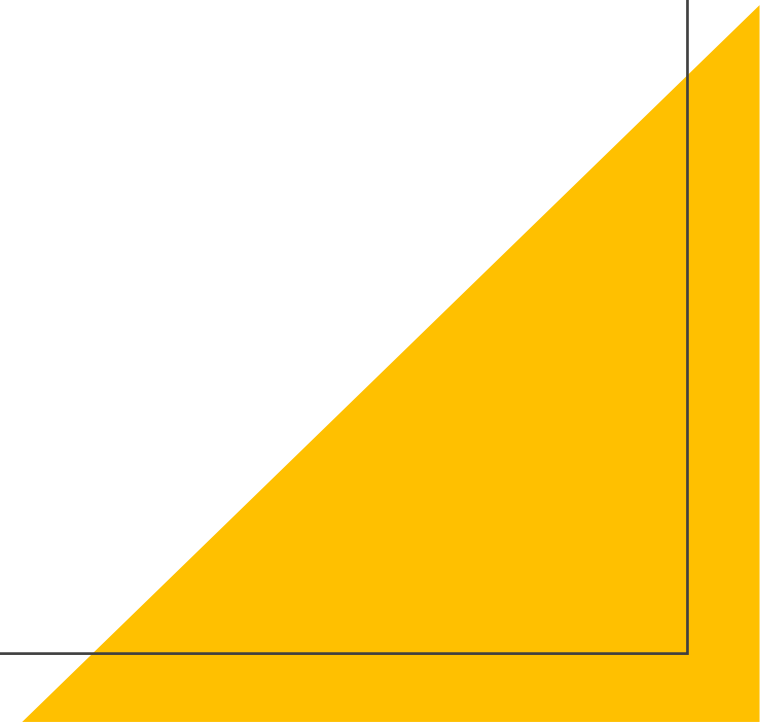


# Vision Accessibility

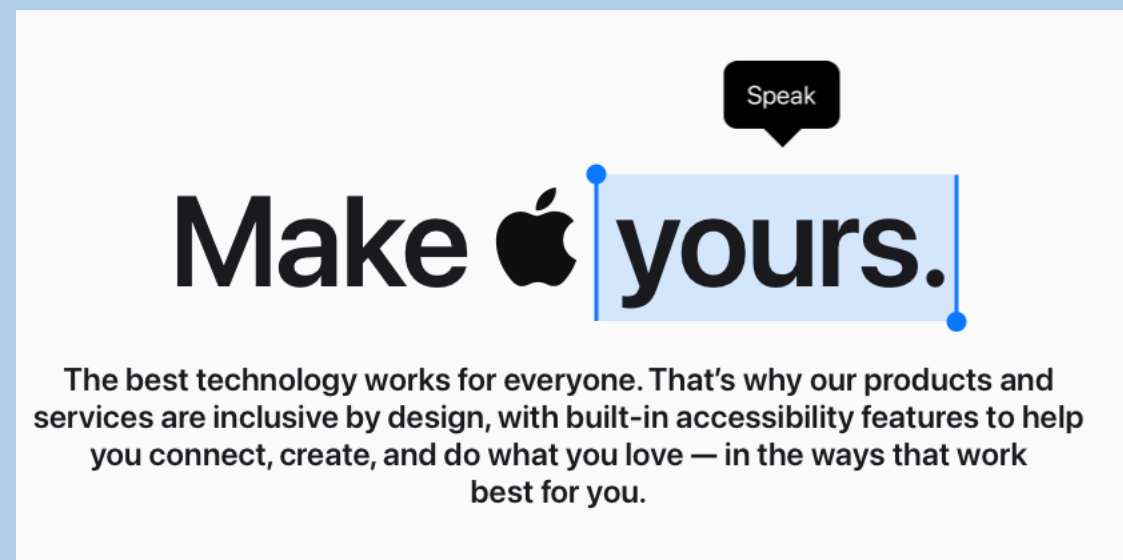
## Features

On the Mac and iPhone



# What is accessibility?

- Computer accessibility refers to the accessibility of a computer system to all people, regardless of disability type or severity of impairment
- Apple has included a number of accessibility features on Macs and iOS devices to allow persons with disabilities to be able to use their devices
- There are also numerous third party accessibility apps



# What will be covered

- Vision Accessibility Features on the Mac
- Vision Accessibility Features on the iPhone
- An overview of these features
- How these features can be implemented on your device

