

Designing Across Platforms

Session 804

Cas Lemmens, Designer

Up Next



American Gods



The Magicians











GONE GIRL

DIRECTOR: David Fincher

88% 17+ 2 hr 29 min Drama 2014

STARRING: Ben Affleck, Rosamund Pike, Neil Patrick Harris, Tyler Perry, Kim Dickens

Directed by David Fincher and based on Gillian Flynn's bestseller, this engaging thriller reveals secrets of a modern marriage. On his fifth wedding anniversary, Nick Dun... MORE

Available On: iTunes HBO

Trailer Play Wish List

Viewers Also Watched

- Far from the Madding Crowd
- Blue Jasmine
- Mitosis Game
- Dior and I
- Big Eyes
- Glen Campbell: I'll Be Me
- Love Mercy
- Hummingbird
- St Vincent





Up Next



American Gods



The Magicians





watchOS



iOS



macOS



tvOS



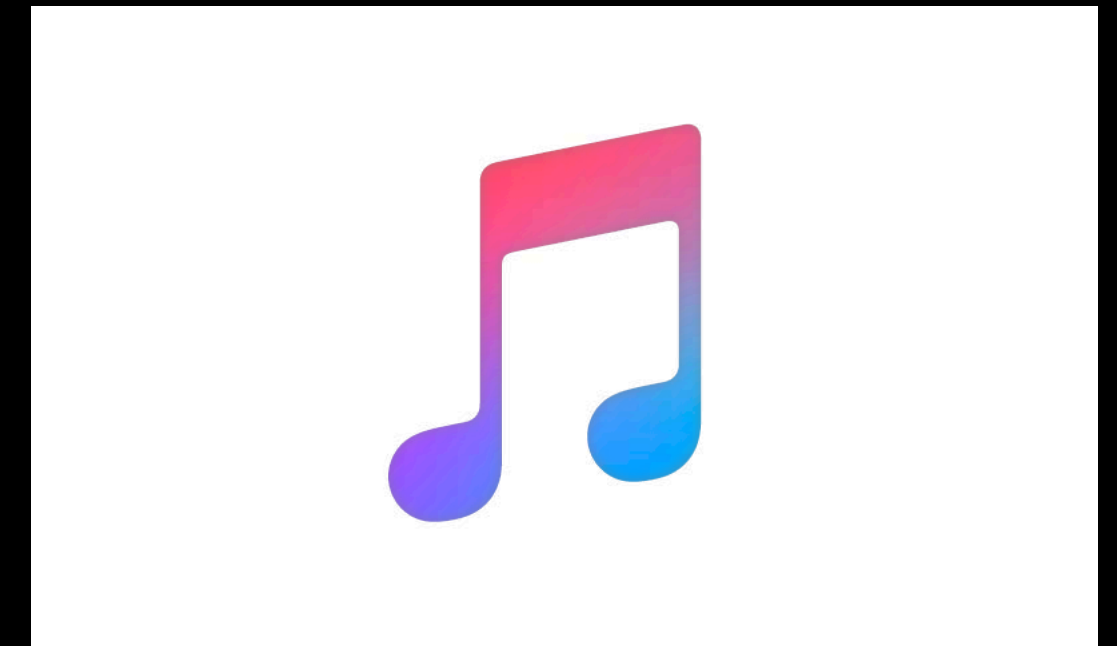
watchOS



iOS



macOS



tvOS



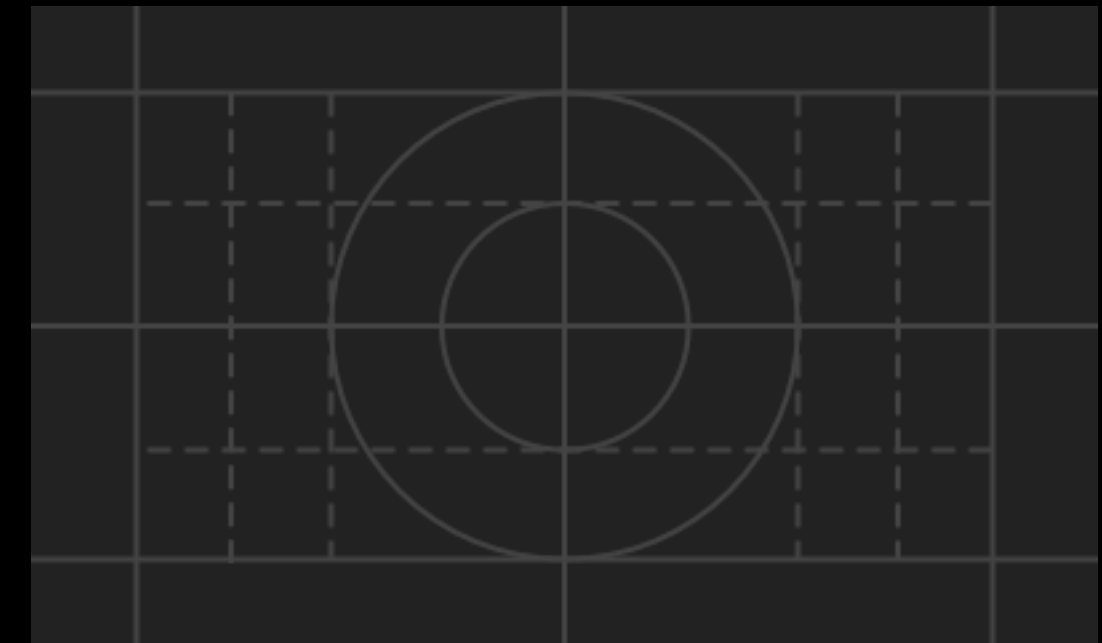
watchOS



iOS



macOS



tvOS



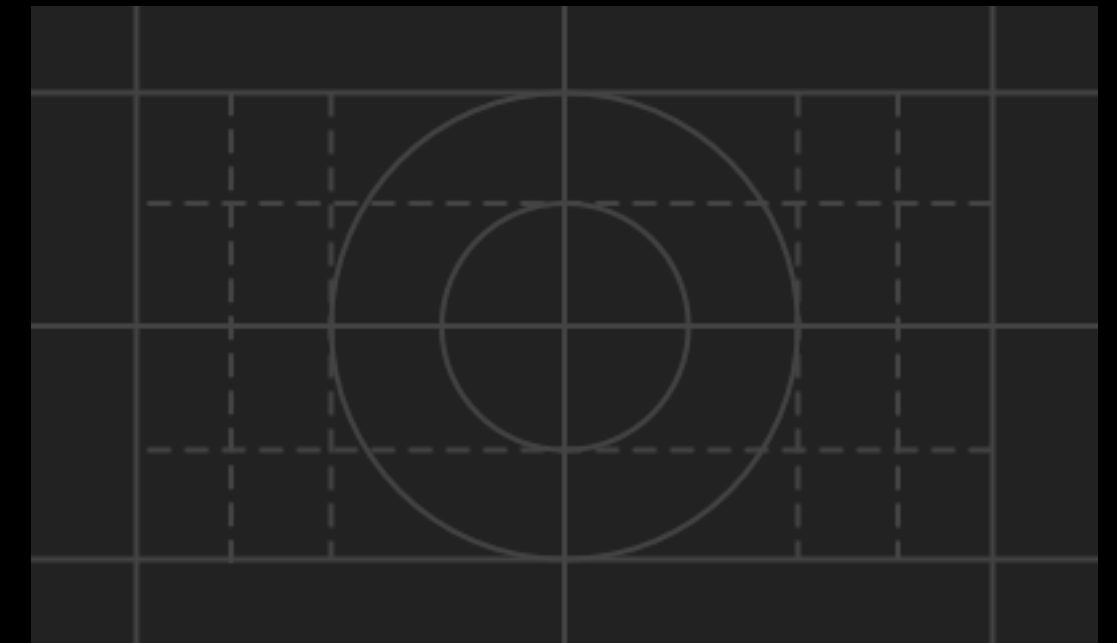
watchOS



iOS



macOS



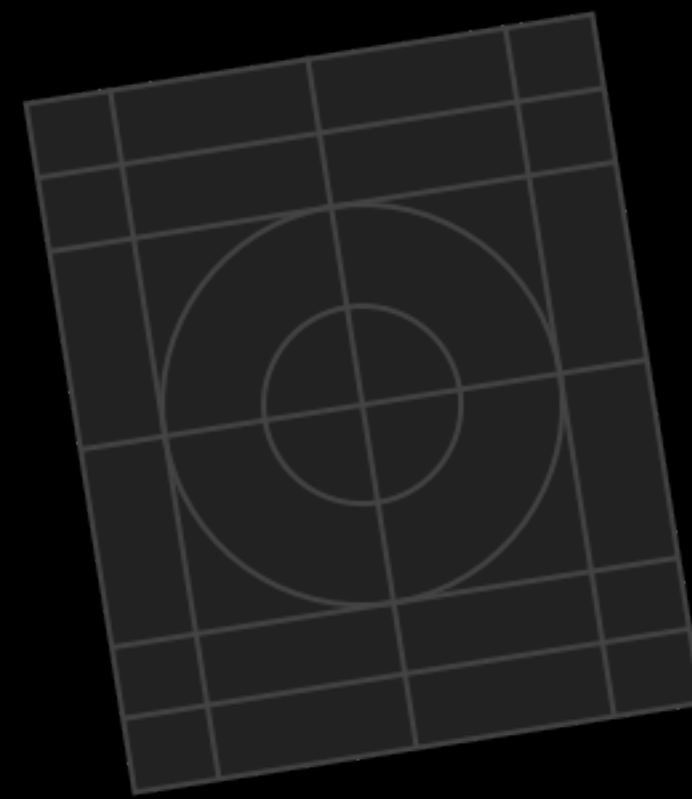
tvOS



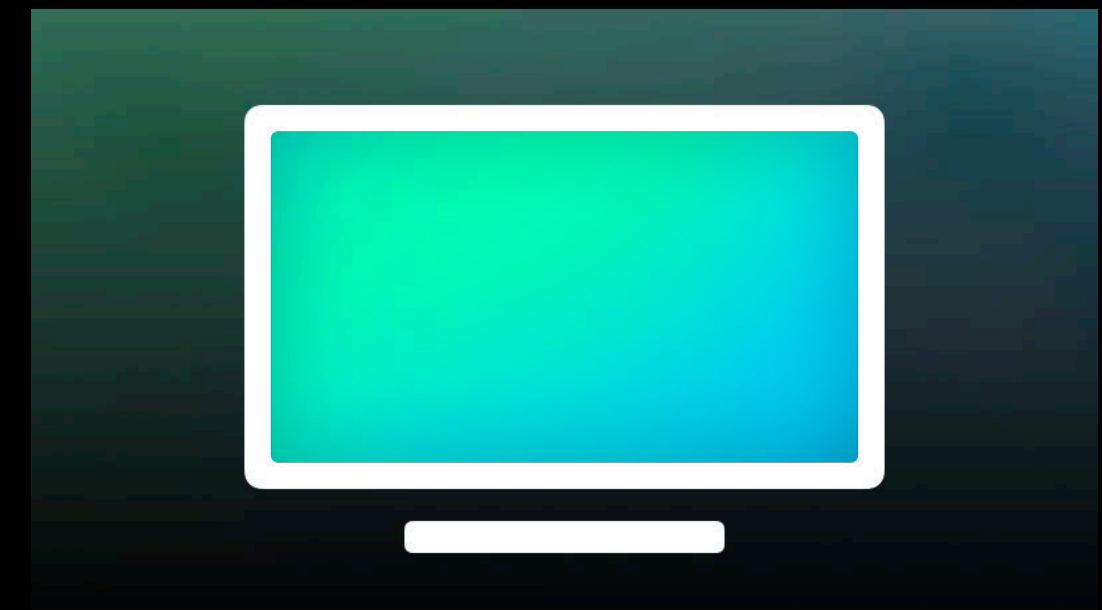
watchOS



iOS



macOS



tvOS



Apple Pay overlay on a laptop screen. The overlay displays a shopping cart with a total of \$128.00 and a 'Pay' button. The background shows a website with a search bar and various product listings.

