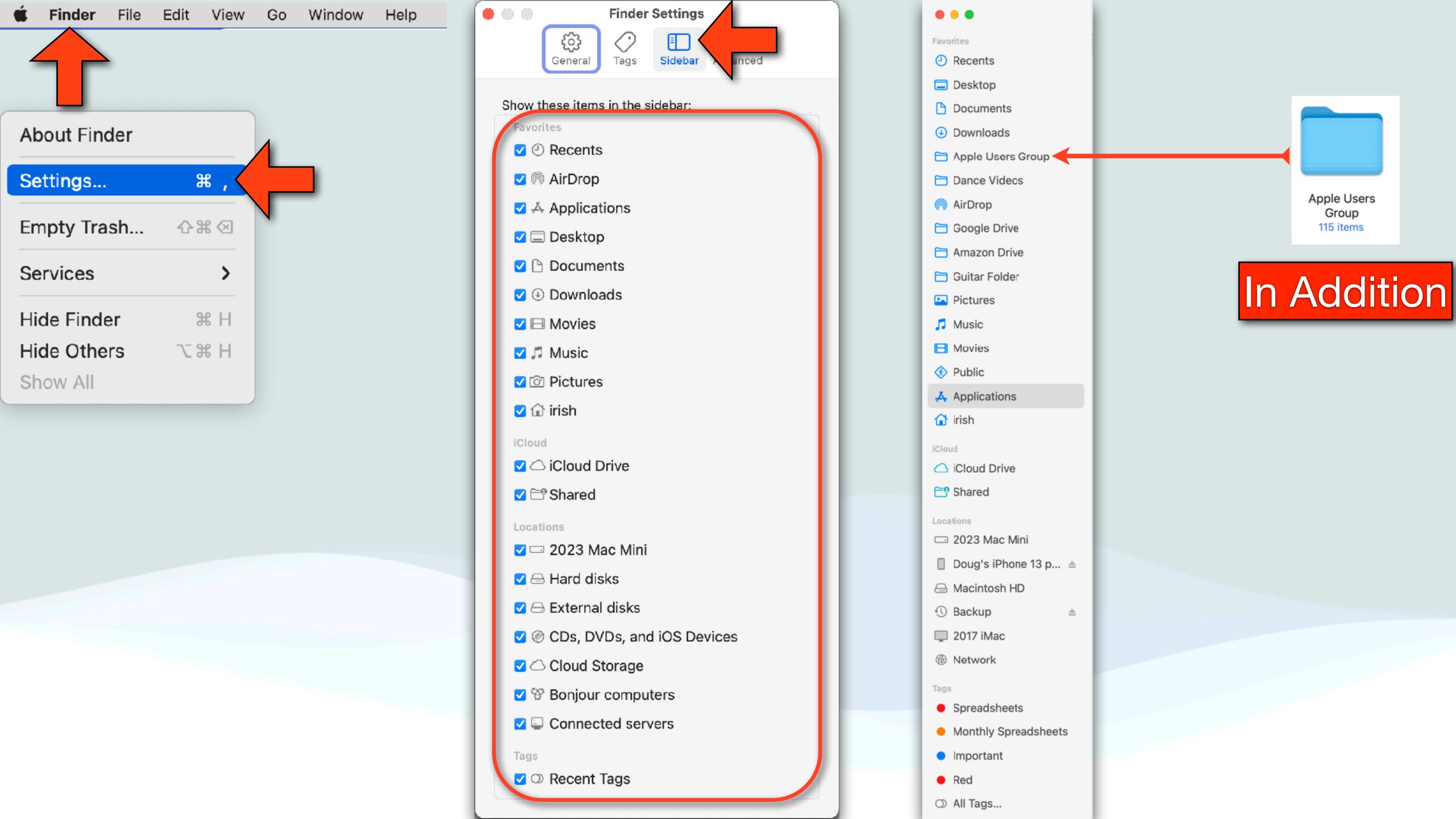










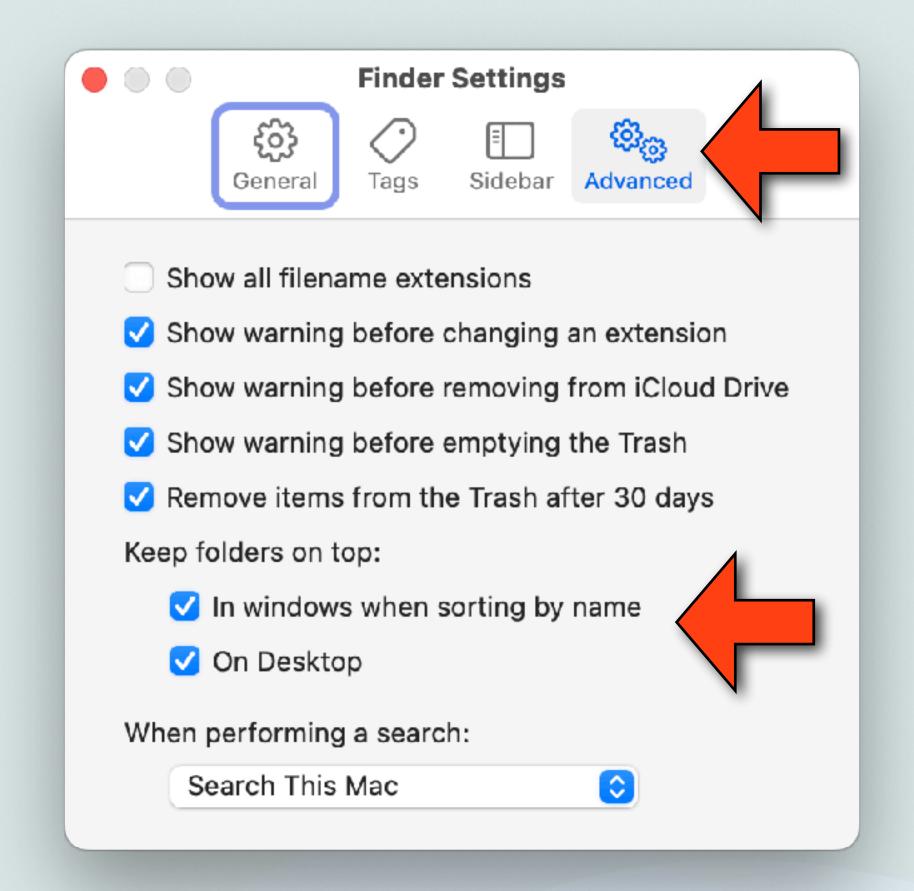


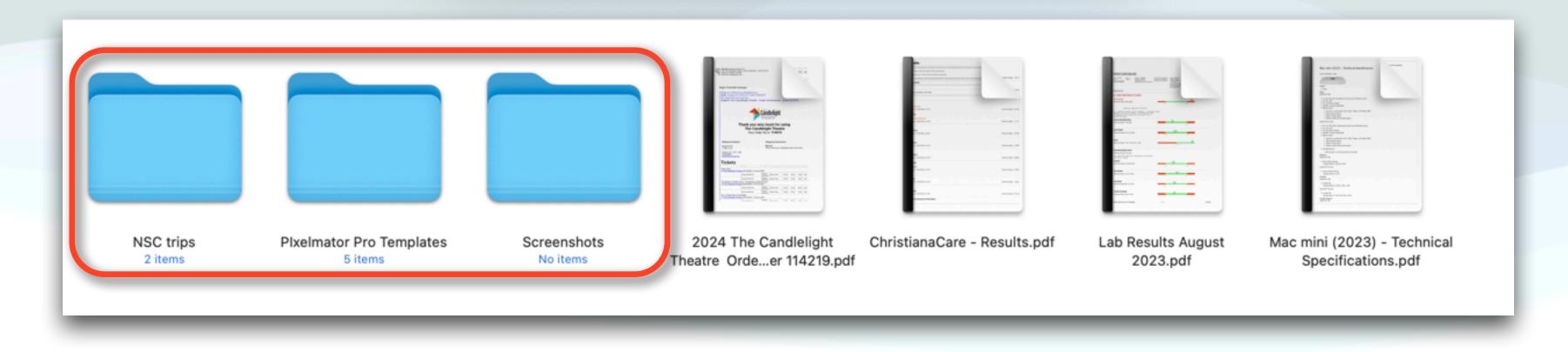


- iCloud Drive Shared Locations 2023 Mac Mini Macintosh HD Backup 2017 iMac Metwork Spreadsheets Monthly Spreadsheets Important Red All Tags...
- <u>iCloud</u>: Includes items automatically stored in iCloud Drive and items you're sharing or are shared with you
- Locations: Includes your computer's disks, any disks or devices attached to your Mac, and your network (you can eject devices using the eject icon ♠)
- <u>Tags</u>: Tags provide quick access to all the items that you've tagged