# Accessibility features on the Mac

- **Vision**
- Hearing
- Motor
- Speech
- General

Today, we will look at Vision Accessibility features

# To navigate to accessibility on the Mac

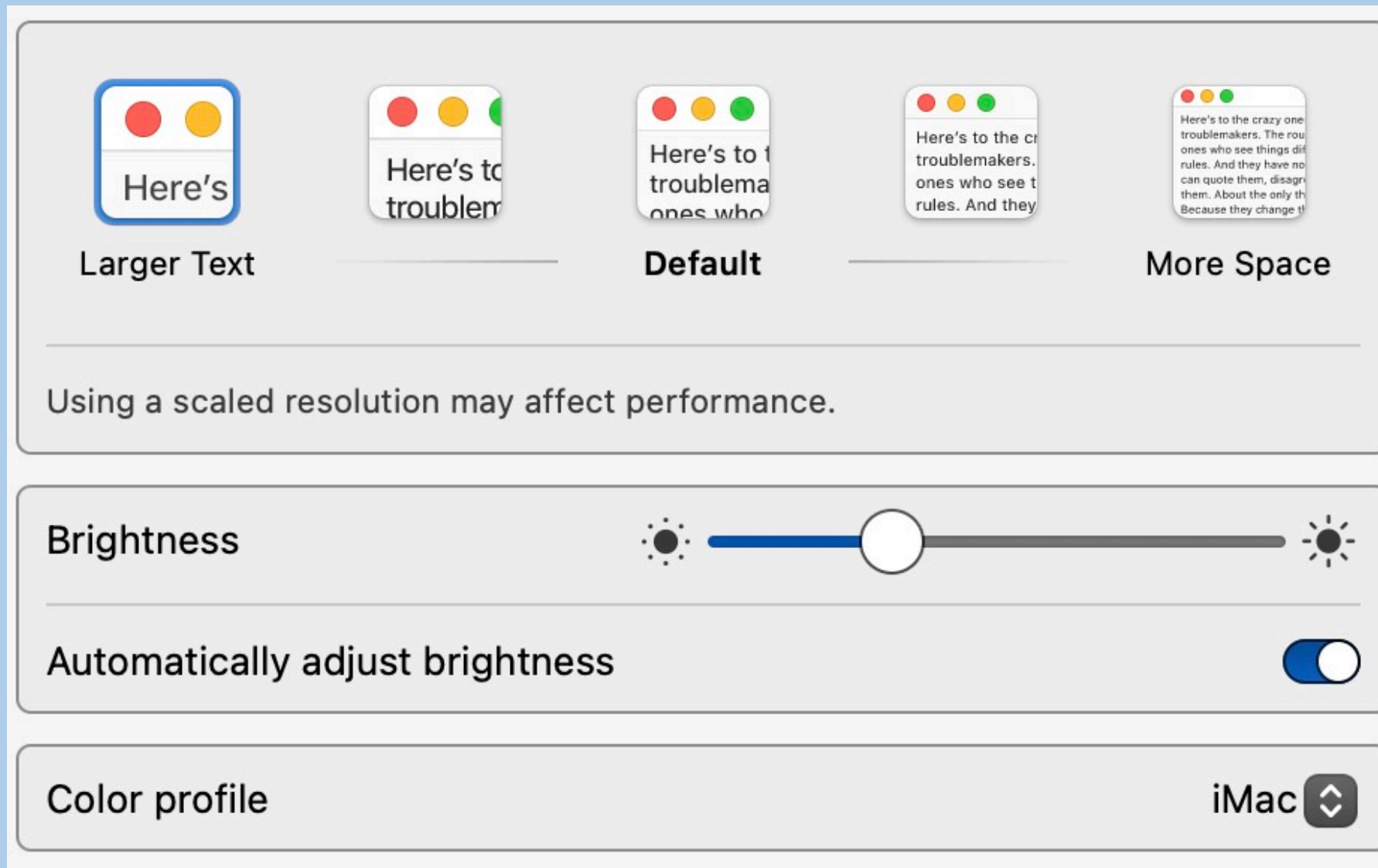
- Open system settings
- Scroll down to Accessibility
- Vision options will appear at top of screen

# VoiceOver

- A feature that allows your computer to read aloud what is on the computer display
- With VoiceOver, you can navigate your computer screen with simple gestures
- This feature requires some setup and practice to master
- YouTube videos can provide guidance on how to use VoiceOver

