



Wearables as Supports for Executive Functioning and Daily Living

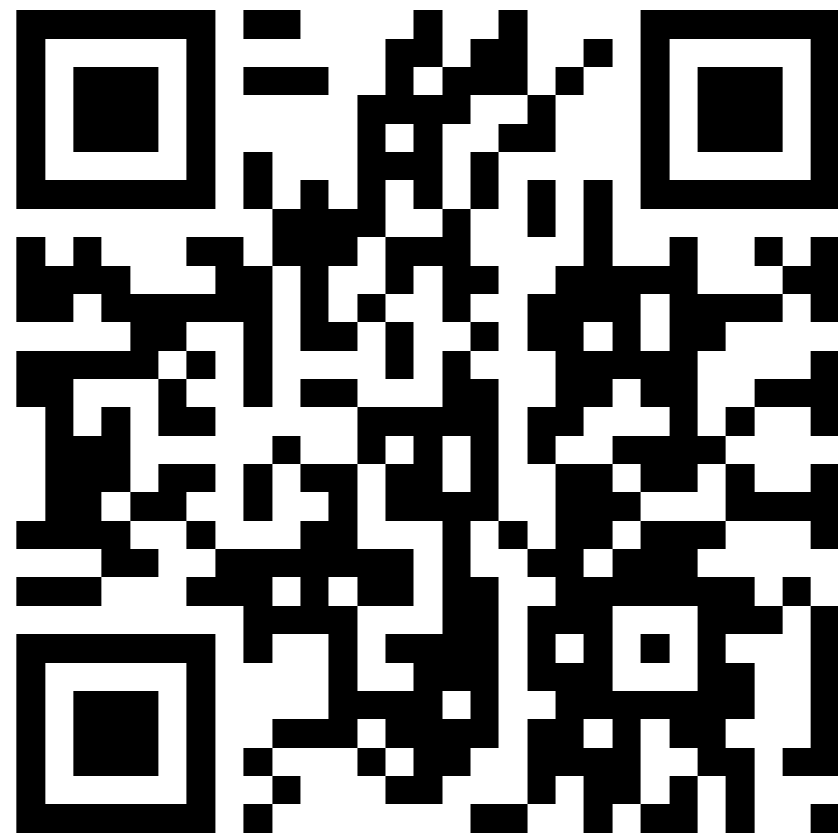
Luis F. Pérez, Ph. D.

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www.luisperezonline.com

Handout

<http://bit.ly/WearablesAccessInclusion>



FROM HEAD TO TOE WEARABLE TECHNOLOGY

SHIRT

Conductive thread means a computer is literally built into the fabric of the shirt, providing the processing power for all the other wearable gadgets.

WRISTBAND

A sensor that tracks movement to determine the number of steps taken through the day – 10,000 is ideal – and how much sleep the wearer gets at night.

TROUSERS

Also made with conductive thread, the trousers take the energy generated by movement and use it to power the other gadgets.

GLASSES

Overlays navigation directions and information about points of interest directly on to the wearer's field of vision.

WRISTWATCH

Vibrates when a message arrives and displays it on the watch face. Tells the time too.

HAND

Embedded under the skin is a chip containing medical records, passport data and credit records. Information is transferred by waving the hand over a suitable scanner.

SHOES

GPS chip provides directions using LED lights in each shoe: the left shoe indicates direction, while the right shows distance.



GRAPHIC: JOHN BRADLEY



GoPro
(2004)



Nike +
(2006)



FitBit
(2009)



Pebble
(2012)



Google Glass



Aira: Visual Interpreter for the Blind



Snapchat Spectacles

Image: Engadget

Vue Smart Glasses

Music | Calls | Activity | Notifications





Pogocam

HEARABLES



AfterShokz



Here One



Made for iPhone
Hearing Aids

FITNESS DEVICES



Fitbit



Garmin

NOTIFIERS



Martian Notifier



Chronos



Ditto

FOCUS AIDS



FokusLabs ReVibe



Time Timer

TACTILE WATCH



Dot

NAVIGATION AID FOR BLIND



Sunu Band

OBJECT TRACKING



Tile



TrackR

FOR KIDS



Tinitell



Tech Kidizoom
Smartwatch DX

FOR THOSE WHO WANDER

SmartSole®



SMART WATCHES



SMART WATCHES



watchOS



Android Wear



Tizen (Samsung)



Apple Watch

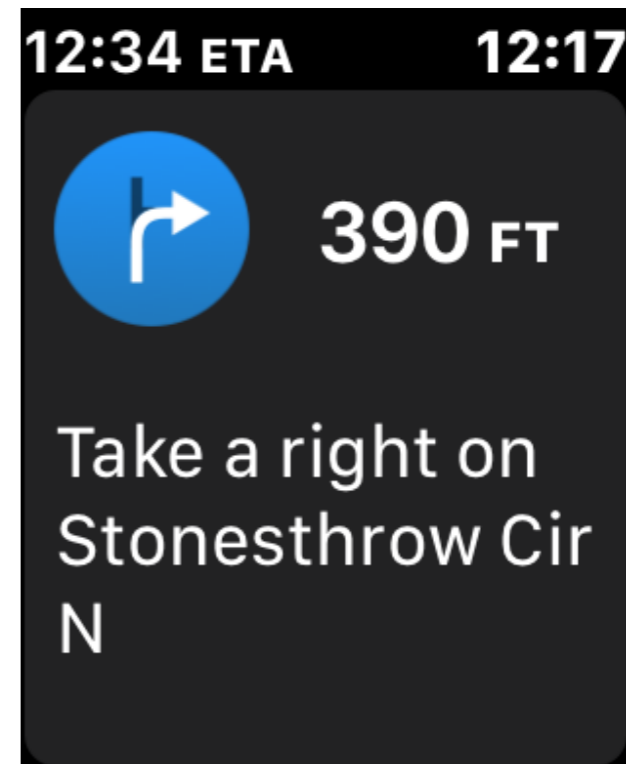
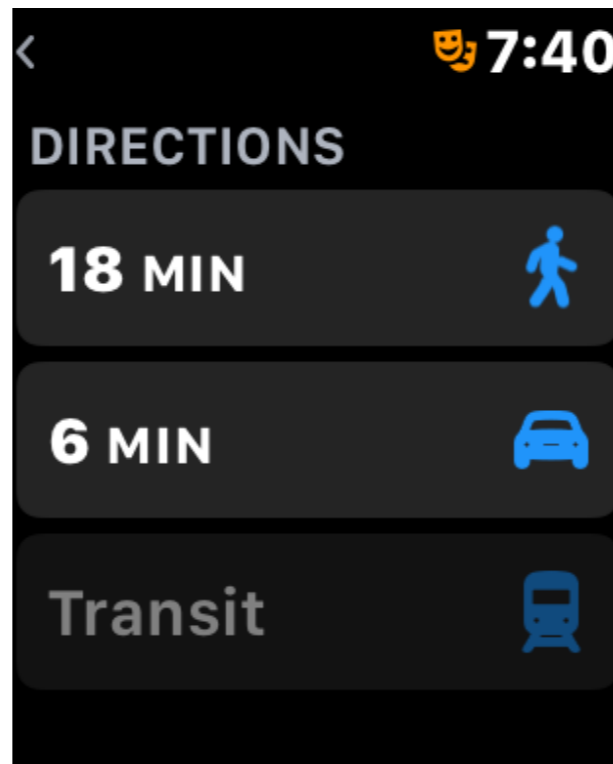
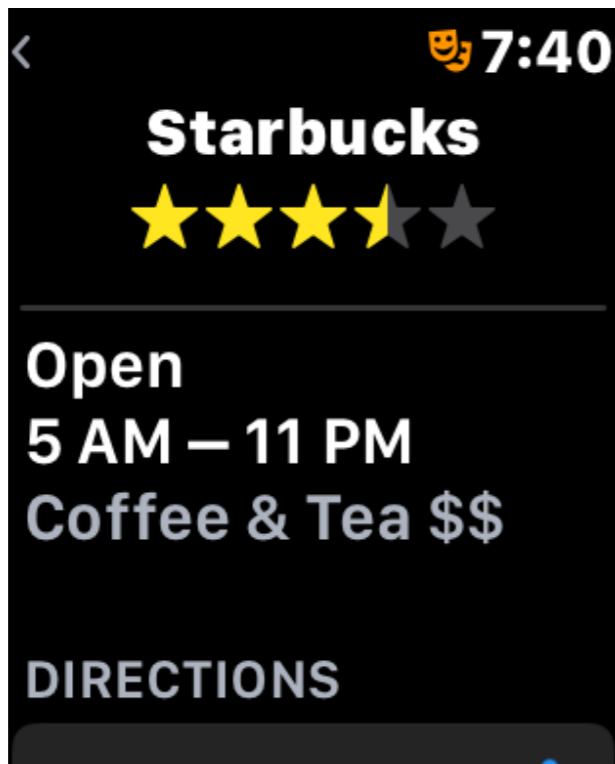
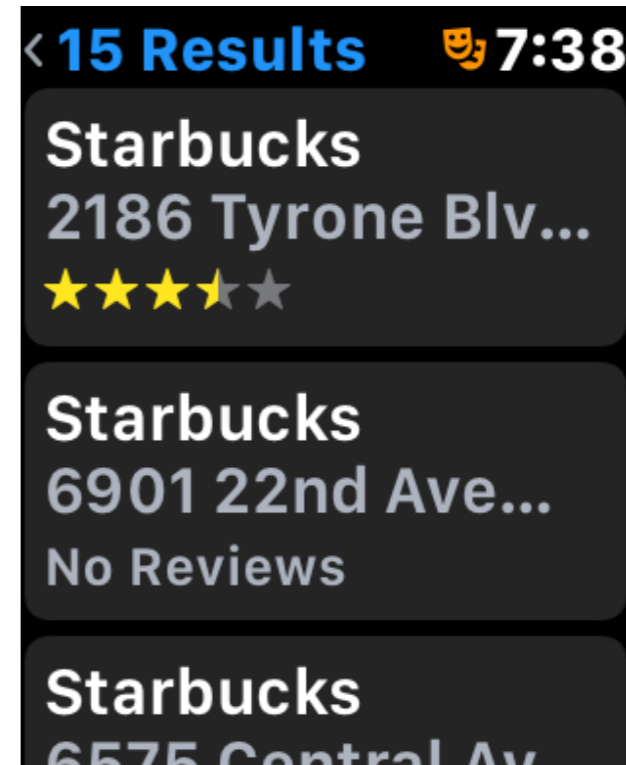
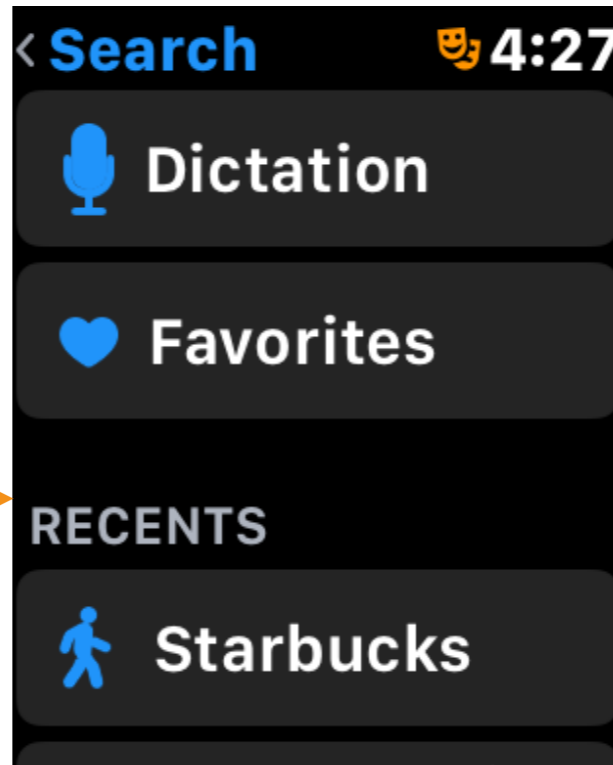
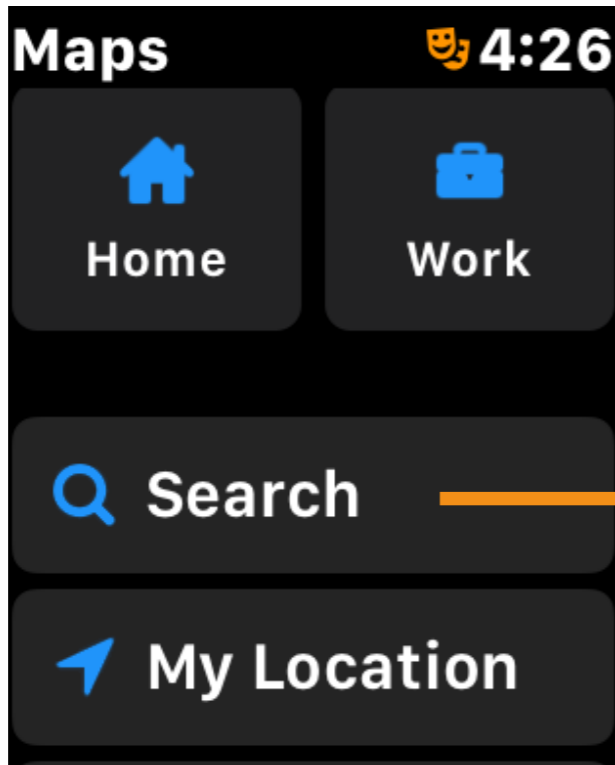
The most accessible wearable
The most robust app ecosystem