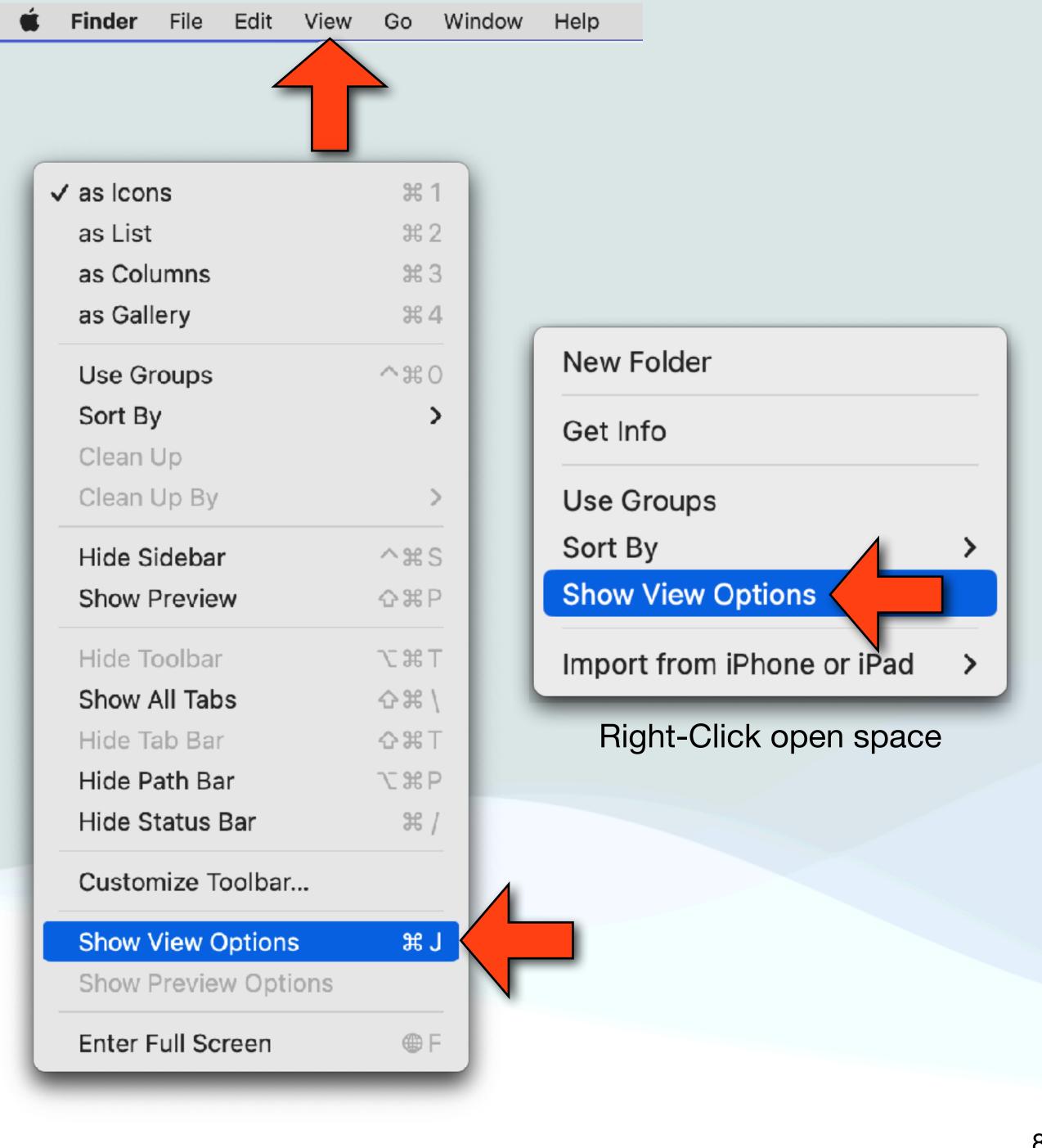
- Another useful technique when sorting by name, is to have the folders listed first (in alphabetical order), before the file icons
- To do this, go to Finder Settings, click Advanced
- Then, below the "Keep folders on top" section, select the "In windows when sorting by name" and "Desktop" options
- I prefer this on my Macs