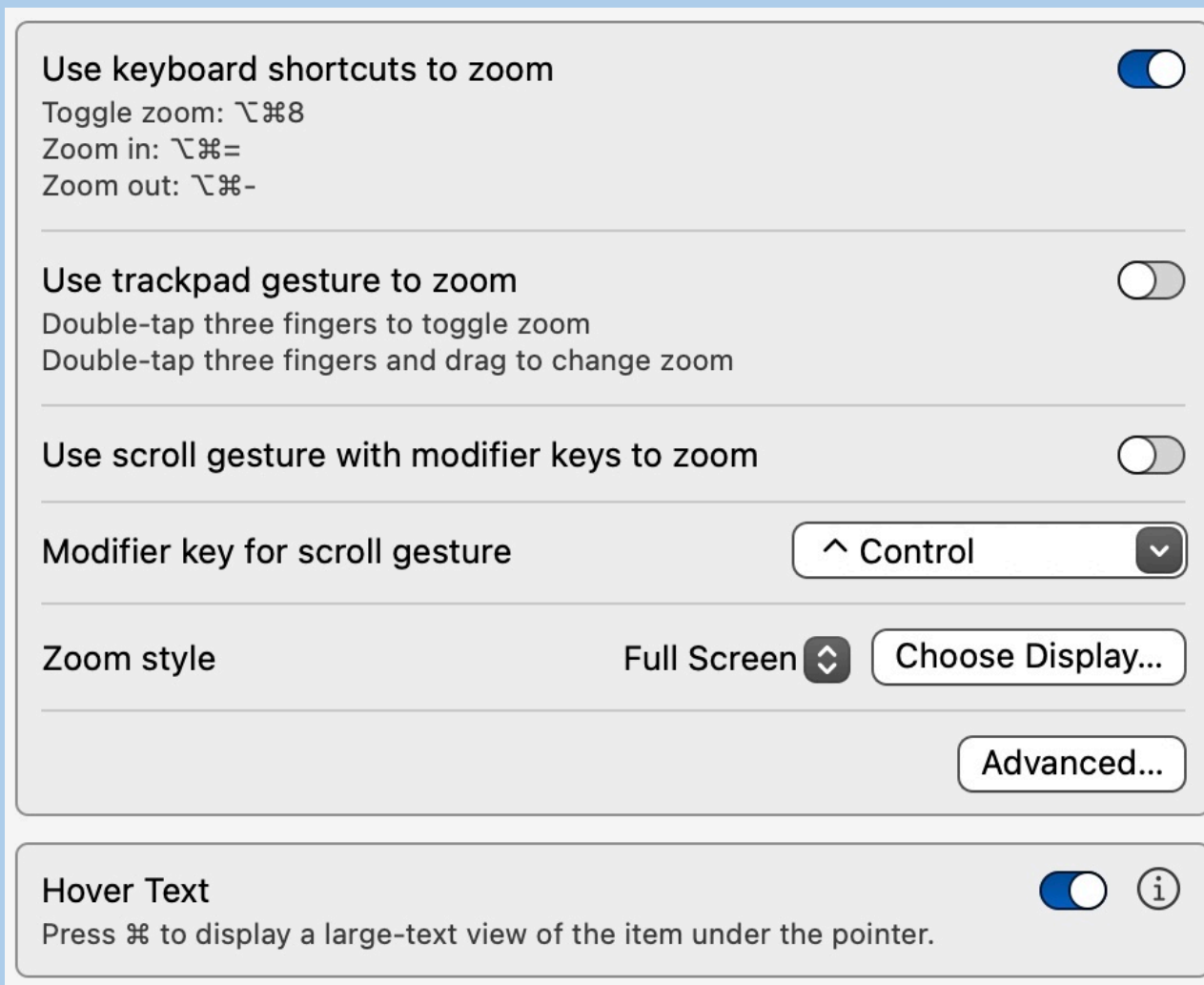
# Display settings

- Set a scaled resolution on the desktop
- One of the simplest methods of increasing overall size of icons and text