Apple Pay app interface on a smartphone. The screen shows the Lululemon logo, the amount \$128.00, and the payment method 'WELLS FARGO DEBIT **** 1234'. A 'Done' button with a checkmark is visible at the bottom.



1

2

3

4

5

1

2

3

4

5



Select



Select



Select



Adapt





Select



Adapt





Select



Adapt



Conform





Select



Adapt



Conform





Select



Adapt



Conform



Connect





Select



Adapt



Conform



Connect





Select



Adapt



Conform



Connect



Extend



Select



Adapt



Conform



Connect



Extend



Select



Adapt



Conform



Connect



Extend



Select



Adapt



Conform



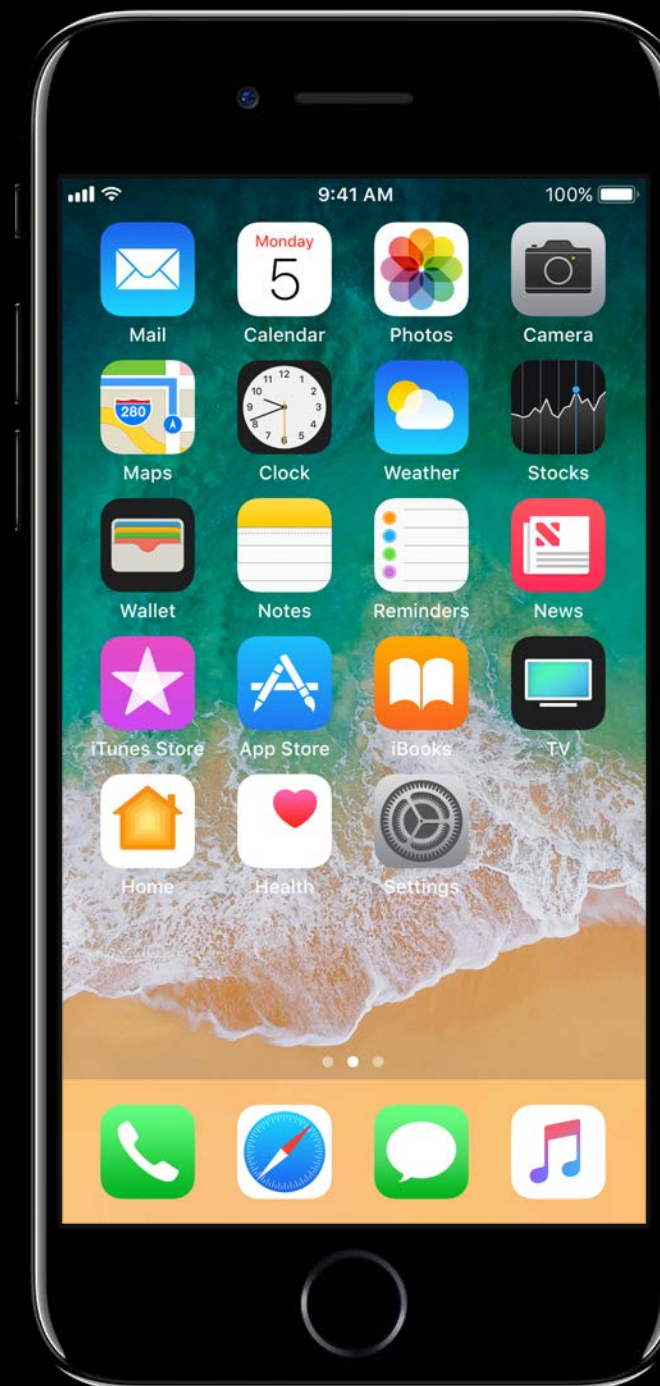
Connect



Extend

Context and Capabilities

Context



Capabilities

Context

Always on, always with you

Mobile

Personal and private

Short engagement



Capabilities

Context

Always on, always with you

Mobile

Personal and private

Short engagement



Capabilities

Background processes