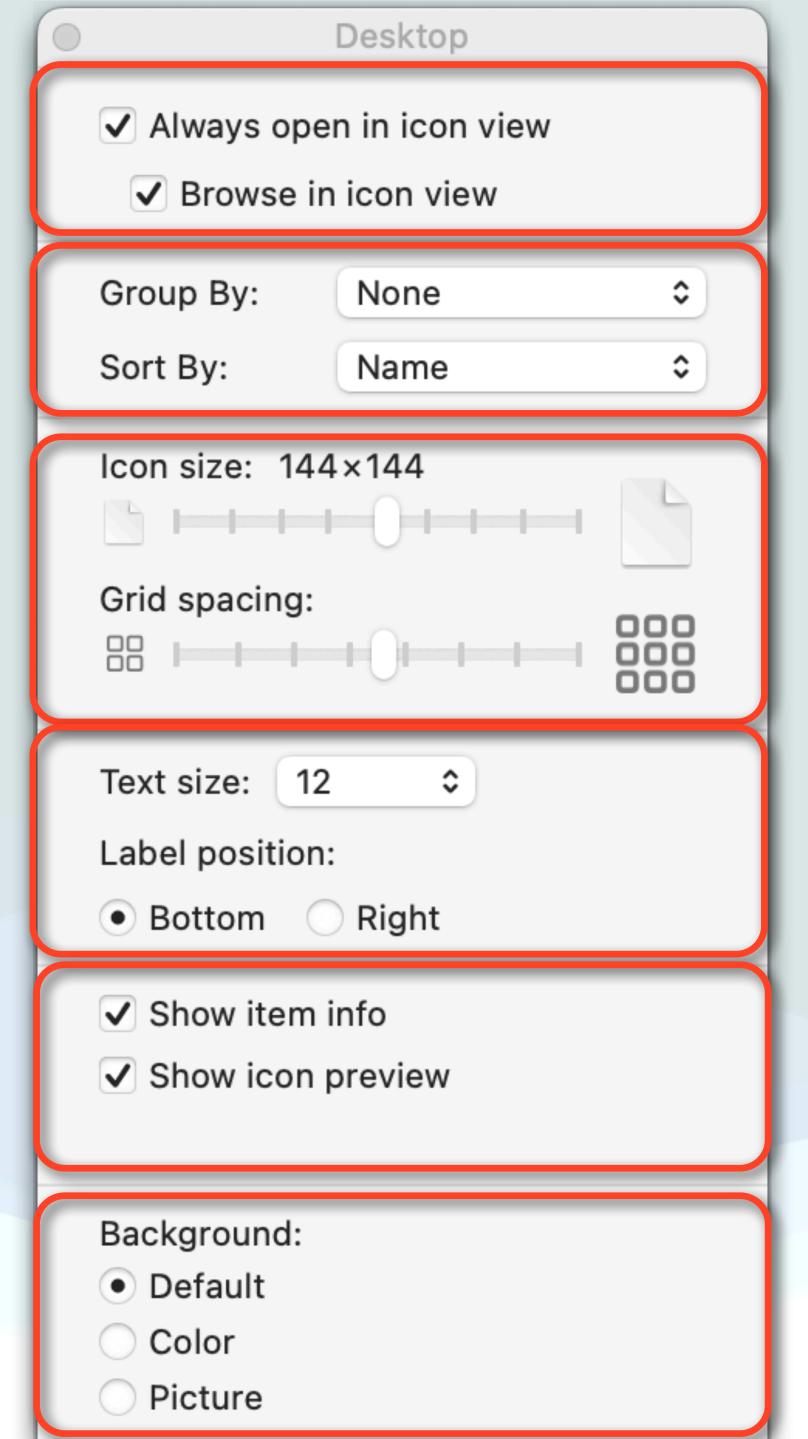


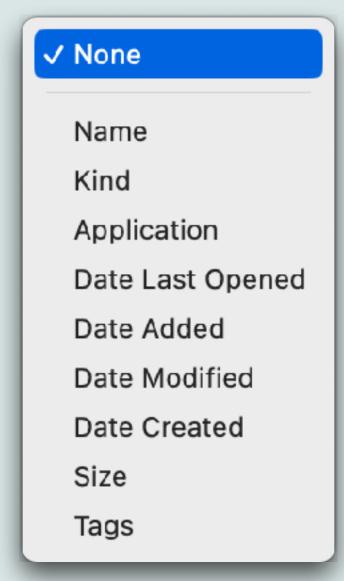




- Regardless of which view you use, you can customize the way the Finder screen appears
- Go to the Finder menu, select "View" and then "Show View Options"
- Or, Right-Click on a blank area of the window and select "Show View Options"
- When this menu appears you have a number of options you can choose to customize the views to your preferences



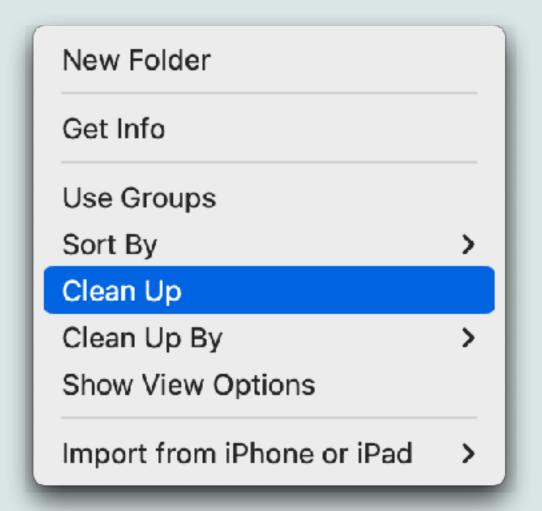




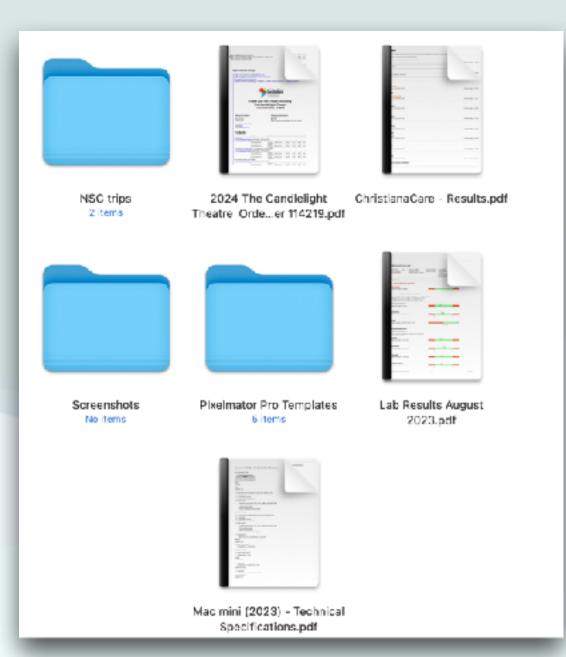