# Zoom

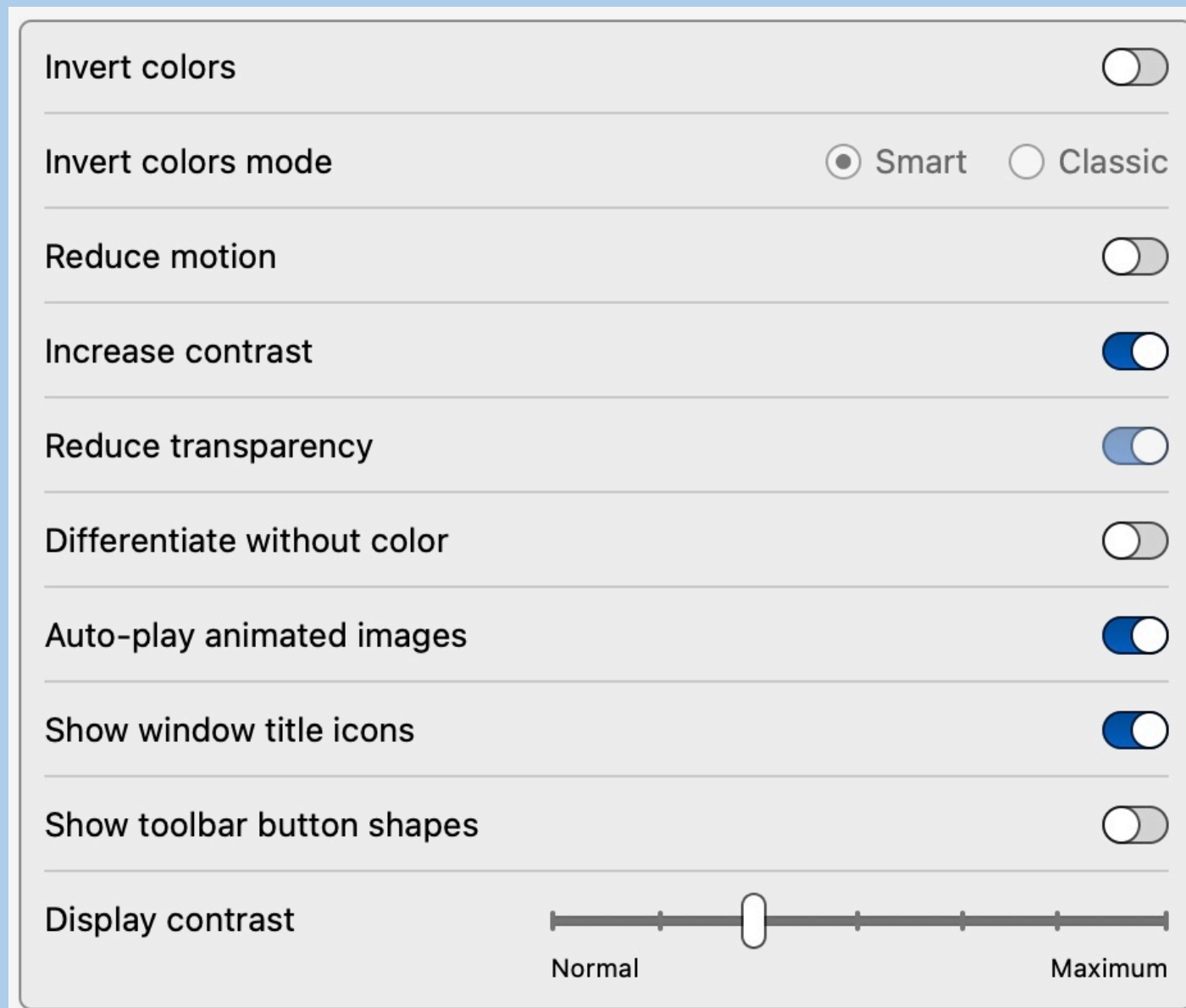
- Magnification features on the Mac





# Display

- Configure your display for maximum benefit



A screenshot of the Windows Display settings panel. The panel is light gray with a white background and contains several settings, each with a label on the left and a control on the right. The settings are: 'Invert colors' with a toggle switch (off); 'Invert colors mode' with two radio buttons, 'Smart' (selected) and 'Classic' (unselected); 'Reduce motion' with a toggle switch (off); 'Increase contrast' with a toggle switch (on); 'Reduce transparency' with a toggle switch (on); 'Differentiate without color' with a toggle switch (off); 'Auto-play animated images' with a toggle switch (on); 'Show window title icons' with a toggle switch (on); 'Show toolbar button shapes' with a toggle switch (off); and 'Display contrast' with a slider control. The slider is positioned between 'Normal' and 'Maximum', with a white knob in the middle.