Battery life remains a challenge
Does it do too much?

Settings > General > Sound & Haptics



Apple Watch as Navigation Aid for Blind (Maps)



Access to Transportation = Independence

Lyft 7:33

6 min

Pickup at
6810 Stonestrow C...

Request Lyft


Lyft 10:05

Arrives in
1 min



Chevy Malibu
4ABC123

Lyft 10:05



Olivia
★ 5.0

Rate Olivia 10:25

★ ★ ★ ★ ★

Awesome Lyft!

Submit

Uber 7:34


uberX

6 MIN


Request

Driver En Route 9:00

6 MIN

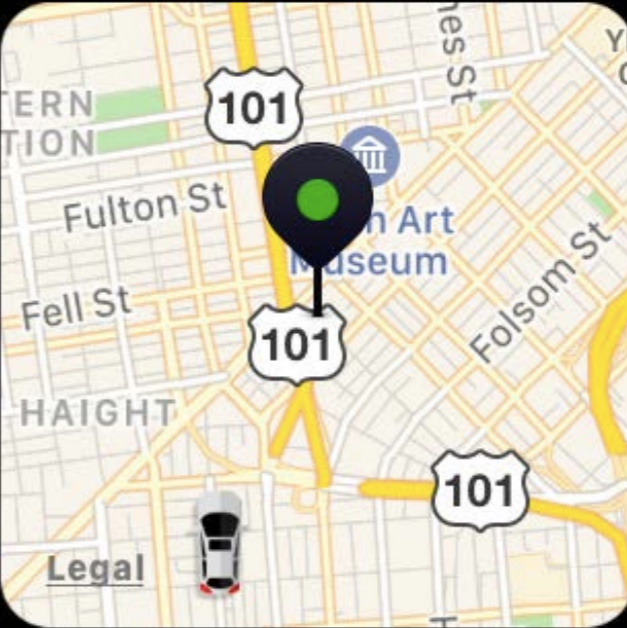


Tyler
5.0★



Toyota Prius
4MAS812

Driver En Route 9:00



Legal

Apple Pay





Accessibility Features

Accessibility Features (Watch)

Settings > General > Accessibility

VoiceOver

Zoom

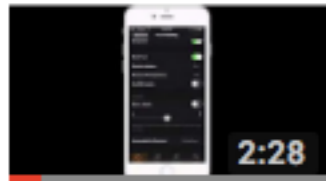
Remove Motion

On/Off Labels



Demo

1



Four Ways to Enable Accessibility on Apple Watch

Luis Perez

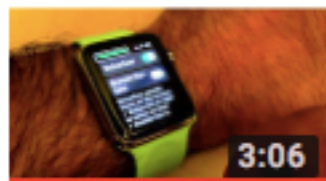
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Zoom on Apple Watch

Luis Perez

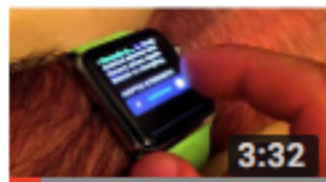
3



VoiceOver on Apple Watch

Luis Perez

4



Additional Accessibility on Apple Watch

Luis Perez

<http://bit.ly/AppleWatchAccess>

Accessibility Features

(iPhone App)

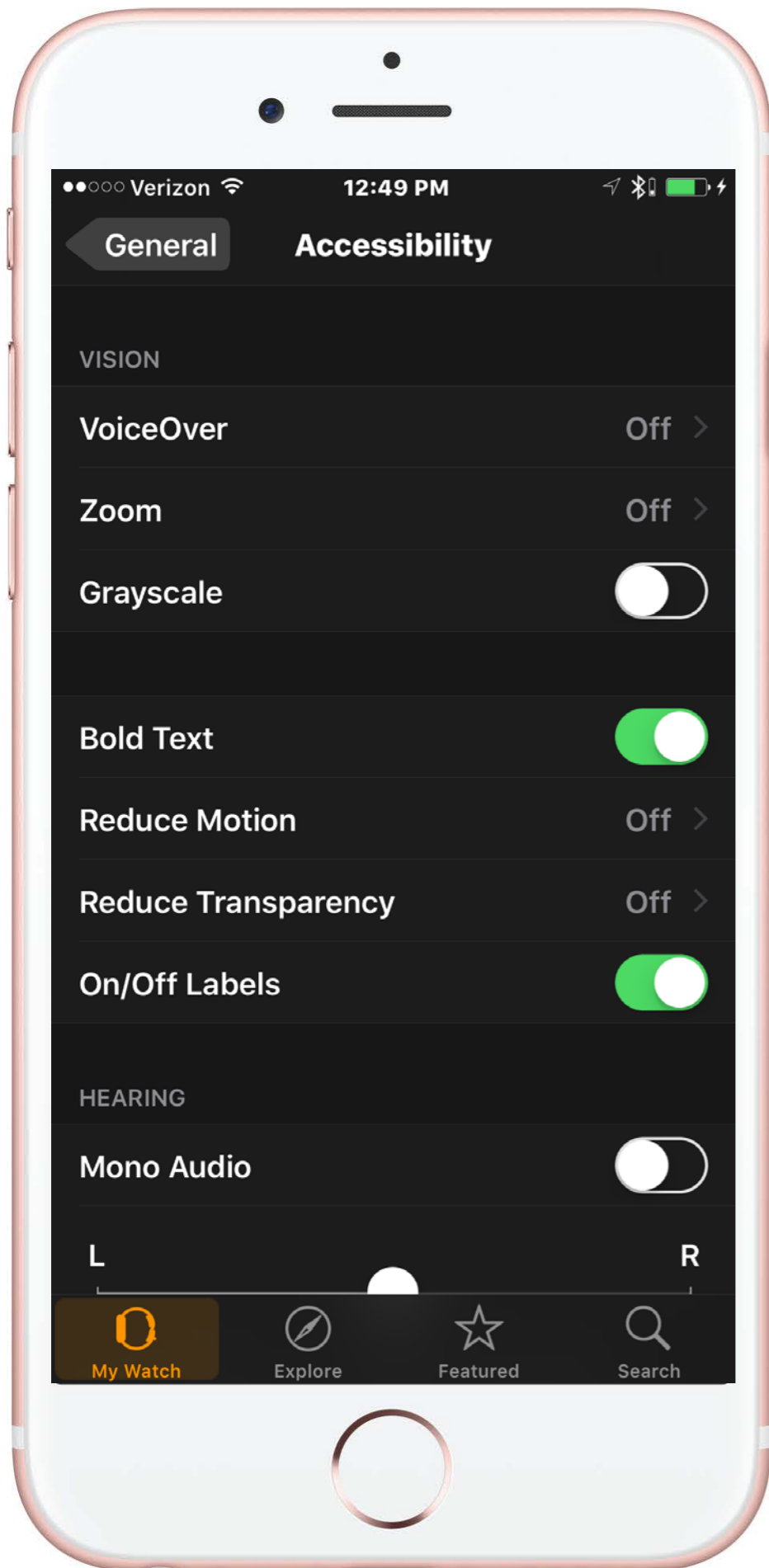
My Watch > General > Accessibility

Grayscale

Reduce Transparency

Mono Audio

Accessibility Shortcut



Apps

(watch OS apps are purchased for iPhone)