Group By Options



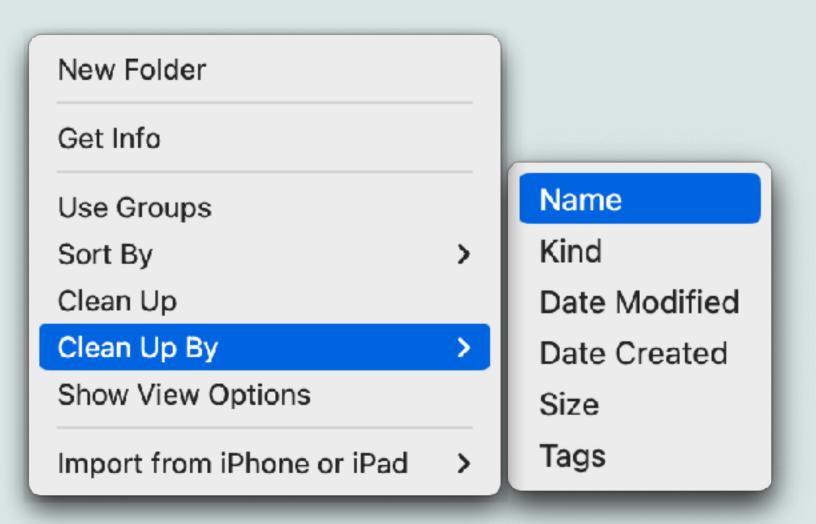
- If you use the "Sort By" option in the view menu, Finder will keep the window sorted, lined up and looking neat
- If you don't use "Sort By", you can use "View > Clean Up" to temporarily align the icons neatly in a grid (without any sorting)
- You can also use the "Clean Up By" option to temporarily clean up and sort icons in a specific order
- Choose View > "Clean Up By", then choose an option, such as Date Created, Name or Kind