Setting	Control
Invert colors	Toggle switch (off)
Invert colors mode	Radio buttons: Smart (selected), Classic (unselected)
Reduce motion	Toggle switch (off)
Increase contrast	Toggle switch (on)
Reduce transparency	Toggle switch (on)
Differentiate without color	Toggle switch (off)
Auto-play animated images	Toggle switch (on)
Show window title icons	Toggle switch (on)
Show toolbar button shapes	Toggle switch (off)
Display contrast	Slider (positioned between Normal and Maximum)

# Display – adjust text size

## Text

### Text size

Set your preferred reading size for supported apps and system features.

Custom >

### Menu bar size

Some apps or system features may need a log out for the changes to menu bar font size to take effect.

Default  Large

### Prefer horizontal text




# Display - set pointer size and color


**Pointer**

Shake mouse pointer to locate   
Quickly move the mouse pointer back and forth to make it bigger.


---

Pointer size  Normal Large

---

Pointer outline color 

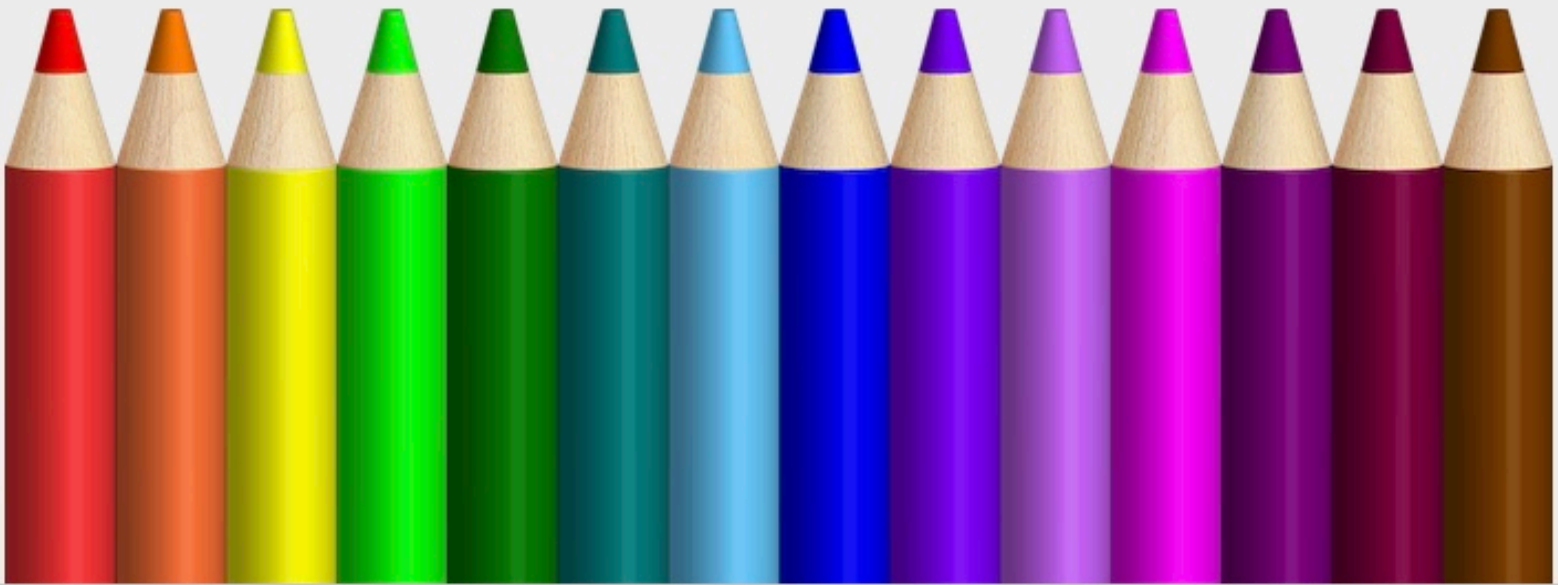
---

Pointer fill color 


---


[Reset Colors](#)

# Display – Add filters




Color filters


Filter type Red/Green filter (Protanopia) 

Intensity  Low High



# Spoken content—using on the Mac

System speech language Use System Language 



---

System voice Samantha 

---

Speaking rate   

---

Speaking volume   

---

[Play Sample](#)

Speak announcements  

---

Speak selection  

---

Speak item under the pointer  

---

Speak typing feedback  







# Descriptions – using descriptions on the Mac

- Audio descriptions provide an audible narration of important onscreen action and content in movies and TV shows
- This feature is only available with a video that includes audio descriptions
- The program must have the letters AD on the screen