Environment aware

Touch ID

Touch screen

Context



Capabilities

Context

Always on, always with you

Personal and private

Instant

Very short interactions



Capabilities

Context

Always on, always with you

Personal and private

Instant

Very short interactions



Capabilities

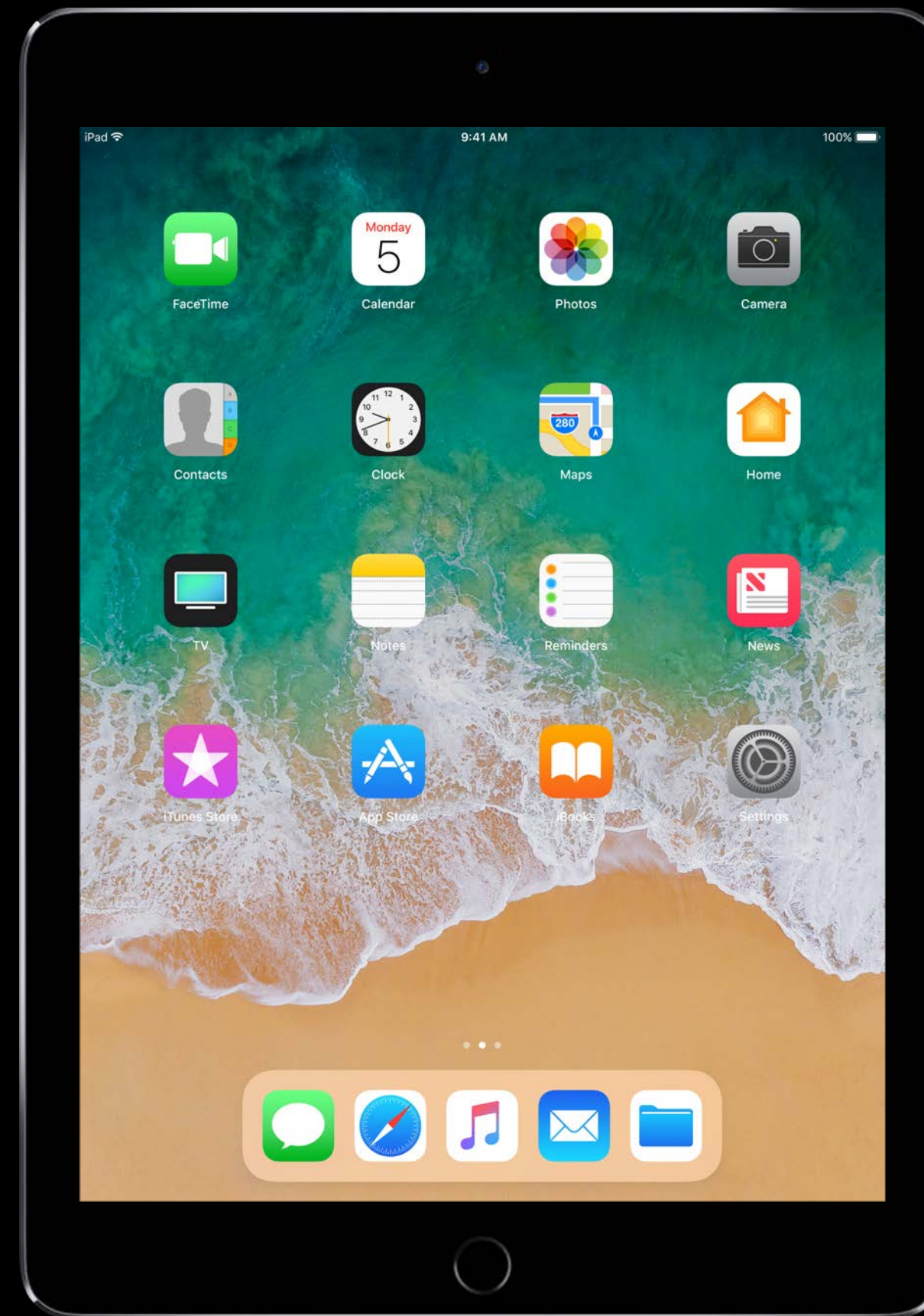
Movement Tracker

Heart Rate Monitor

Haptics

Watch Faces

Context



Capabilities

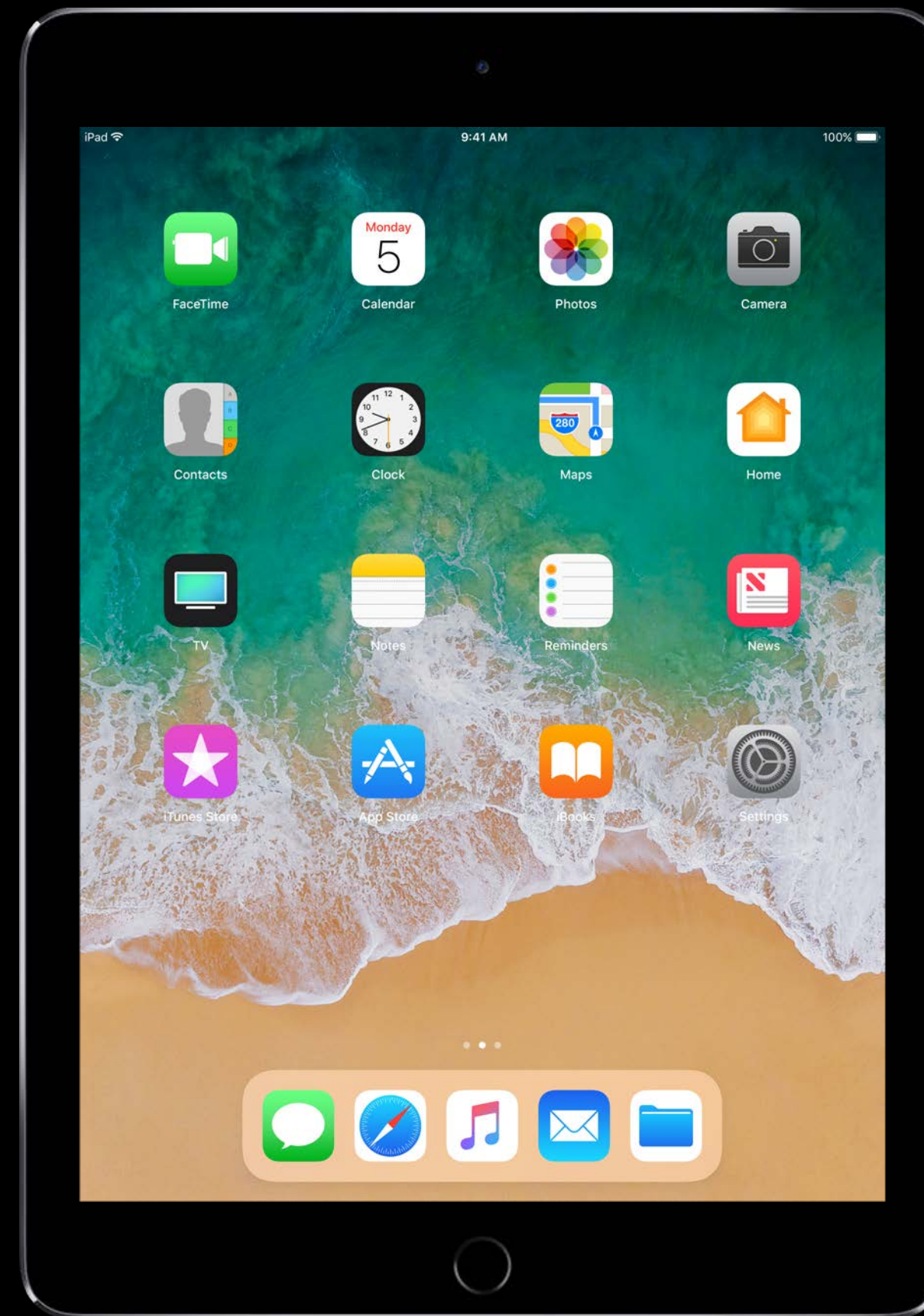
Context

Both home and mobile

Precise and focused

Lean back

Long engagements



Capabilities

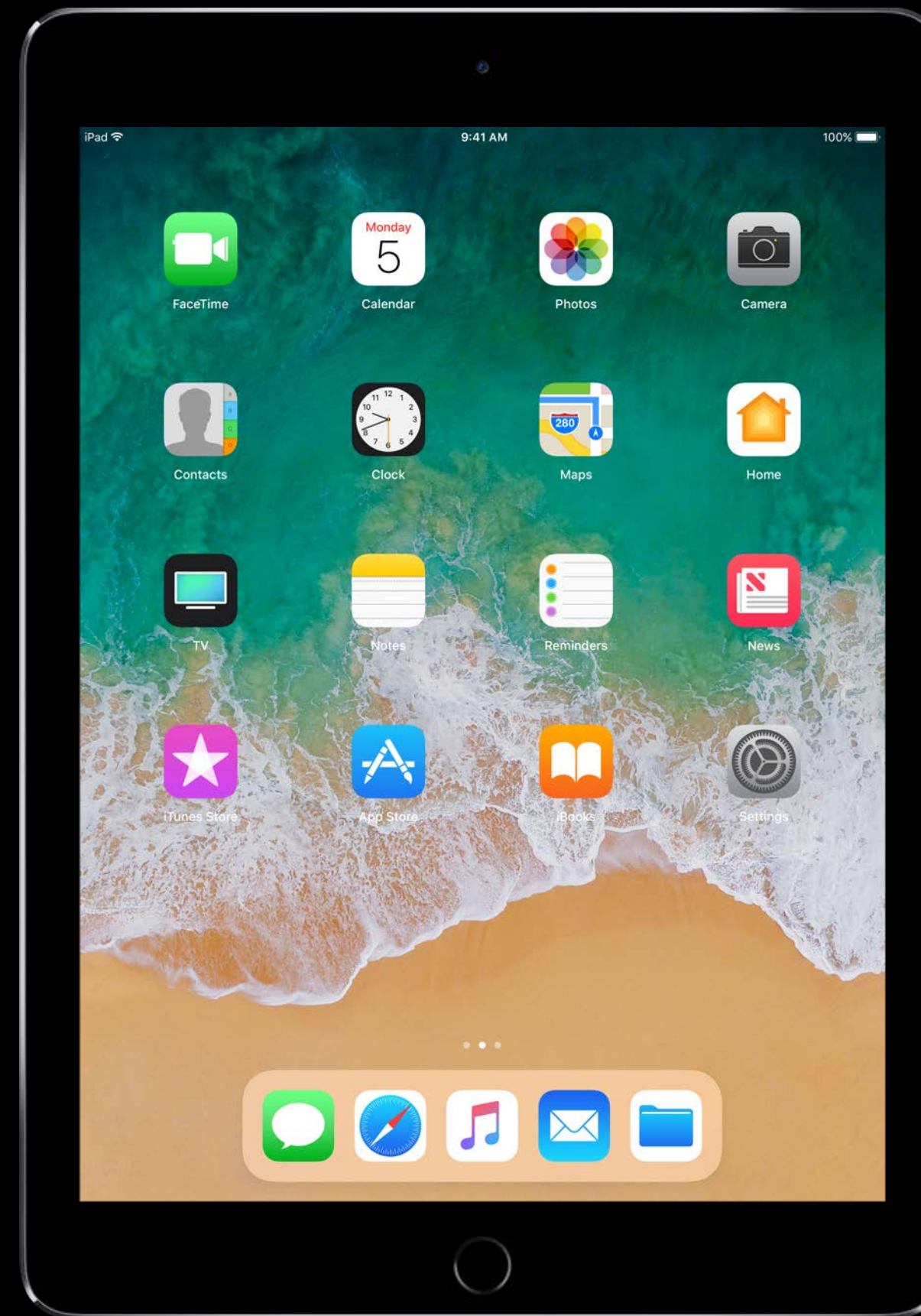
Context

Both home and mobile

Precise and focused

Lean back

Long engagements



Capabilities

Large screen

Ambient light sensor

High fidelity speaker

Touch screen

Context

Both home and mobile

Precise and focused

Lean back

Long engagements



Capabilities

Large screen

Ambient light sensor

High fidelity speaker

Precise Interaction

Context



Capabilities

Context

Professional