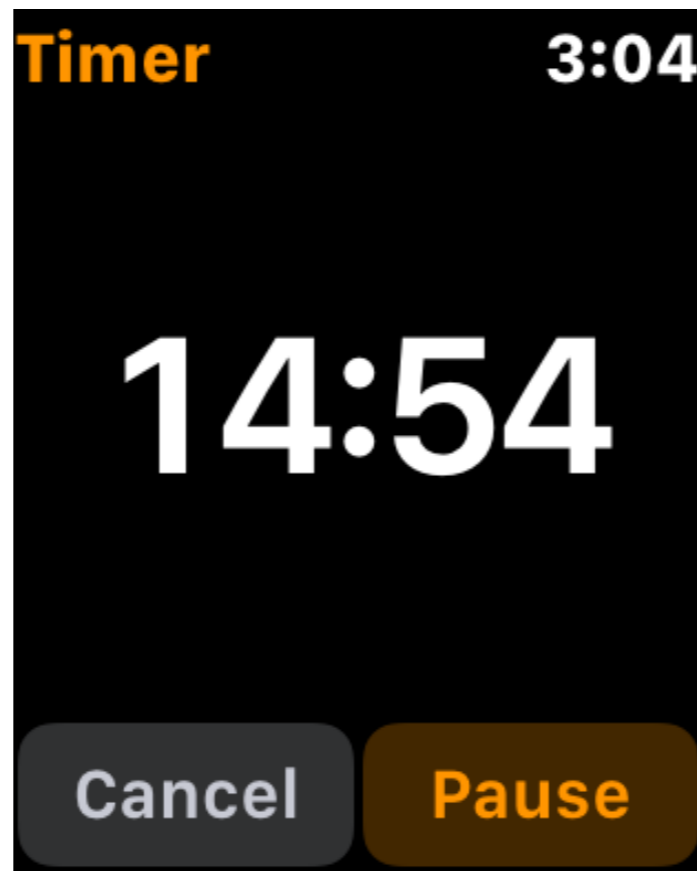
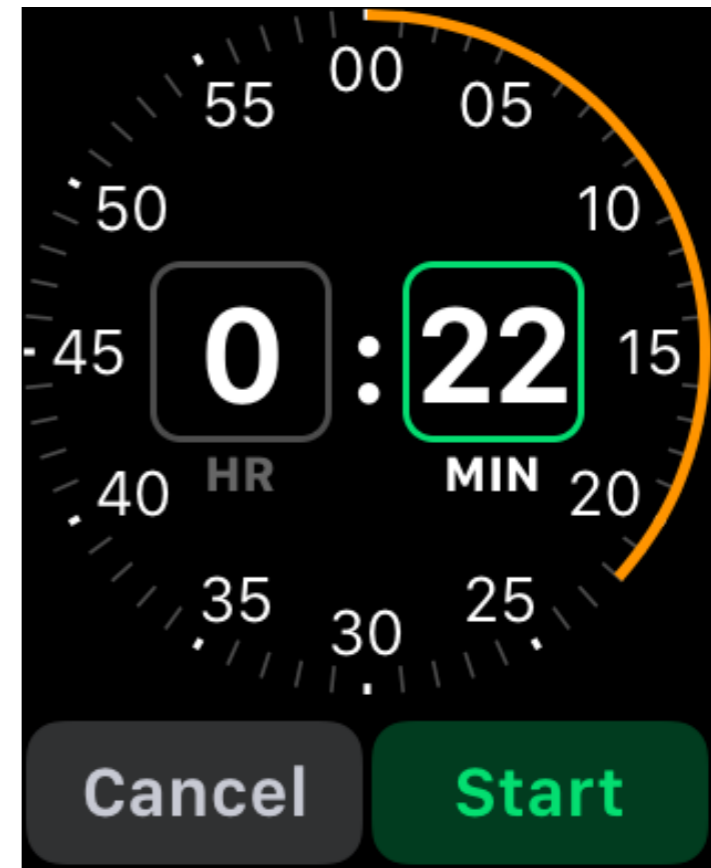
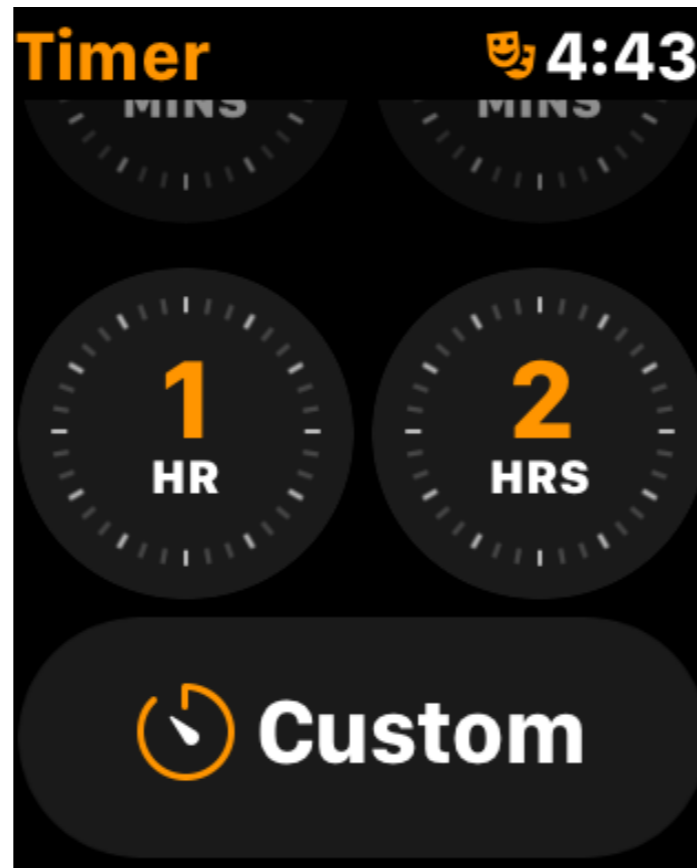
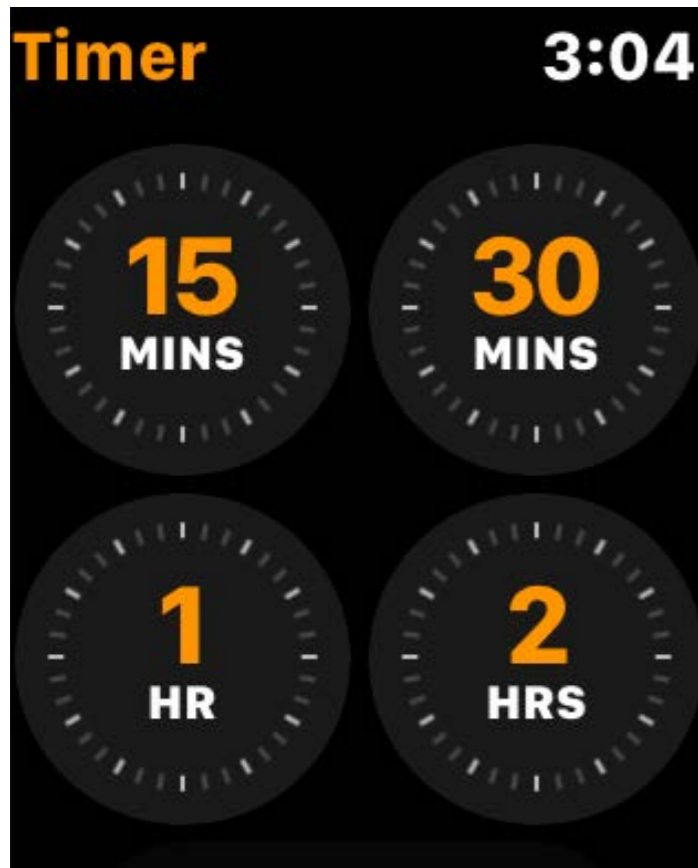
Dock (Watch OS 3)



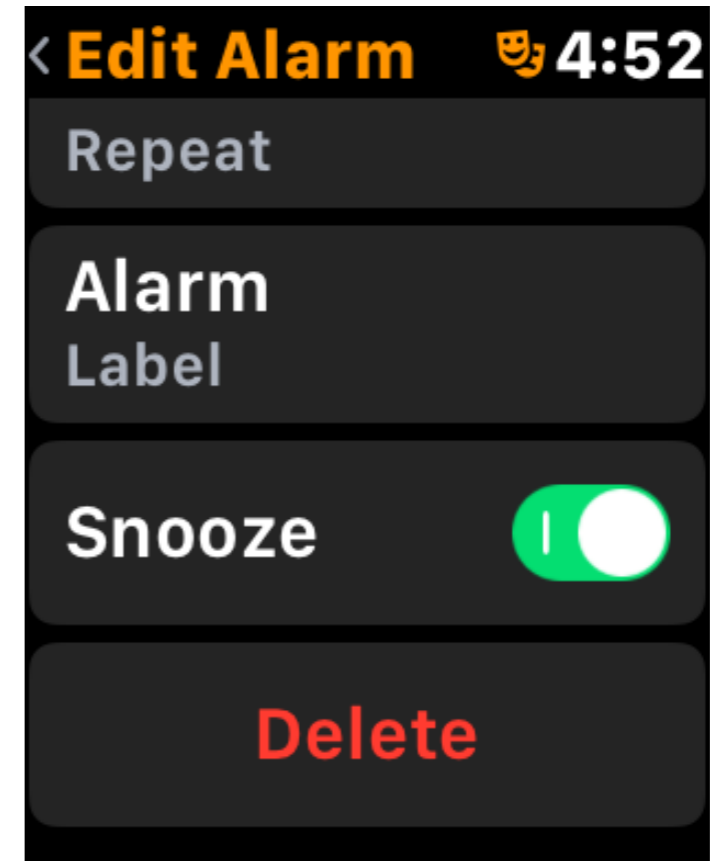
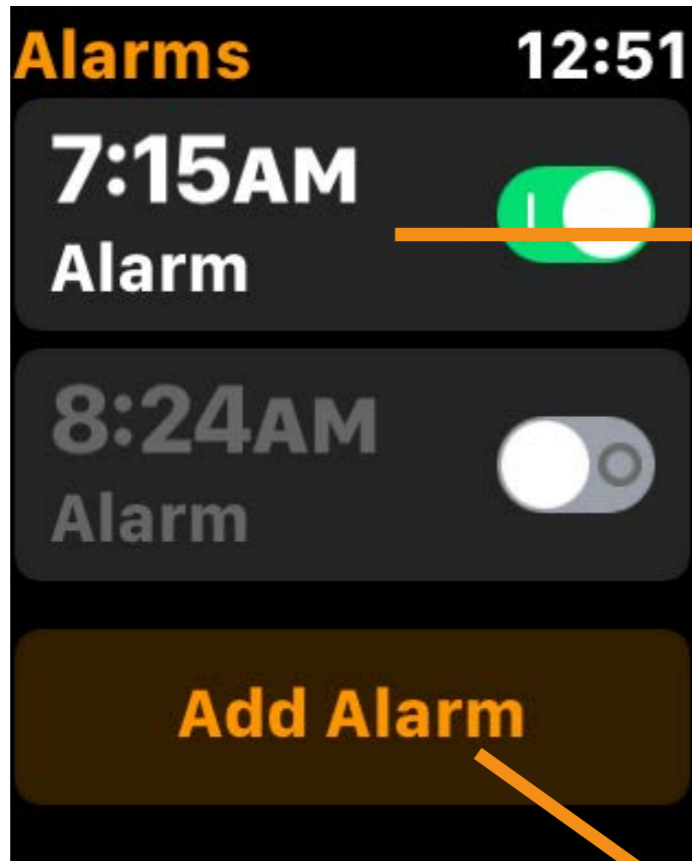
Executive Functioning