# Accessibility features on the iPhone

- Vision
- Physical and Motor
- Hearing
- Speech
- General

# Vision accessibility features on the iPhone

VISION		
	VoiceOver	Off
	Zoom	On
	Display & Text Size	
	Motion	
	Spoken Content	
	Audio Descriptions	Off



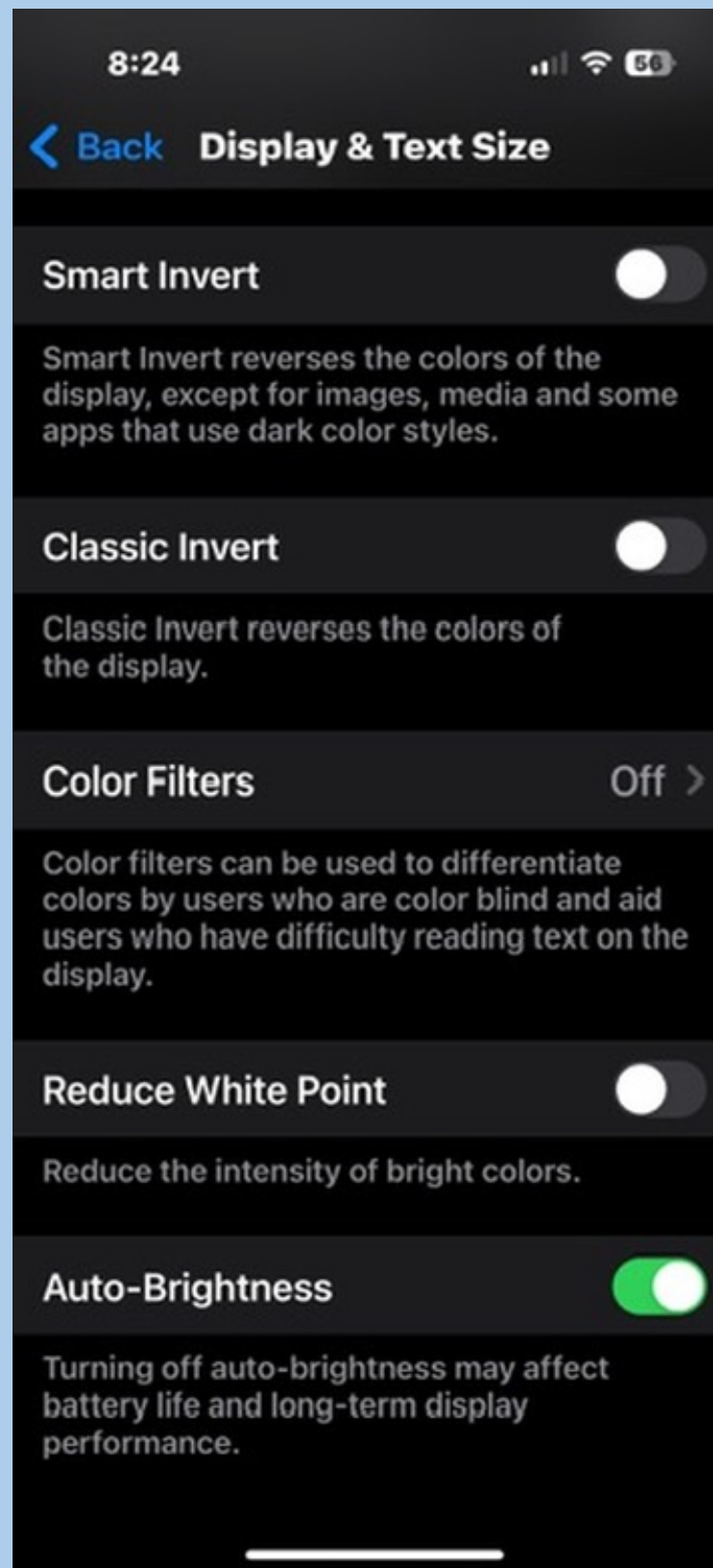
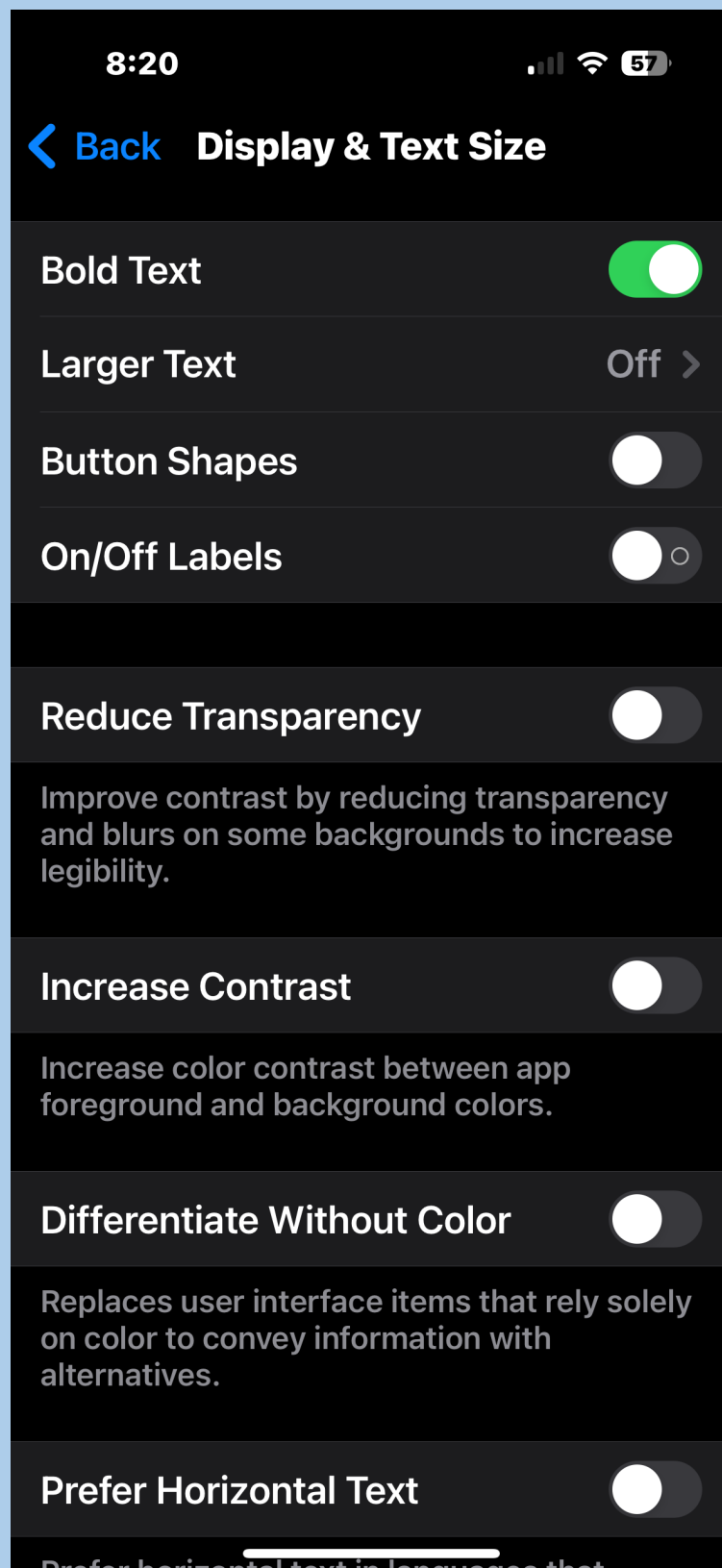
# VoiceOver