Precise and complex

Shared but personal

Long engagements



Capabilities

Context

Professional

Precise and complex

Shared but personal

Long engagements



Capabilities

High performance

Keyboard and mouse

Multitasking

Multi user

Context



Capabilities

Context

Shared

Stationary

Lean back

Long engagement



Capabilities

Context

Shared

Stationary

Lean back

Long engagement



Capabilities

HD display

Remote control input

Home aware

10 foot optimised

Up Next



American Gods



The Magicians





Activity



Activity

Mobile



Activity

Mobile

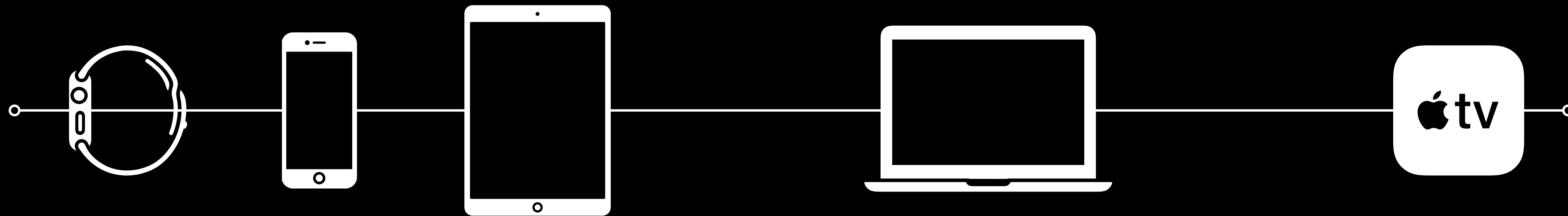
Personal

Mobile

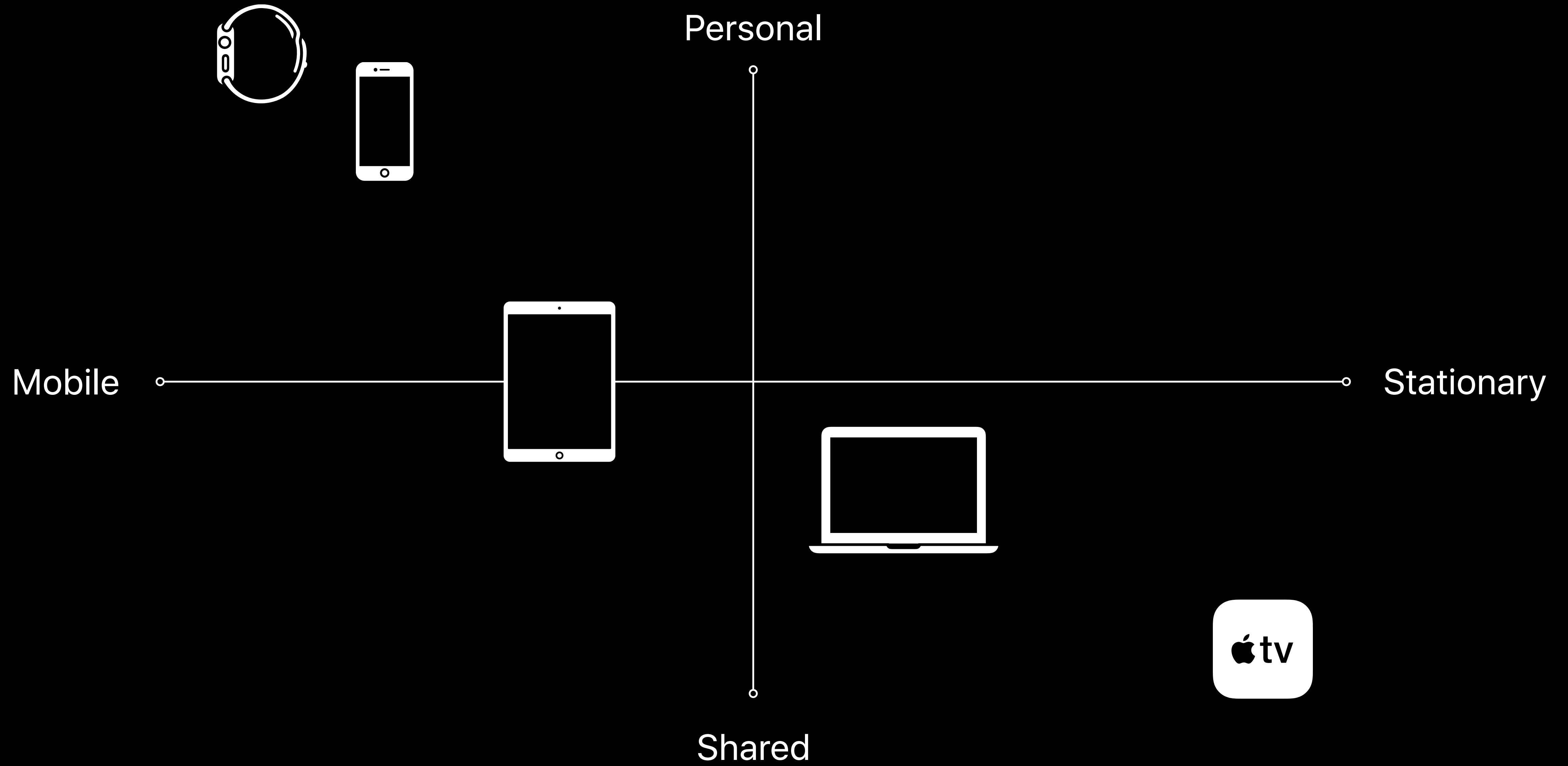


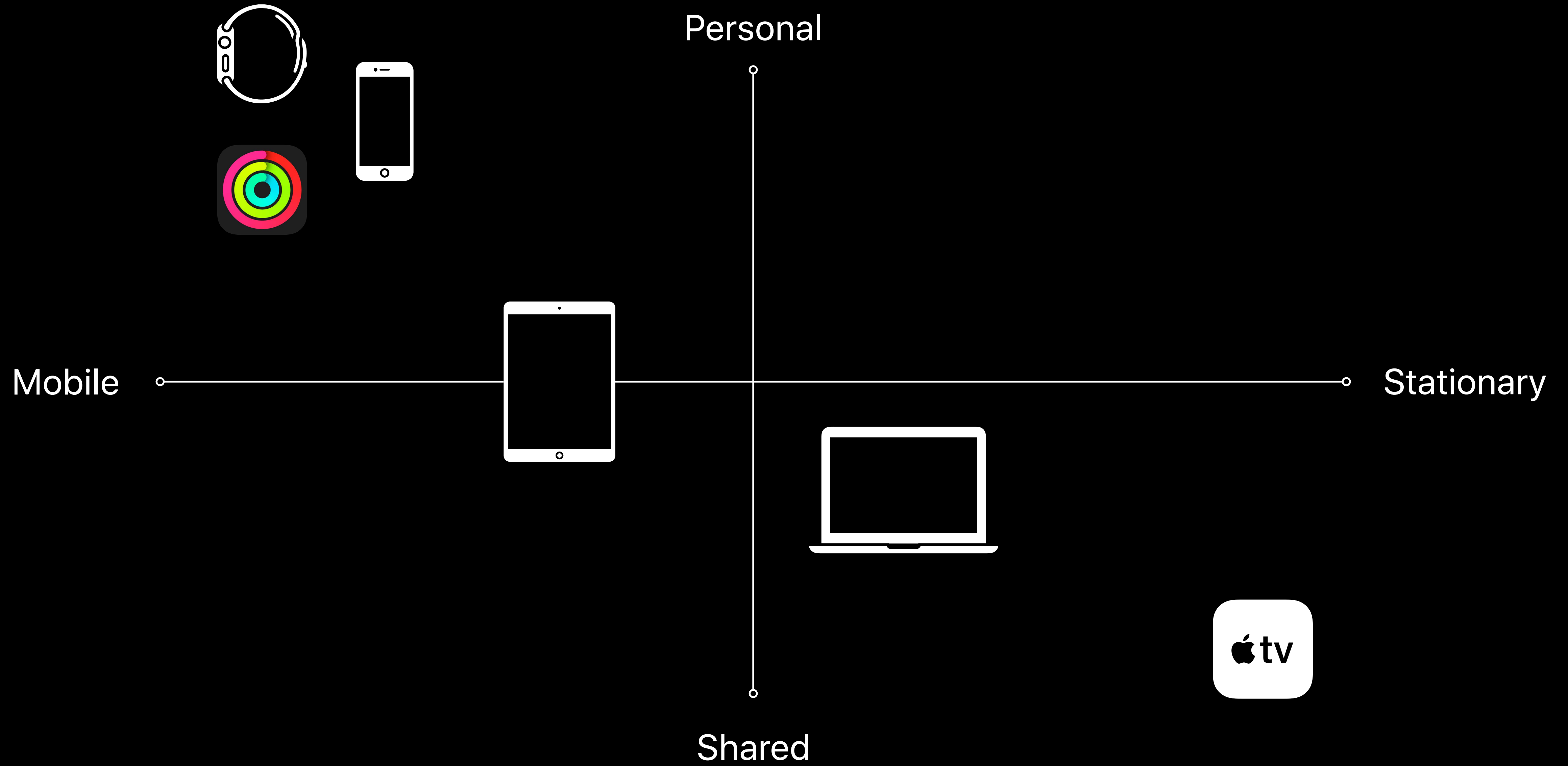
Stationary

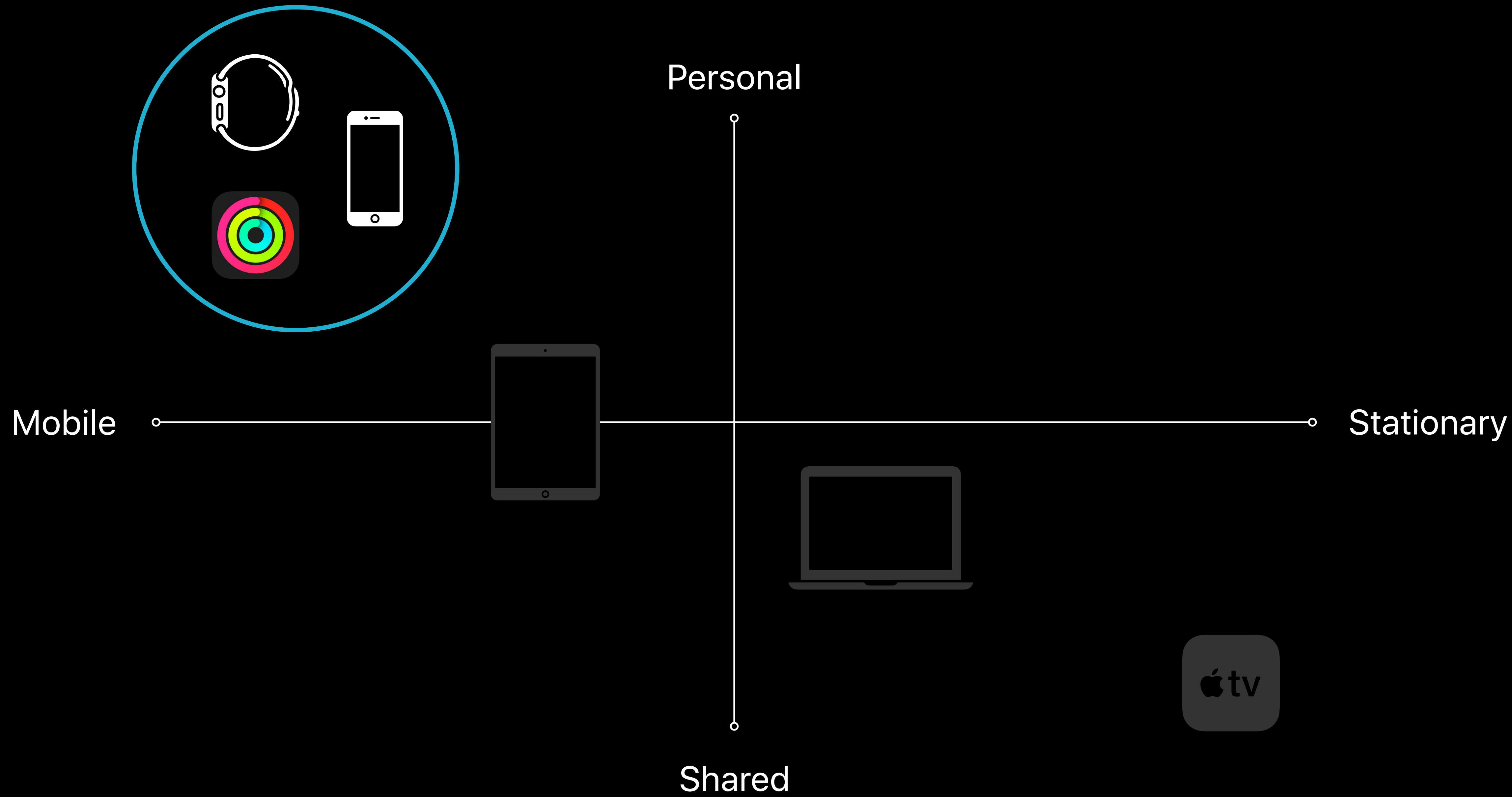
Mobile



Stationary









GarageBand



GarageBand

Precise



GarageBand

Precise

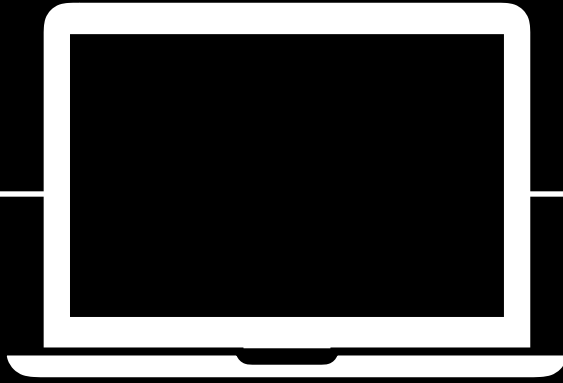
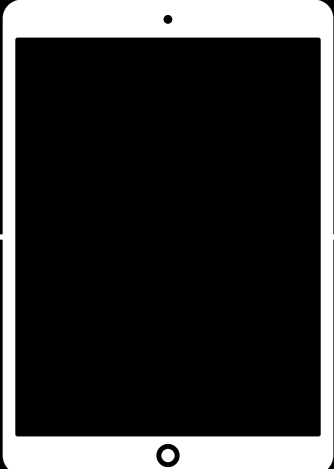
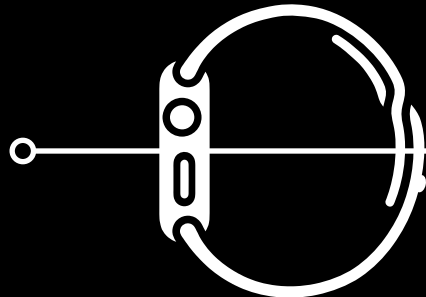
Multi Task