(Planning, Prioritizing, Organizing)

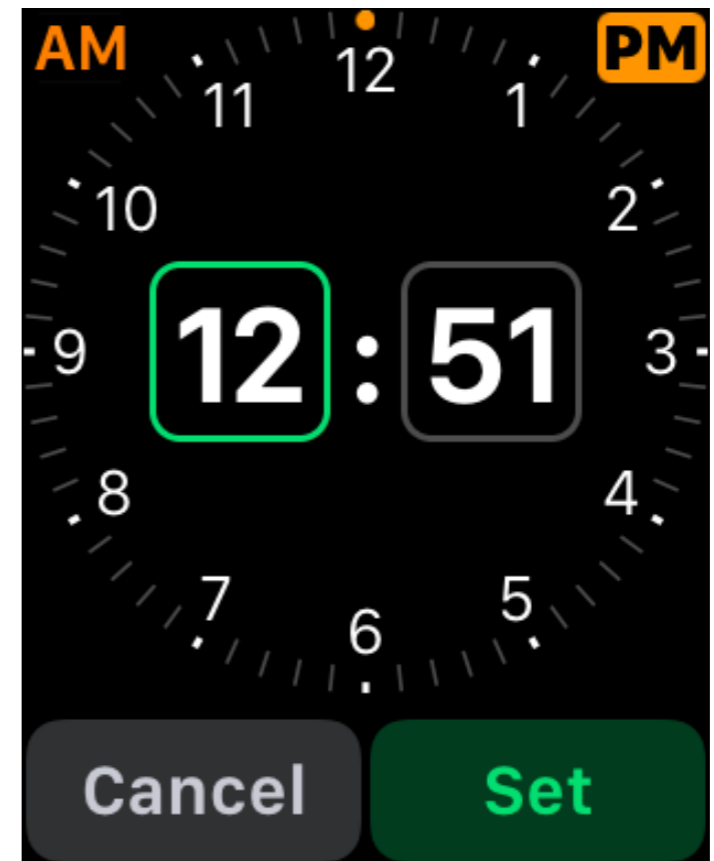
Tip: Use Siri

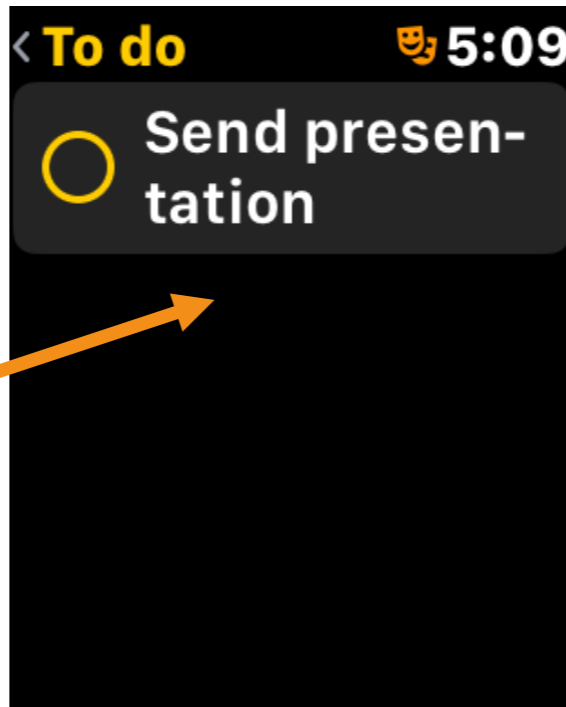
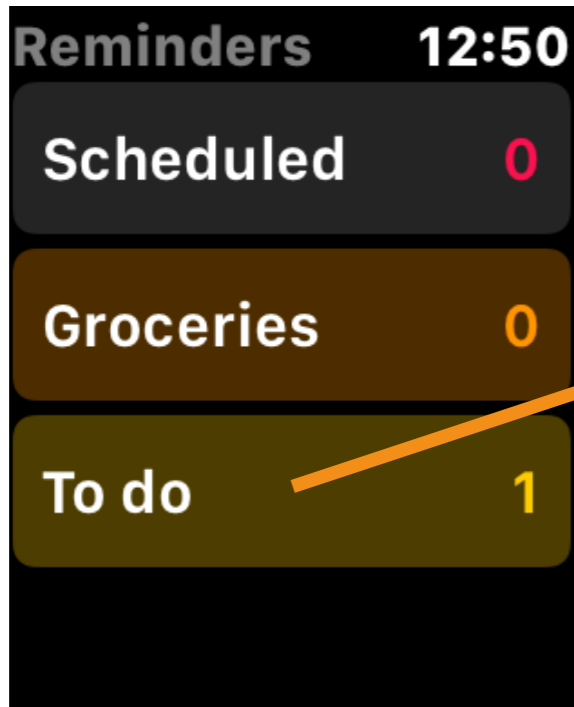
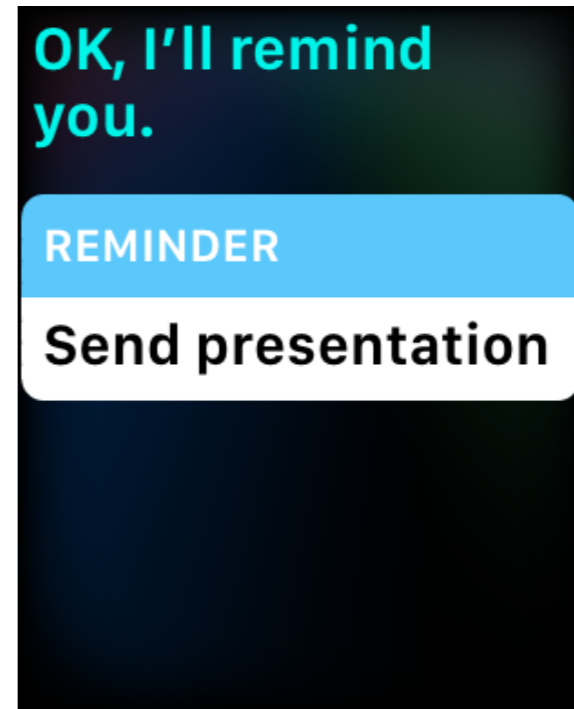
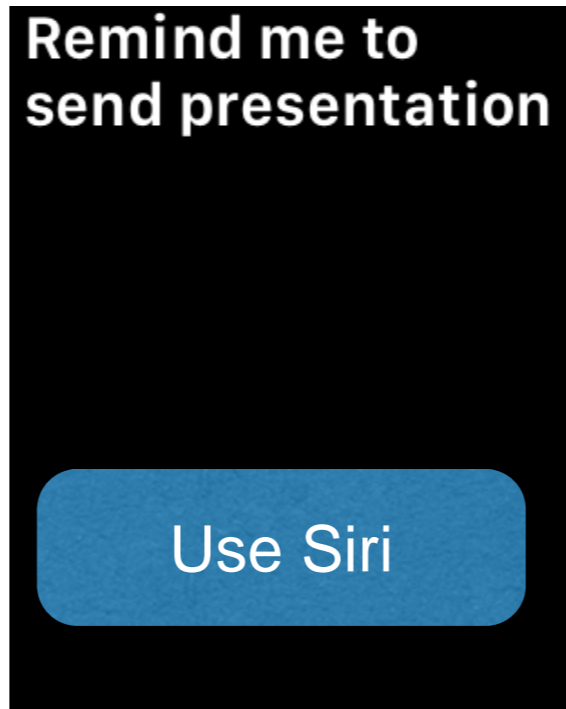
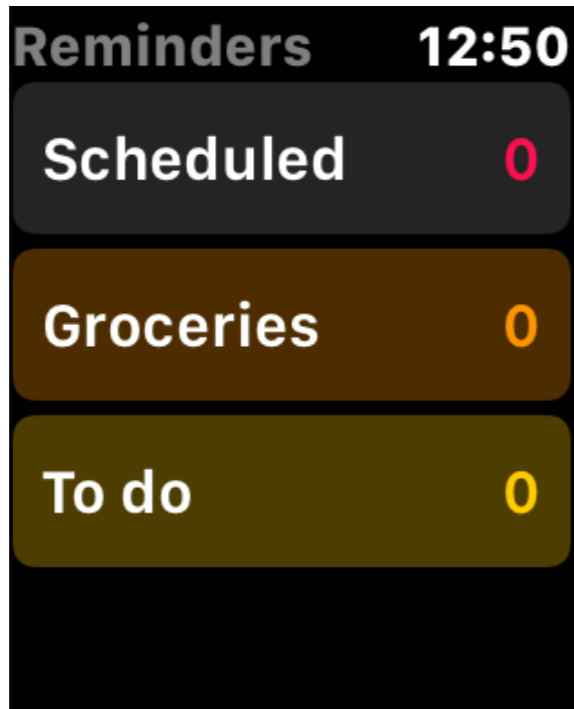