- With VoiceOver—a gesture-based screen reader—you can use iPhone even if you can't see the screen
- VoiceOver gives audible descriptions of what's on your screen—from battery level, to who's calling, to which app your finger is on
- This feature is intended for more serious vision issues
- This feature requires some setup and practice
- There is help on the Apple support site and on YouTube

# Zoom – magnify text and images on iPhone

- Display & Brightness settings
  - Change text size
  - Make all text Bold
  - Change display zoom to Larger Text
- Under accessibility there are more Zoom settings
  - Turn on Zoom to magnify the entire screen
  - Double-tap three fingers to move around the screen

# Display and text size

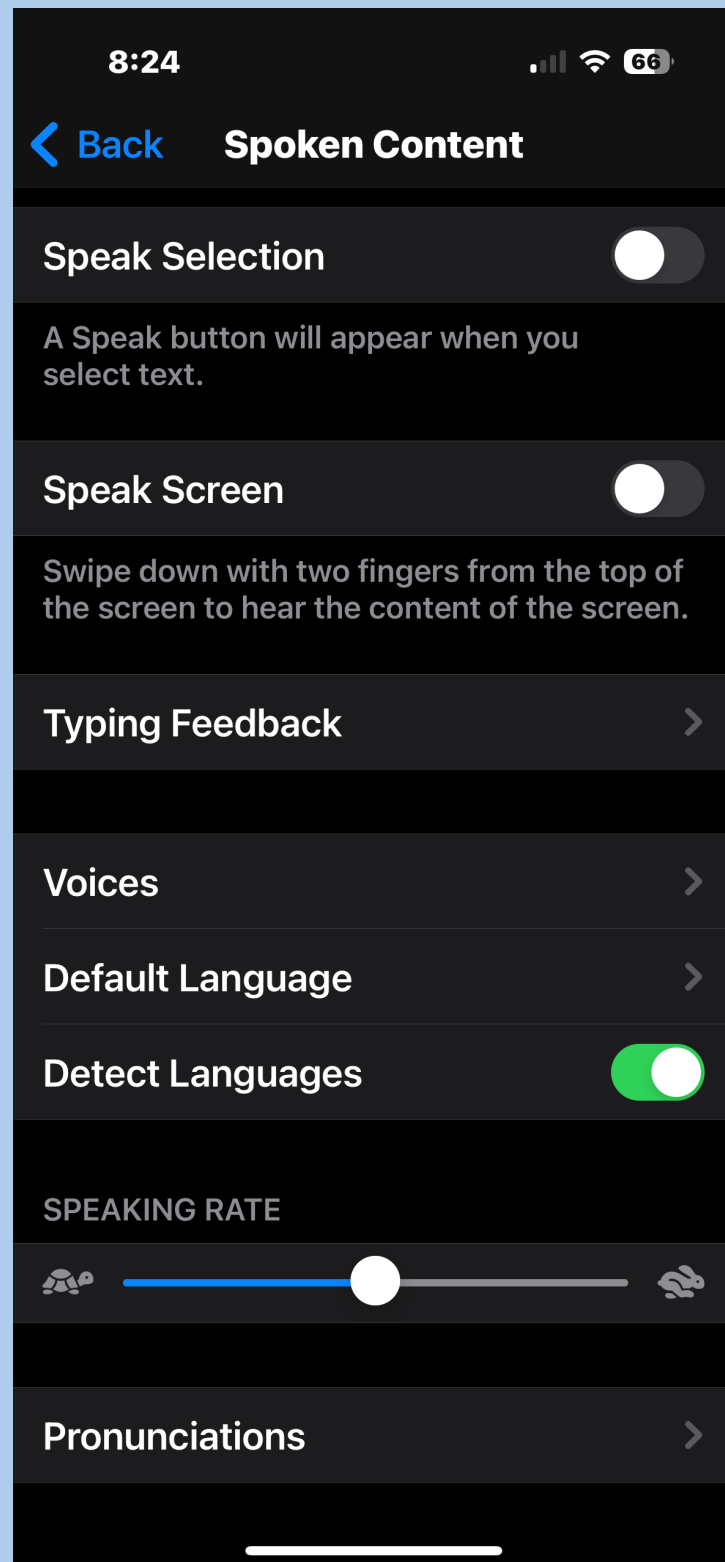


# Motion

- Reduces the motion of the user interface for those that are bothered by motion, flashing lights, animation, etc.

# Spoken content

- Used to read content on an iPhone screen



# Audio descriptions

- When available on content, provided the content is AD enabled
- Works on Apple TV, smart TVs and some other devices
- The program material must have the AD symbol in order to be compatible

# Other useful accessibility tips

- Connect a larger monitor or TV to your Mac
  - Must make sure to have compatible cable between Mac and display
  - Will have to play with adjustments to make the image suitable

# Resources

- Various Apple websites that cover all aspects of accessibility, specifically:

[https://www.apple.com/accessibility/?afid=p238|Upyw9BFQ-dc\\_mtid\\_20925e1t39169\\_pcrd\\_78546564173007\\_pgrid\\_1256742314801549\\_&cid=wwa-us-kwbi-features-slid--Brand-Accessibility-Avail-](https://www.apple.com/accessibility/?afid=p238|Upyw9BFQ-dc_mtid_20925e1t39169_pcrd_78546564173007_pgrid_1256742314801549_&cid=wwa-us-kwbi-features-slid--Brand-Accessibility-Avail-)

- Wikipedia
- Thanks to Oak for his input