Loose
Interaction



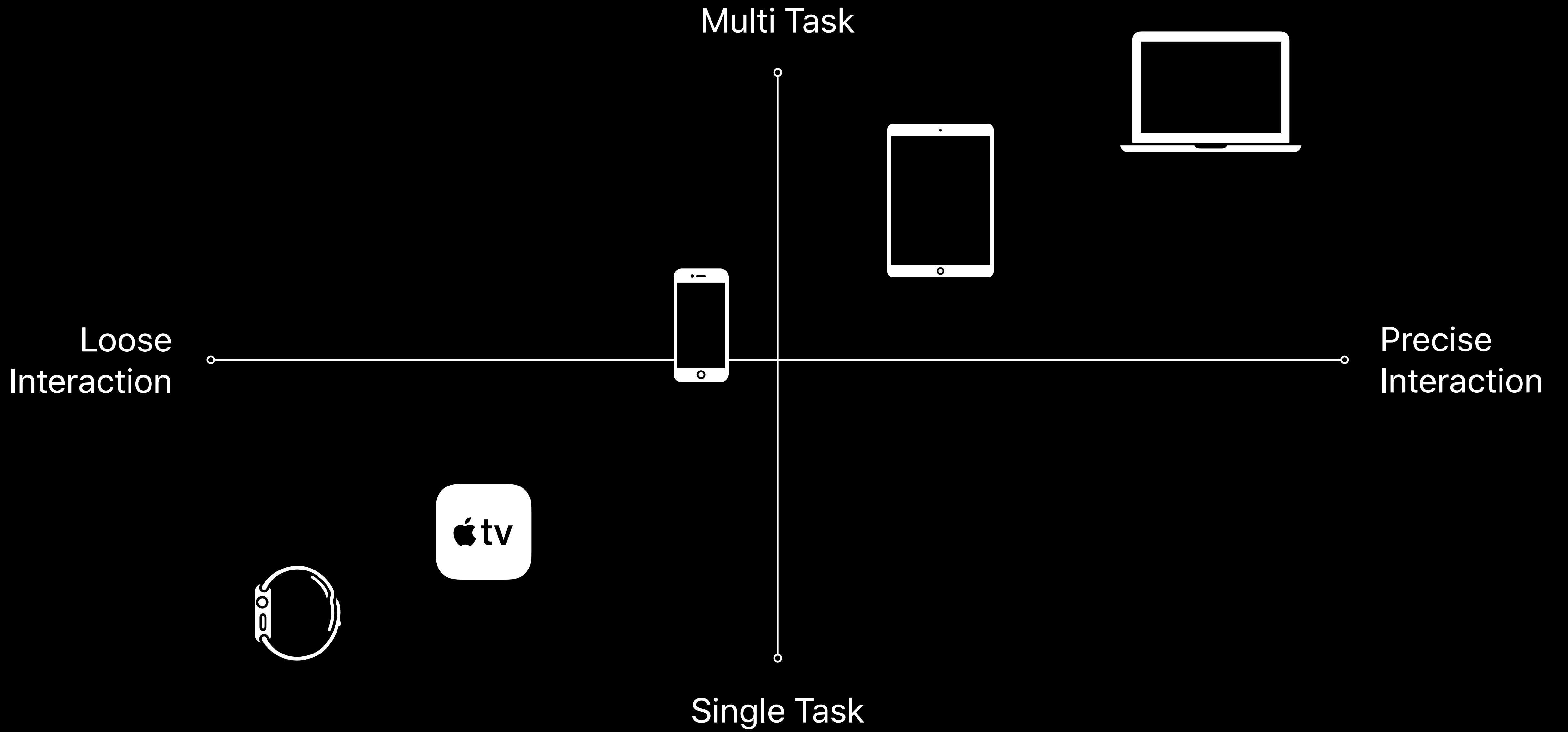
Precise
Interaction

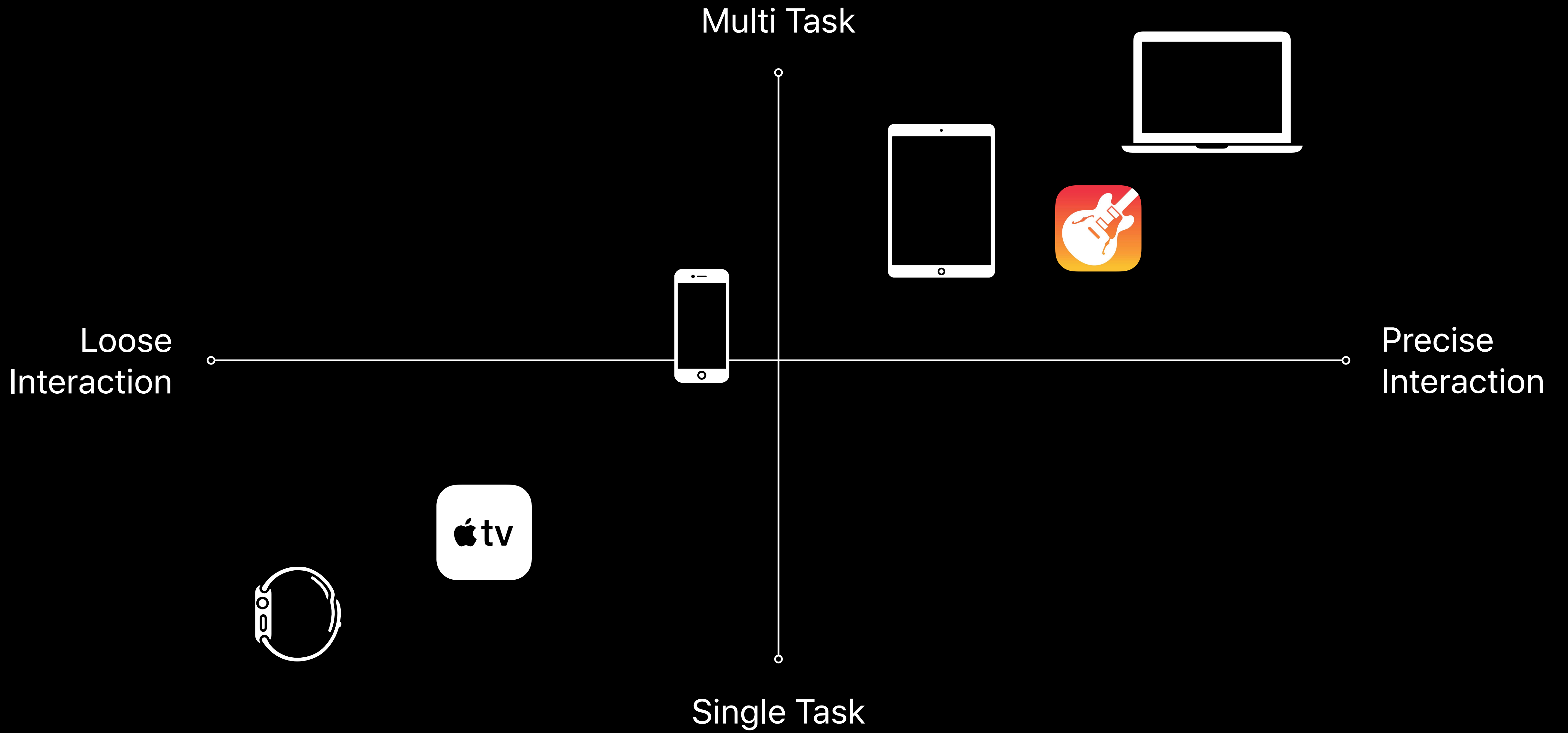
Loose
Interaction

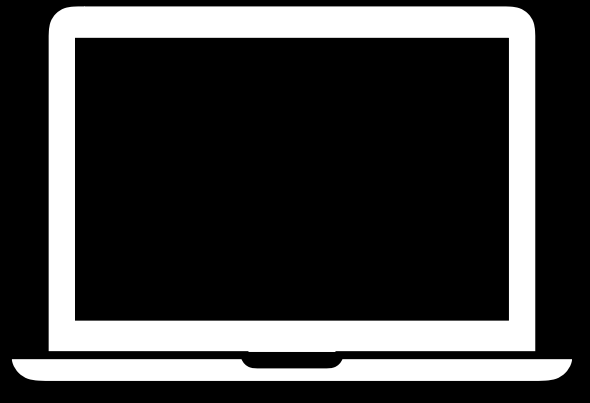
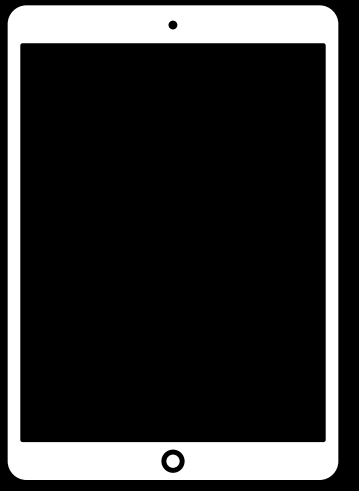
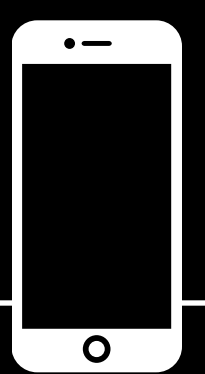
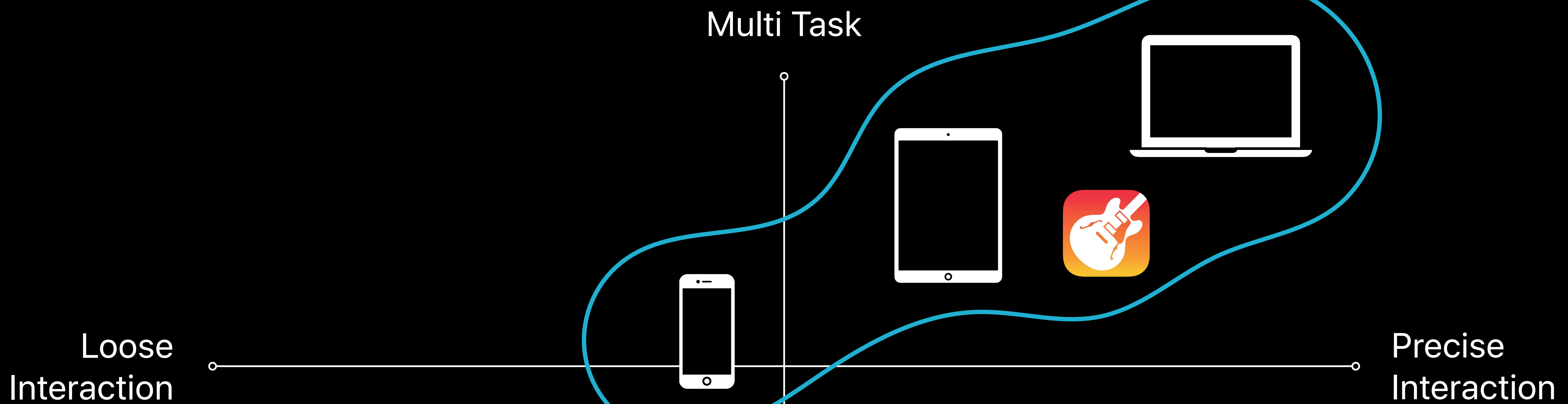