Timers

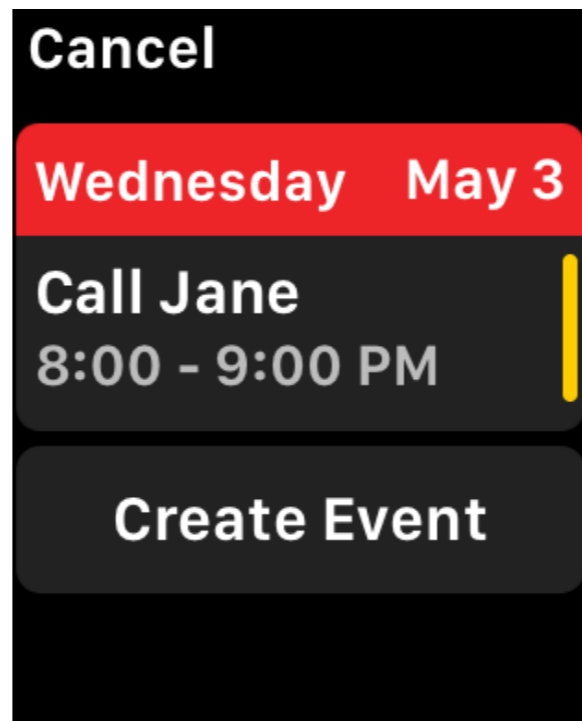
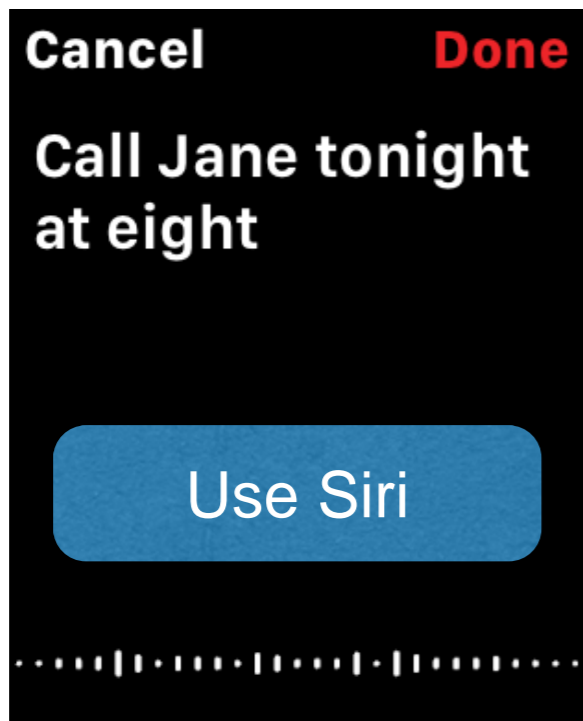
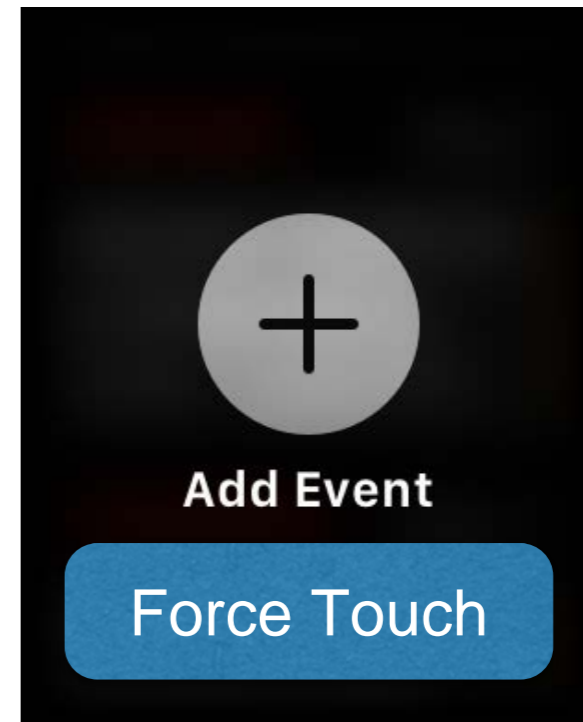
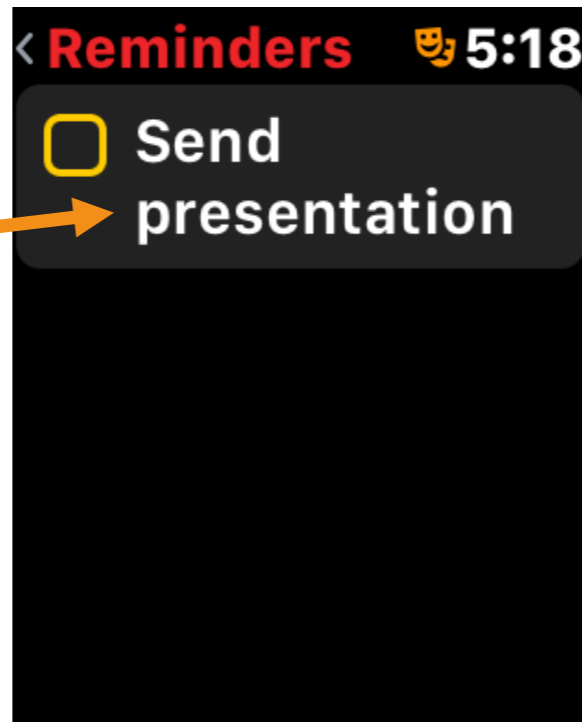
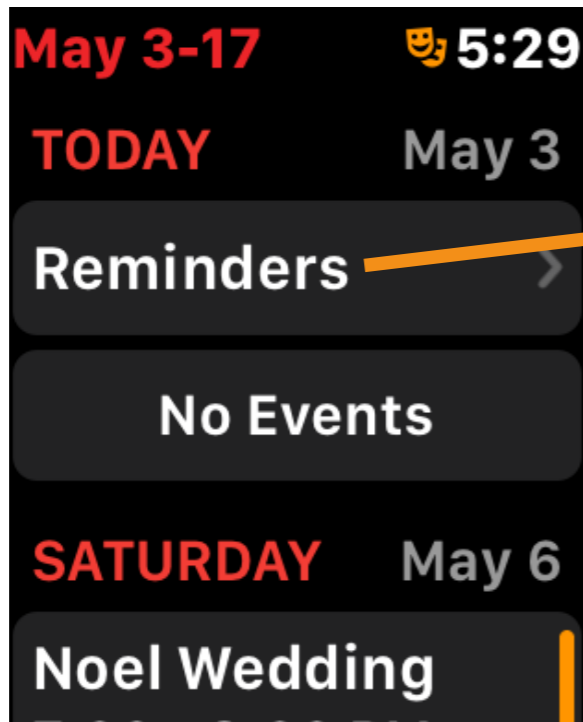


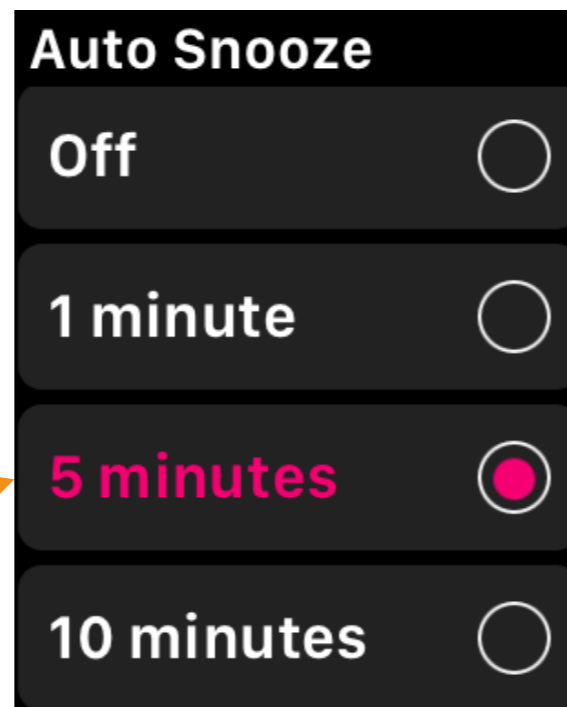
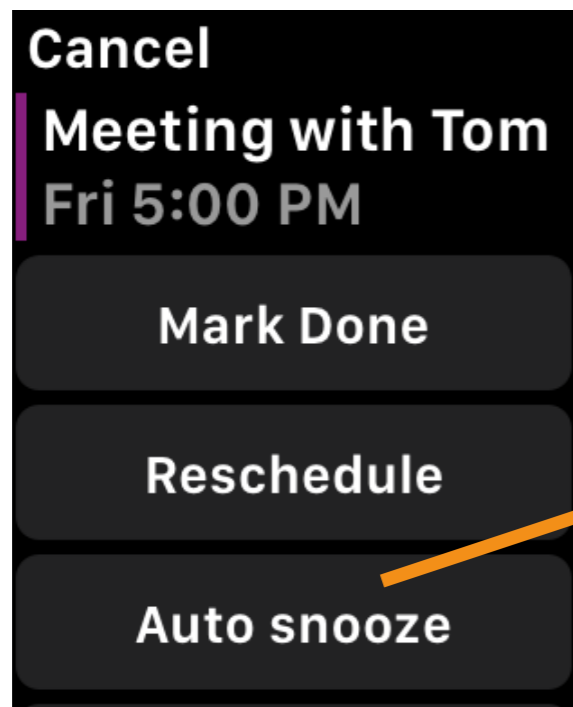
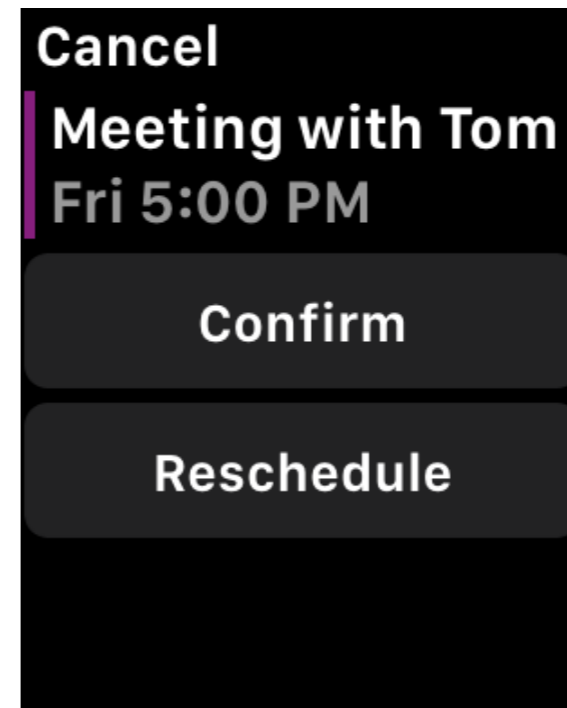
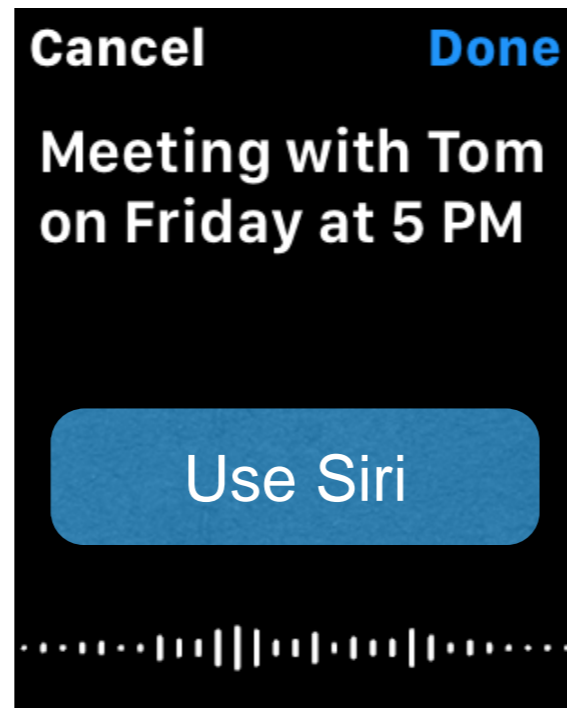
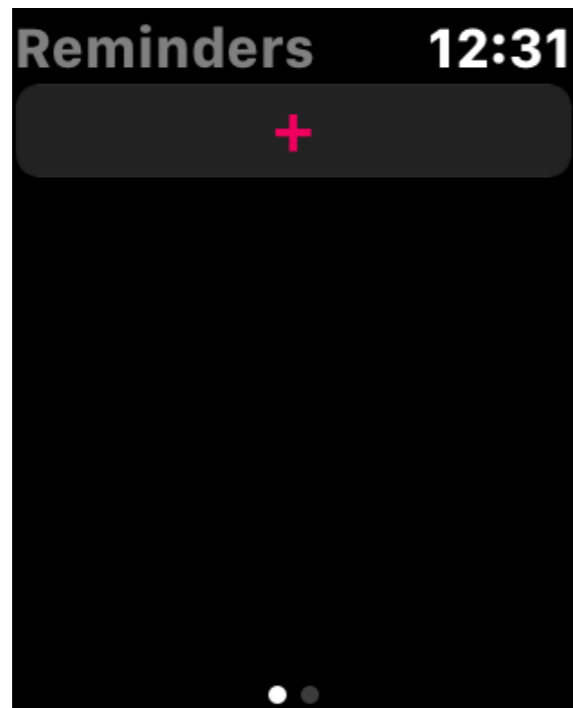
Alarms