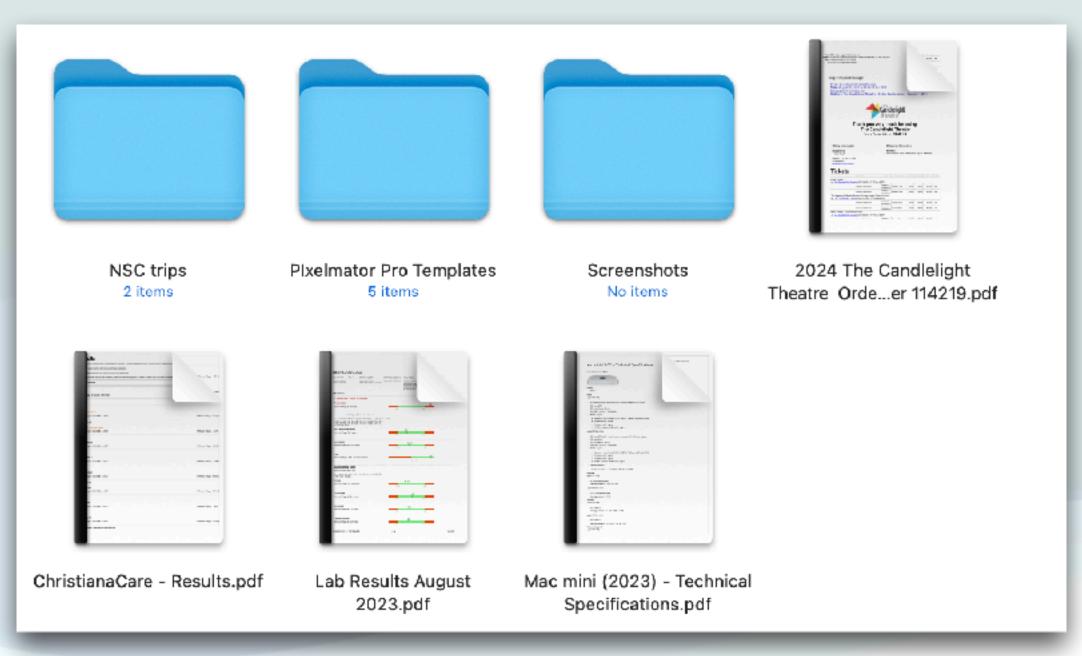
Right Click



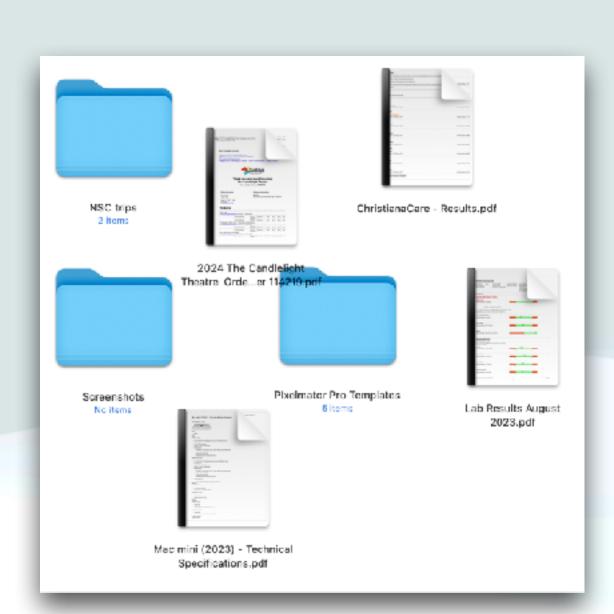
Clean Up



Right Click



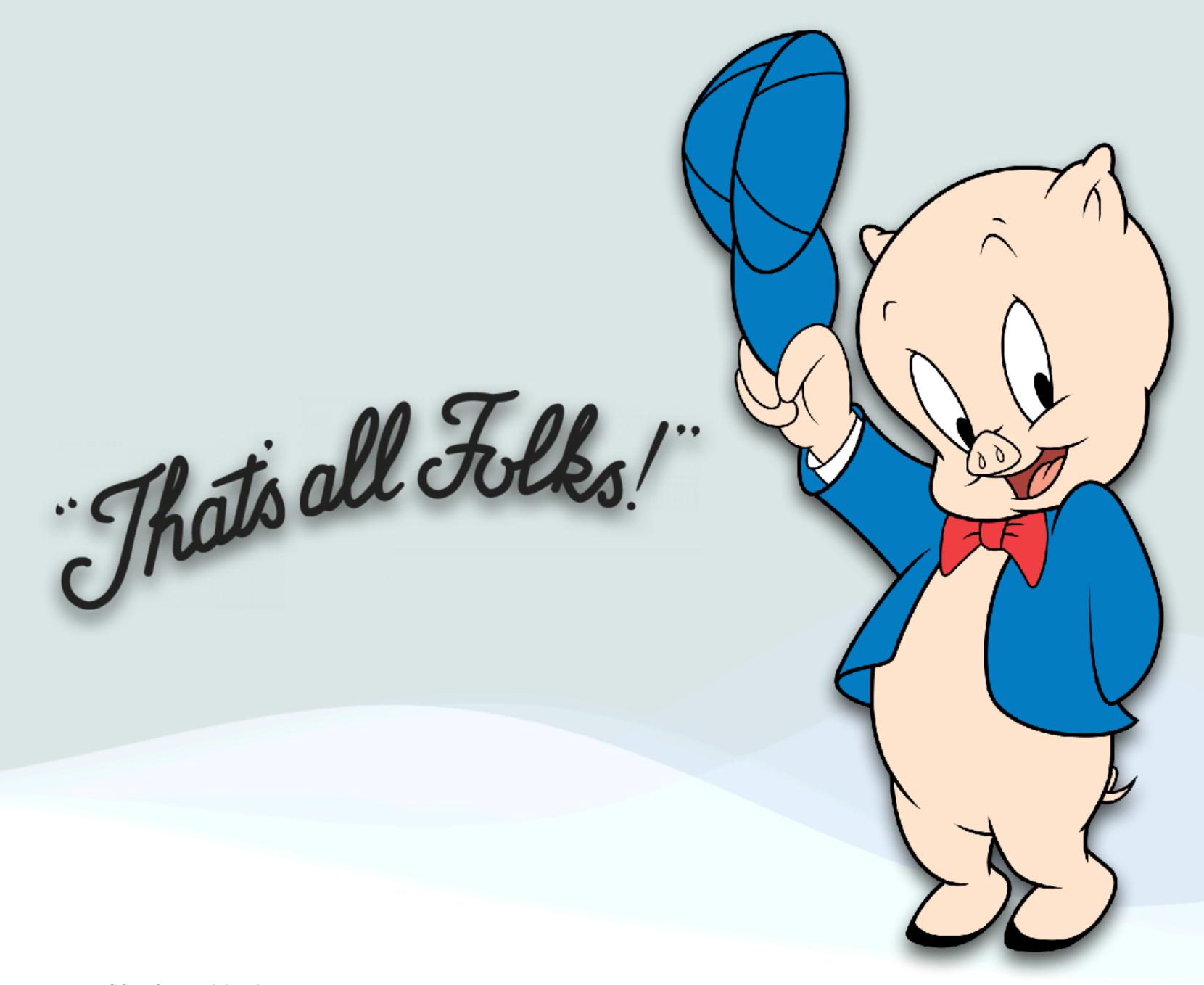
Clean Up by Name



No Sorting



Questions?



Thurk Hou!

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Presentation produced on an Mac mini using Apple's Keynote software and presented using an iPad Air