Precise
Interaction









Single Task



Select



Select

Select based on Context and Capabilities



Select

Select based on Context and Capabilities

Validate where your app benefits



Select



Adapt



Conform



Connect



Extend



Select



Adapt



Conform



Connect



Extend



Select



Adapt



Conform



Connect



Extend



Select



Adapt



Conform



Connect



Extend



Share Workout

See Workout Detail

Manage Progress History

Share Progress

See All Workouts

See Daily Progress

Manage Workouts

Filter Workouts

See Progress History

Message Friends

Share Achievement

See Friend's Progress

See All Achievements

Sort Friends

Manage Friends

See Single Achievement



Share Workout

See Workout Detail

Manage Progress History

Share Progress

See All Workouts

See Daily Progress

Manage Workouts

Filter Workouts

See Progress History

Message Friends

Share Achievement

See Friend's Progress

See All Achievements

Sort Friends

Manage Friends

See Single Achievement



See Workout Detail

Manage Progress History

Share Workout

Share Progress

See All Workouts

See Daily Progress

Manage Workouts

Filter Workouts

See Progress History

Message Friends

Share Achievement

See Friend's Progress

See All Achievements

Sort Friends

Manage Friends

See Single Achievement



Add Workout

See Daily Progress



Message Friends

See Friend's Progress

Set Move Goals

Sort Friends

2

Adapt

2

Adapt

Prioritize based on Context and Capabilities

2

Adapt

Prioritize based on Context and Capabilities

Consider features based on unique capabilities

Photoshop CC File Edit Image Layer Type Select Filter 3D View Window Help

Adobe Photoshop CC 2017

IMG_0043.jpg @ 50% (Curves 1, Layer Mask/B) *

Info

R:	142/ 142	C:	47/ 47%
G:	145/ 145	M:	36/ 36%
B:	138/ 138	Y:	43/ 43%
		K:	3/ 3%

B-bit

X: 816 W: 4032

Y: 568 H: 3024

Doc: 34.9M/34.9M

Click and drag to interact with the 3D scene.

Histogram

Libraries Adjustments

Add an adjustment

Properties

Layers Channels Paths

50% Doc: 34.9M/34.9M

MacBook Pro

Adobe Photoshop CC 2017

Feather: 0 px Anti-alias Style: Normal Width: Height: Select and Mask...

C_0043.jpg @ 50% (Curves 1, Layer Mask/8) *



Info

R:	142/ 142	C:	47/ 47%
G:	145/ 145	M:	36/ 36%
B:	138/ 138	Y:	43/ 43%
K:		K:	3/ 3%

B-bit

X:	616	W:	4032
Y:	550	H:	3024

Doc: 34.9M/34.9M

Click and drag to interact with the 3D scene.

Histogram Navigator



Libraries Adjustments

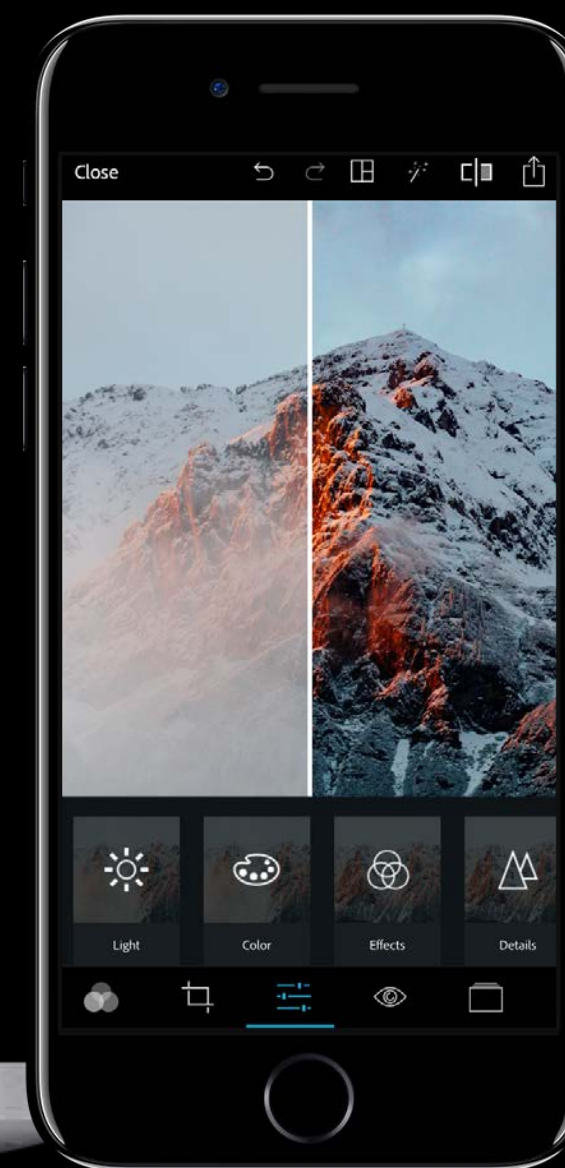
Add an adjustment

Properties

Layers Channels Paths



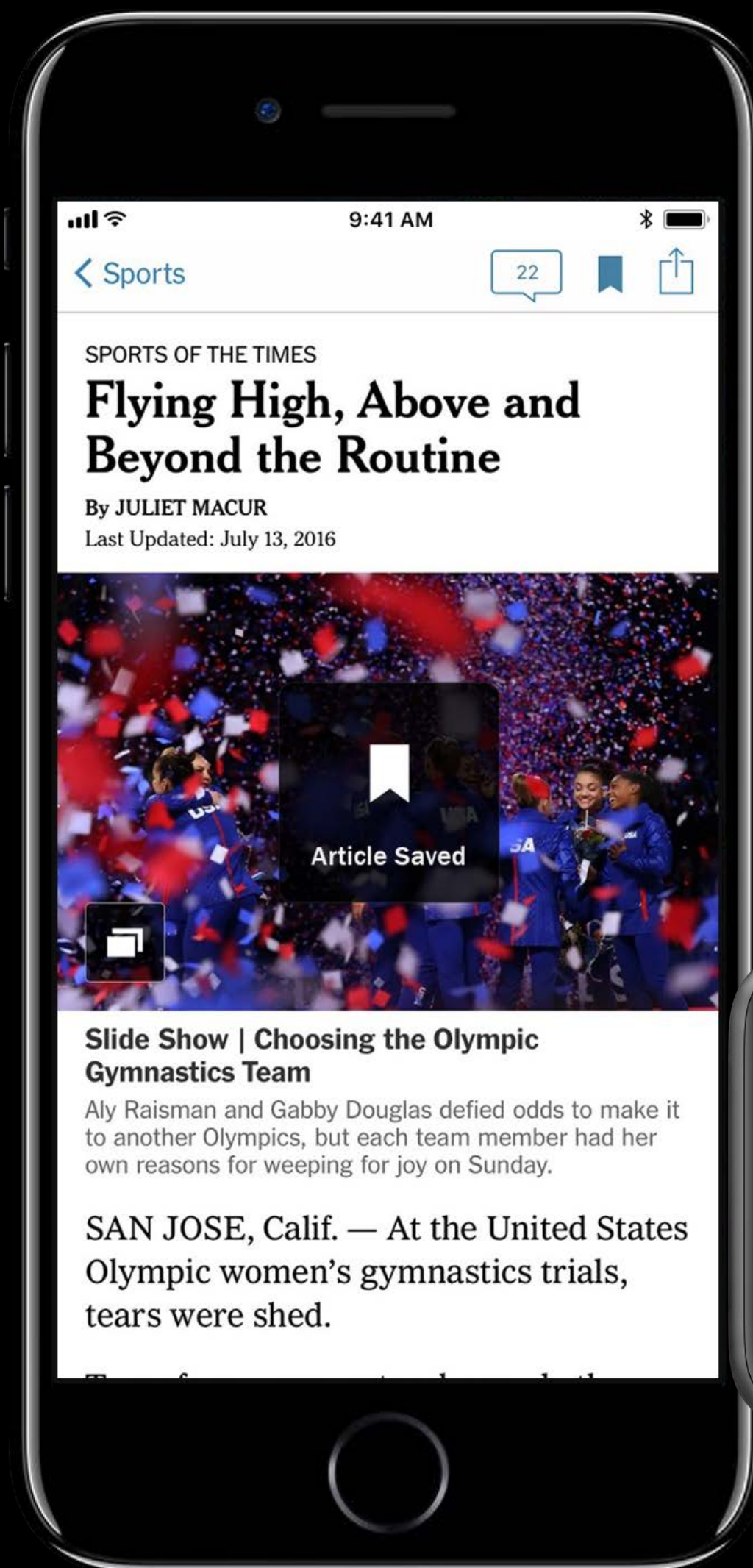
MacBook Pro



Photoshop Express

Photoshop Fix

Photoshop Mix





Select



Adapt



Conform



Connect



Extend



Select



Adapt



Conform



Connect



Extend



Select



Adapt



Conform



Connect



Extend



Select



Adapt



Conform



Connect



Extend

Consistent

Consistent \neq Identical

**Brand
Consistency**

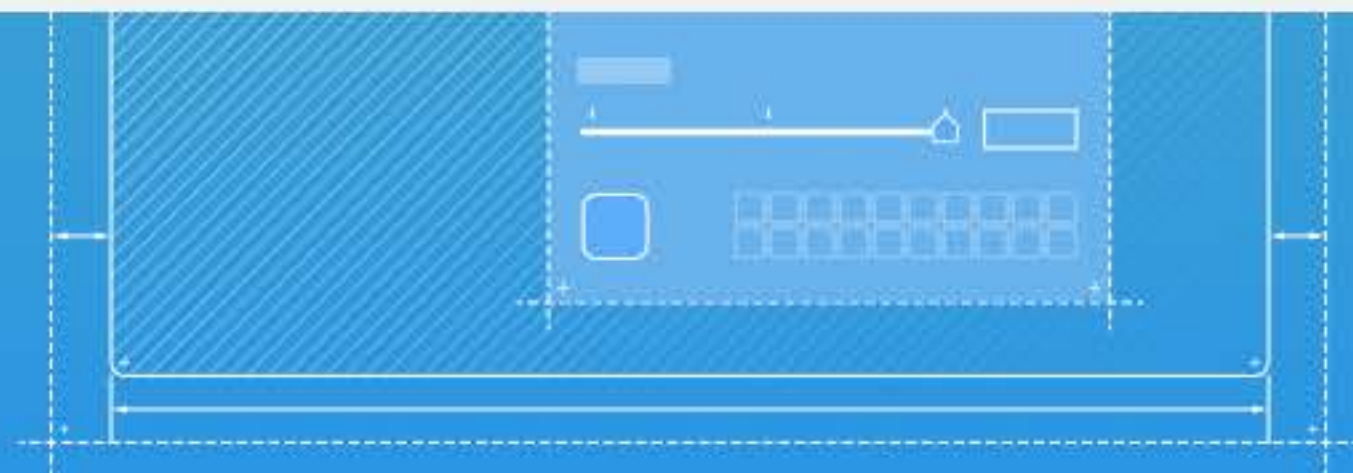
**Brand
Consistency**

**Platform
Consistency**

**Brand
Consistency**



**Platform
Consistency**



Human Interface Guidelines

Get in-depth information and UI resources for designing great apps that integrate seamlessly with Apple platforms.