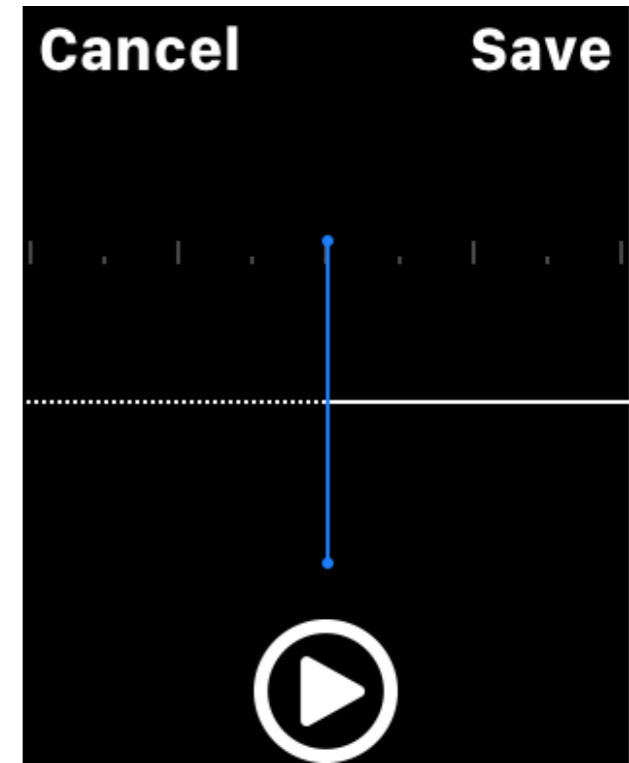
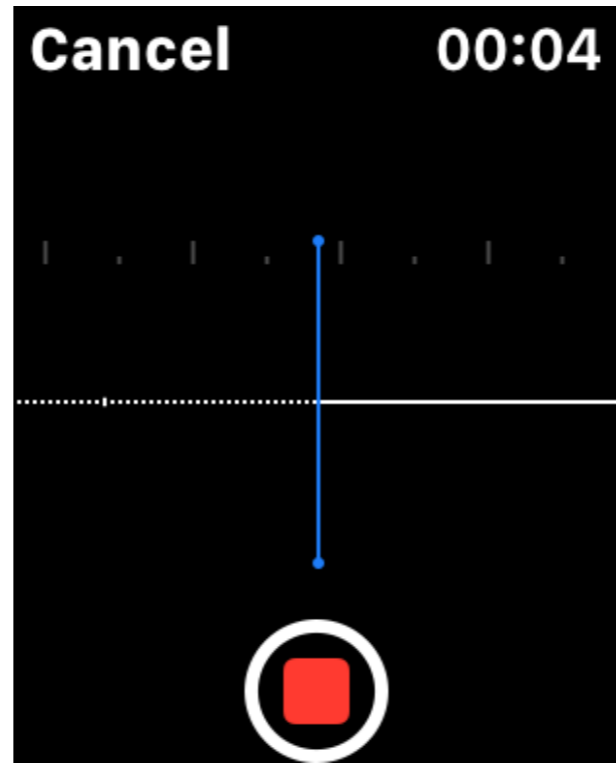


Reminders

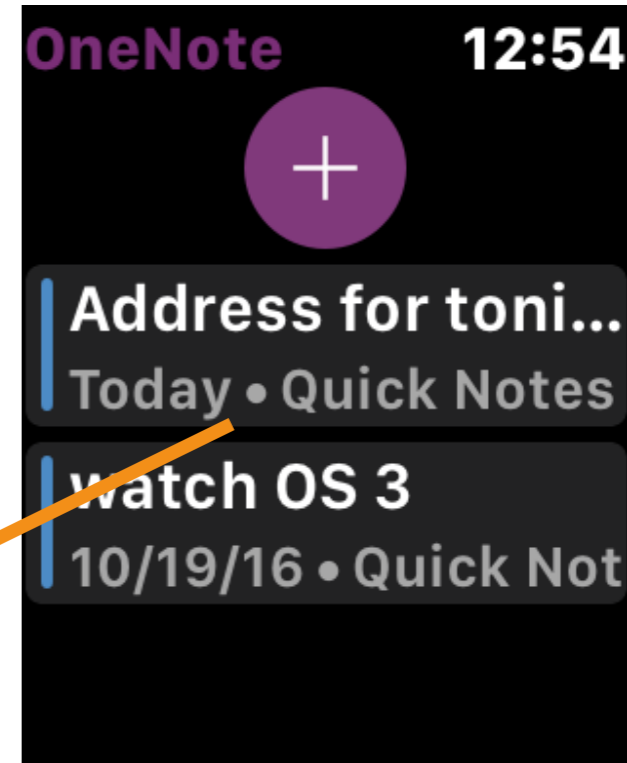
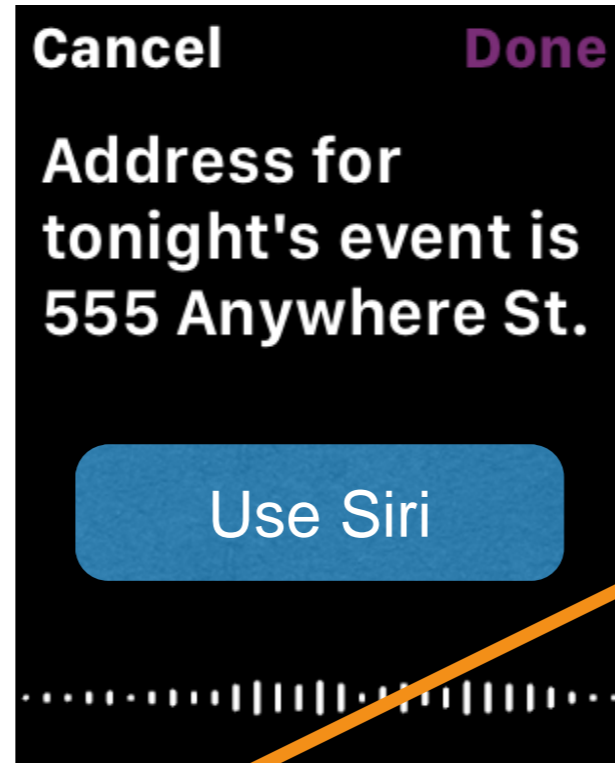
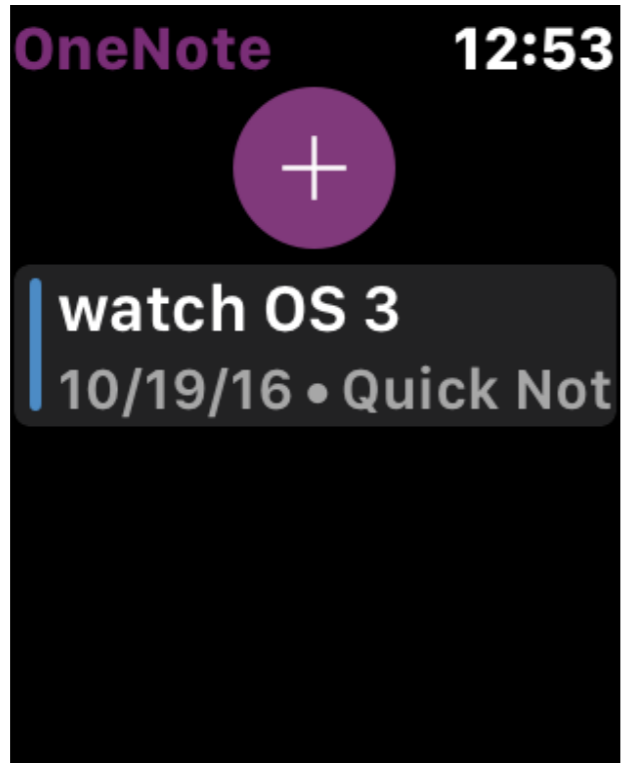