[macOS >](#) [iOS >](#) [watchOS >](#) [tvOS >](#) [CarPlay >](#)





Headline

Body

Footnote

Caption1

Caption2



Title 1

Title 2

Title 3

Headline

Callout

Body

Subhead

Footnote

Caption1

Caption2



Title 1

Title 2

Title 3

Headline

Callout

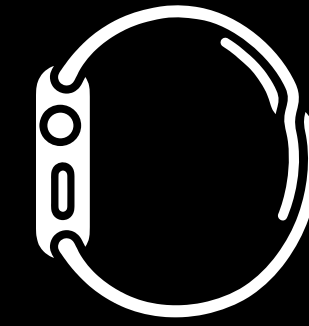
Body

SUBHEAD

Footnote

Caption1

Caption2



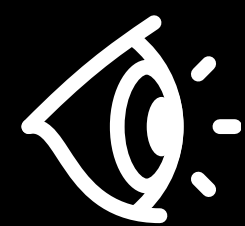
Hello world!



Hello world!

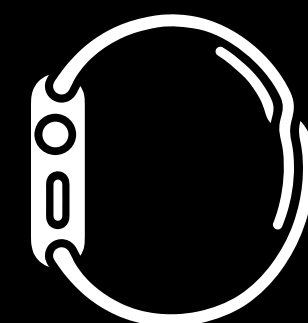


Hello world!

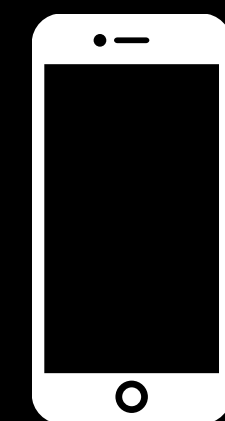


0.5 - 1 ft

15 - 30 cm



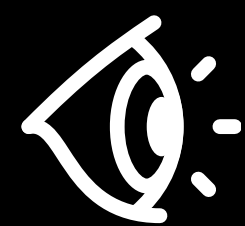
Hello world!



Hello world!

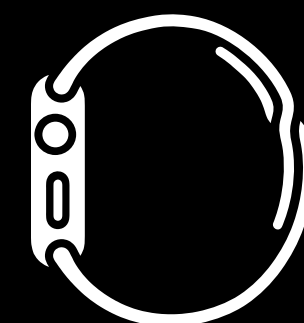


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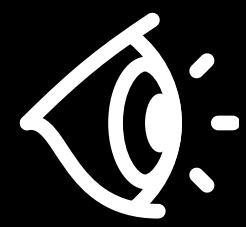


0.5 - 1 ft

15 - 30 cm

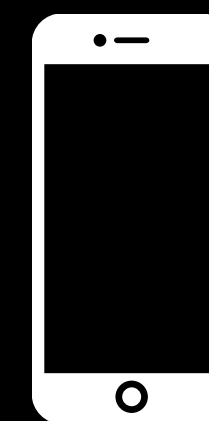


Hello world!



1 - 1.5 ft

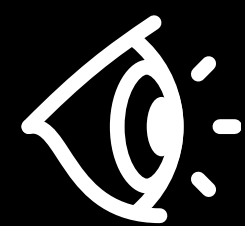
30 - 40 cm



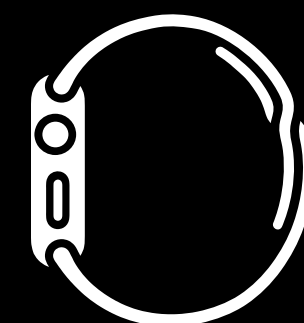
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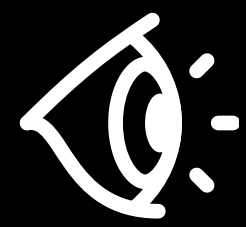
Hello world!



0.5 - 1 ft
15 - 30 cm



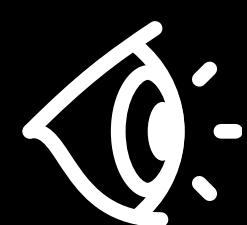
Hello world!



1 - 1.5 ft
30 - 40 cm



Hello world!



7 - 10 ft
2 - 3m



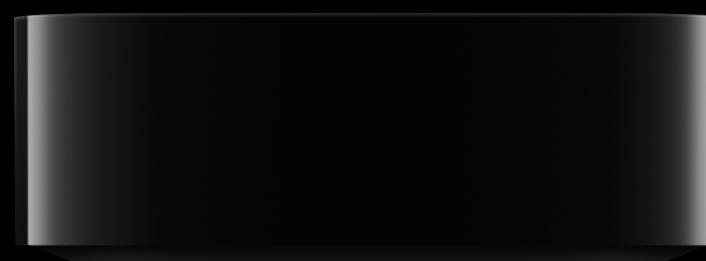
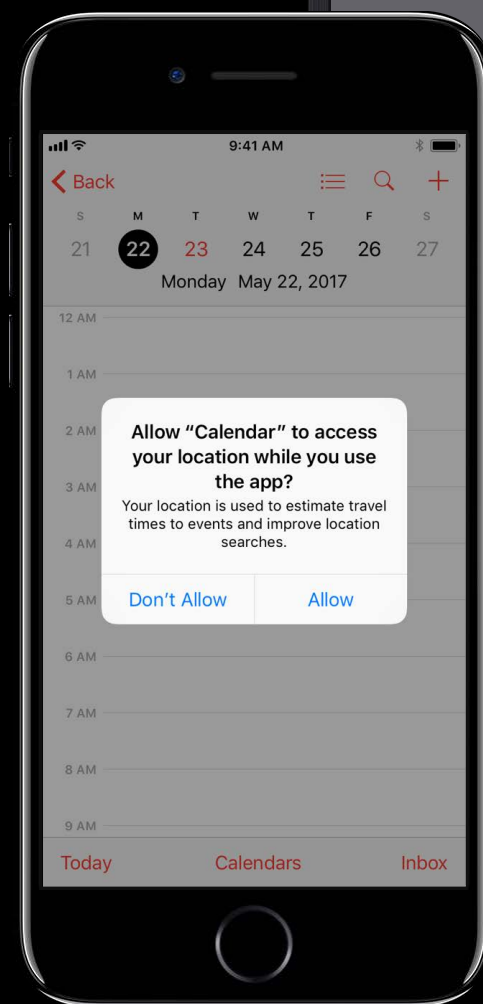
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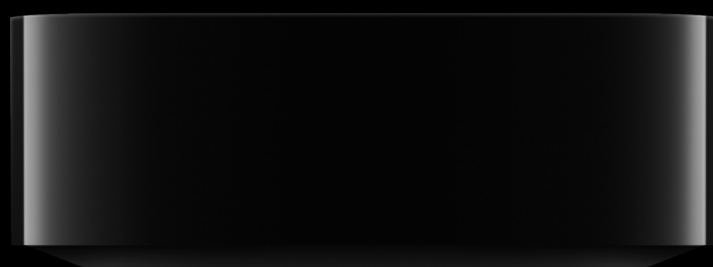
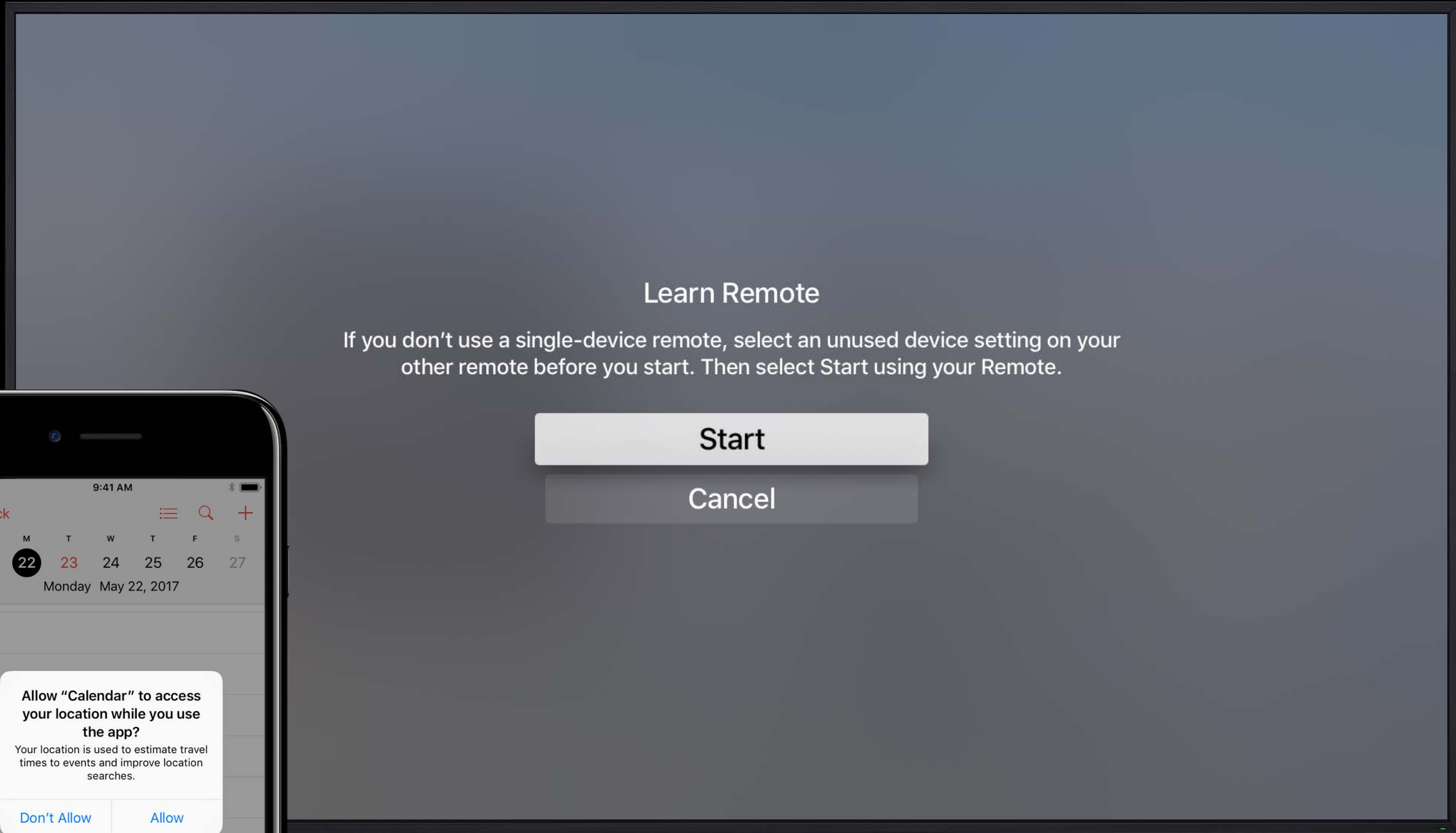
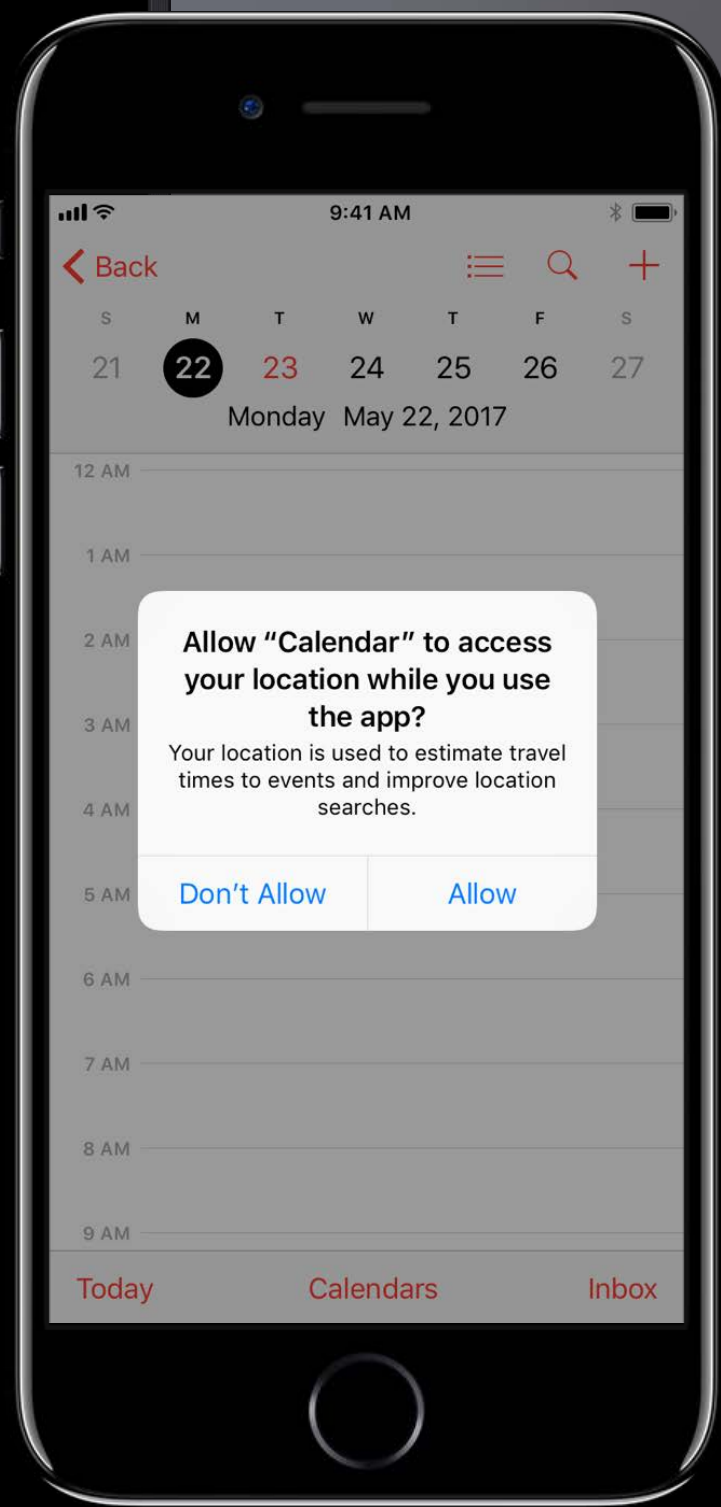
Learn Remote