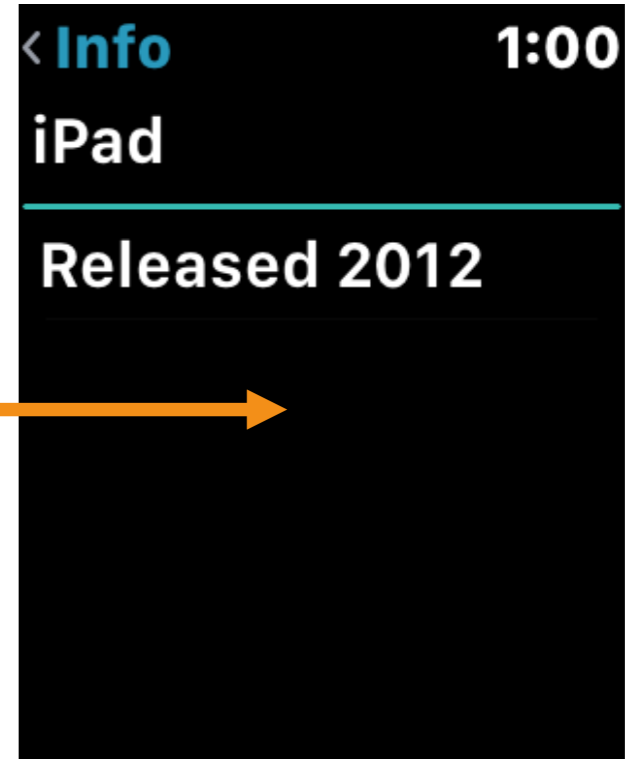
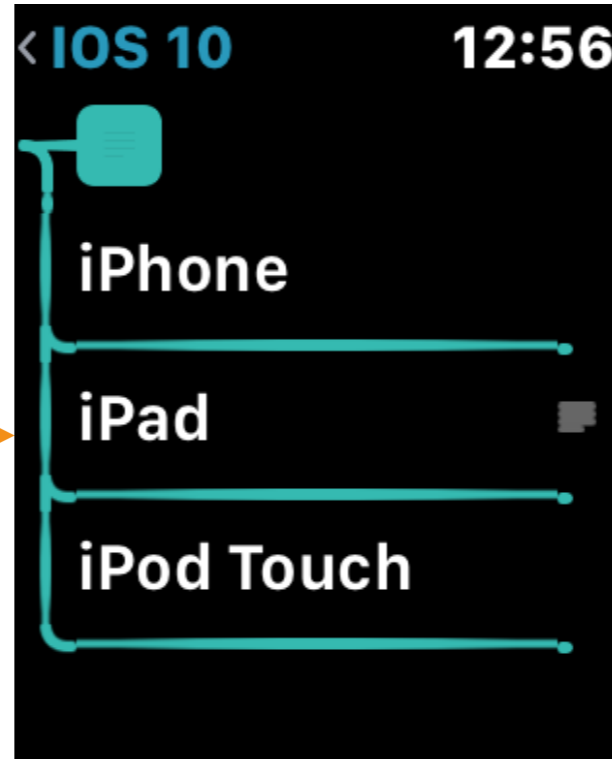
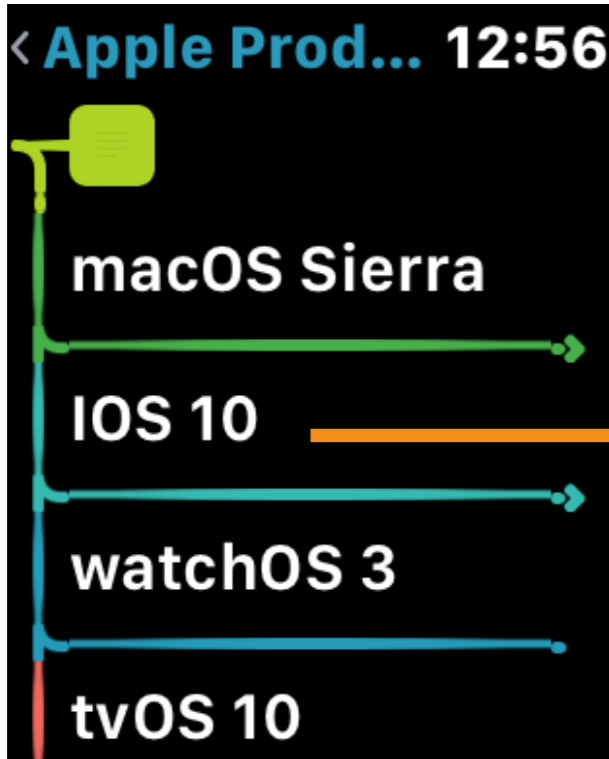
Due



Just Press Record



One Note



MindNode

Other Apps



Clear
(To Do Lists)



Todoist
(To Do Lists)



Timewinder
(Timers)

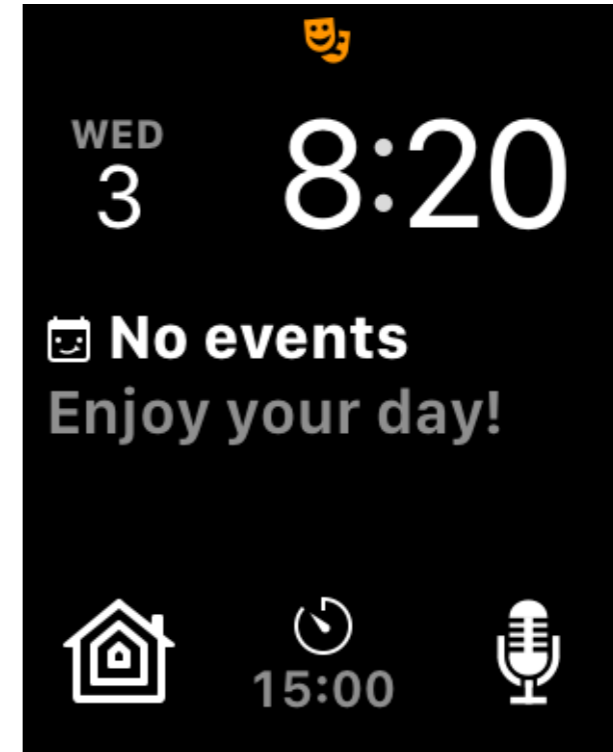
Tip - Use Watch Face to Indicate Change of State



Play



Focus

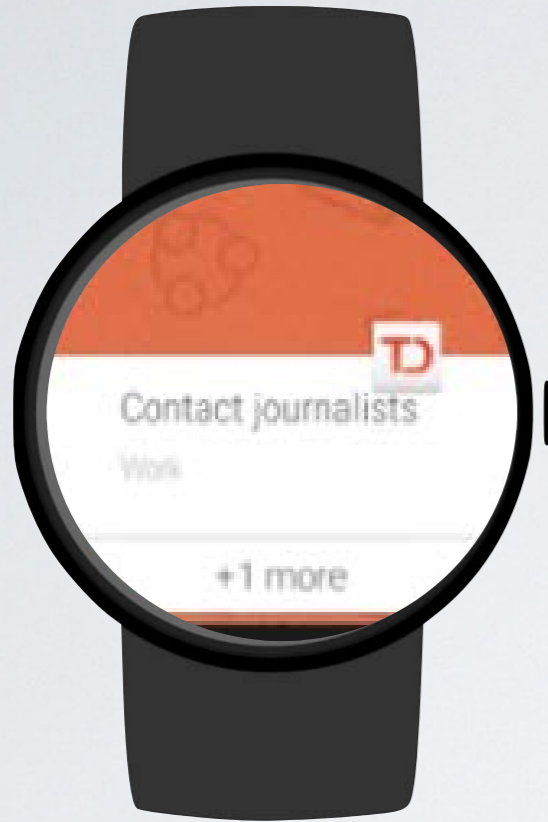


Morning

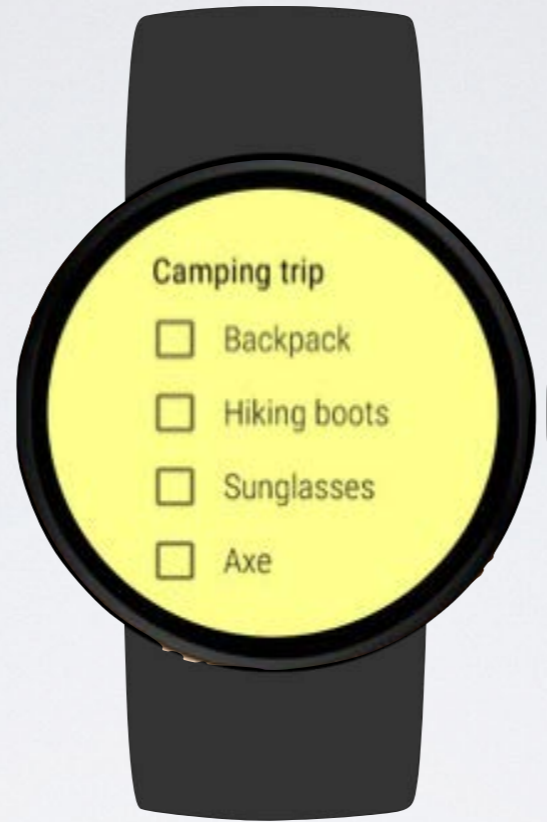
Tip - Create audio playlist with steps (schedule)

Credit: Jamie Knight, @JamieKnight (autistic web developer)

Android Wear



Todoist

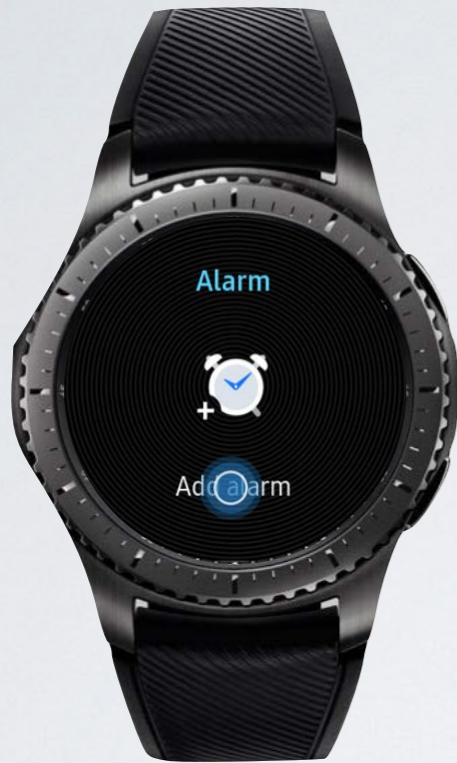


Google Keep

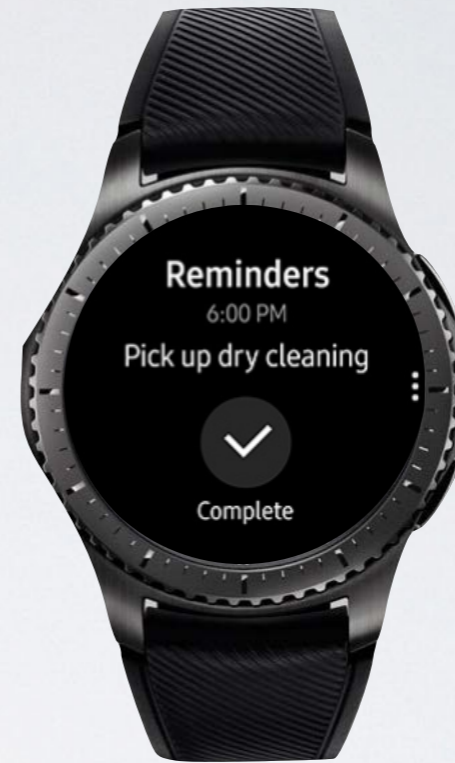


Wear Audio Recorder

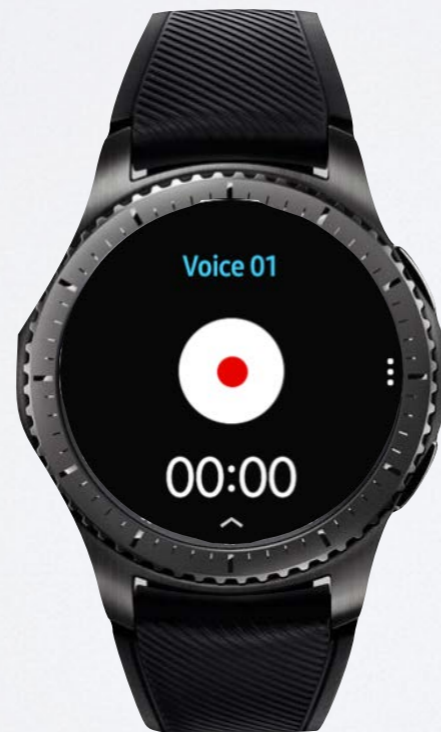
Tizen (Gear S3)



Alarms



Reminders



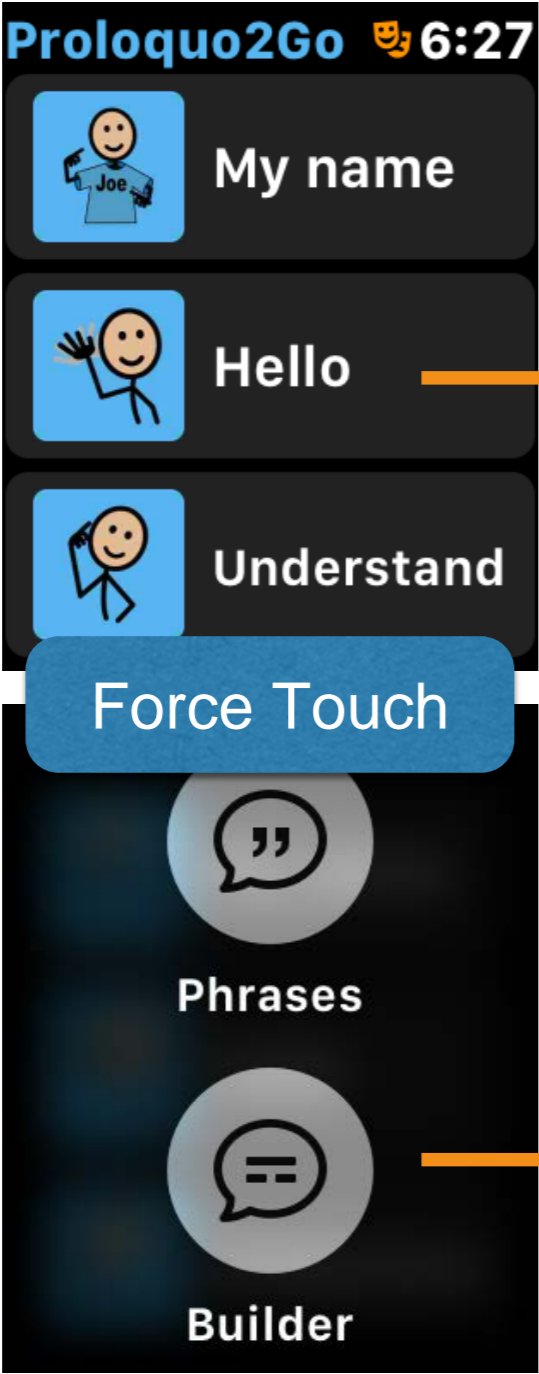
Voice Memos



My Tasks

Communication

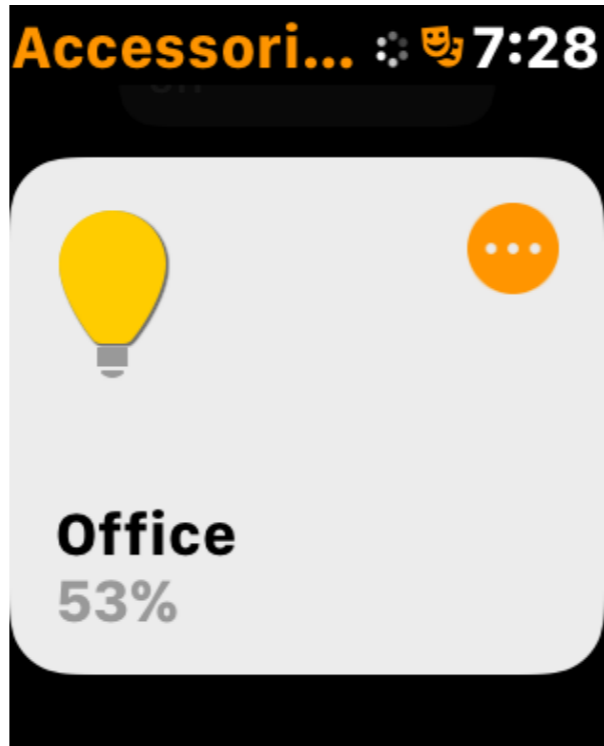
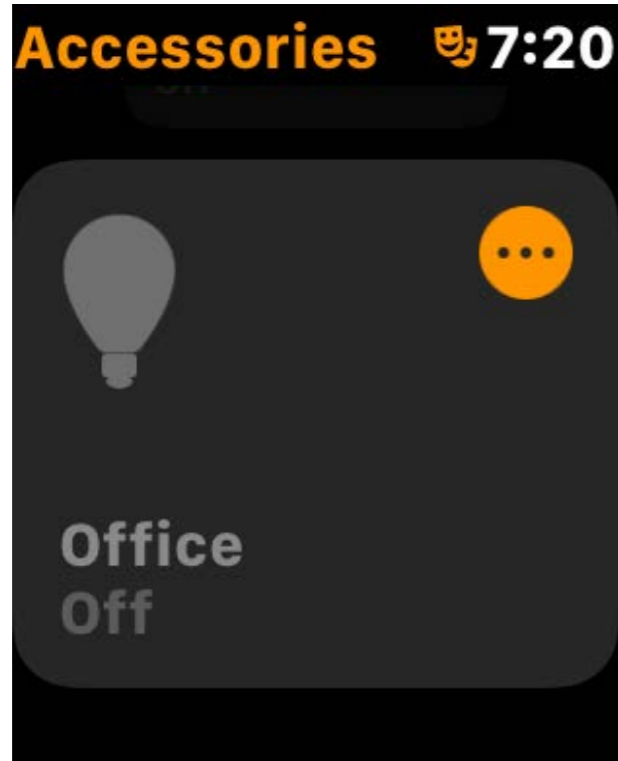
Text to Speech



Proloquo2Go



Home Automation



Home

Favorite Accessories



Woven Nylon Apple Band



Zens Travel Battery/Charger

Apple Watch for Diverse Learners

prepared by You

Buttons: Add Resource, Upload File, Search Resources

Buttons: Visibility Public, Manage Collaborators, Manage Collection

Tags: [Apple Watch](#) [accessibility](#) [universal design](#)

This collection includes resources to help you use the Apple Watch as a support for diverse learners, including videos about the built-in accessibility features, apps, and ideas for using the device in the classroom.

Buttons: Subscribed, Share, Add All

Accessibility - Watch OS - Apple
Apple Watch is designed with powerful assistive technology that makes it easy for every person to use.

Four Ways To Enable Accessibility On Apple Watch
Apple Watch includes many of the same built-in accessibility features as iOS devices such as the iPhone and iPad. In this video, you learn how to enable these features, which include a built-in screen reader and screen magnification. Some of the features can be enabled on the Apple Watch itself... [Read More](#)

Zoom On Apple Watch

Discussion

Only you and other collaborators can see this. [Clear All](#)

Leave a comment

Lauren from Participate Learning
Hi Luis, you can help us shape the #CollaborativePD movement! Complete a...

Luis Perez

Brad from Participate Learning
Hi Luis, want to grow your professional learning network? Join us for...

After the release of the new Apple Watch was up and running, I added a new component allowing the user to create simple sentences that are displayed right on the Apple Watch.

about a year ago

Luis Perez



<http://bit.ly/ParticipateAppleWatch>