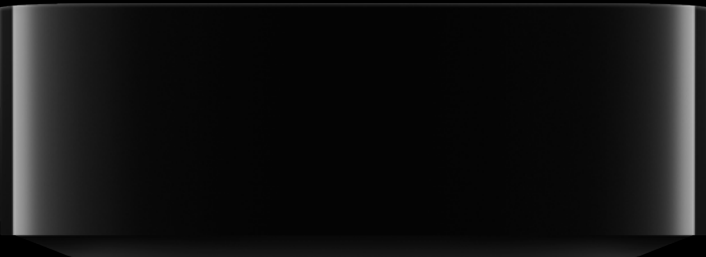
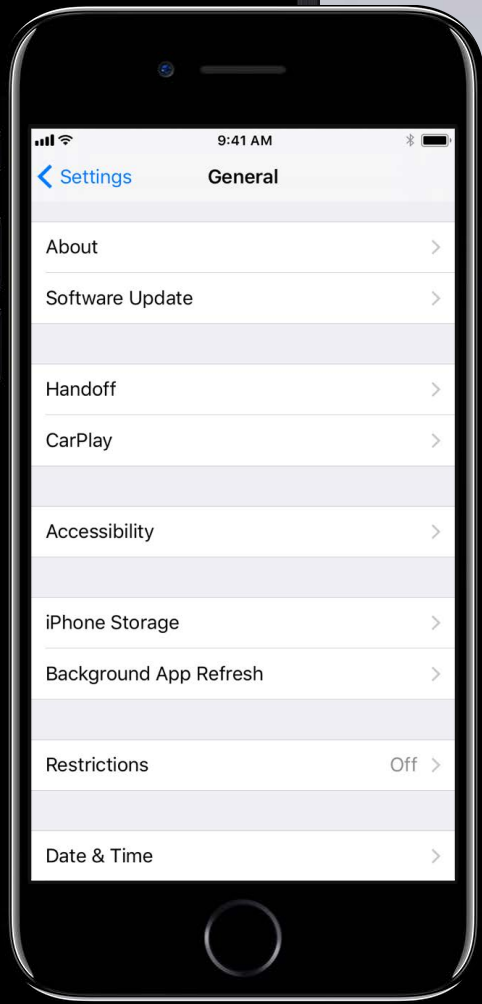
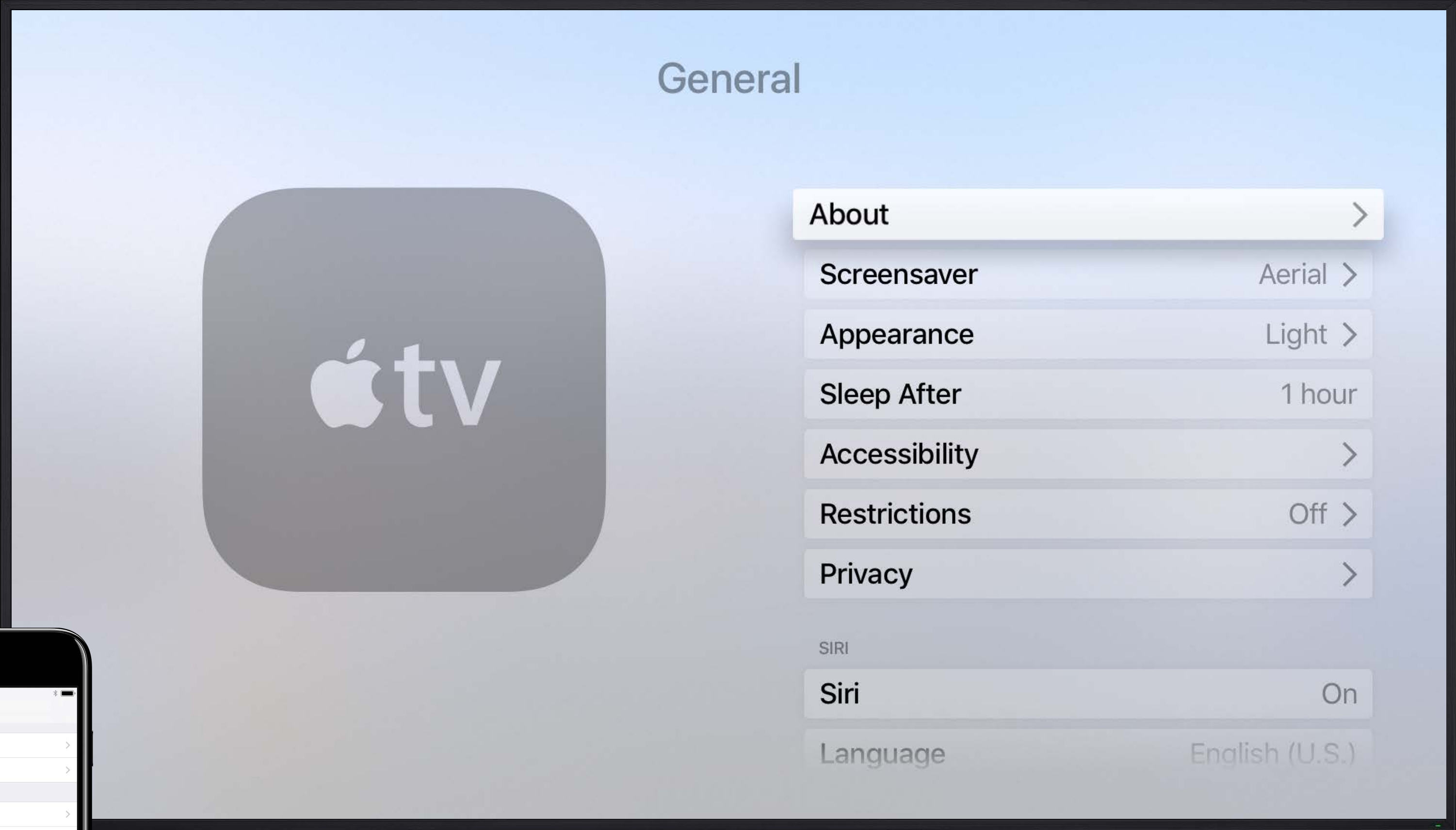
If you don't use a single-device remote, select an unused device setting on your other remote before you start. Then select Start using your Remote.

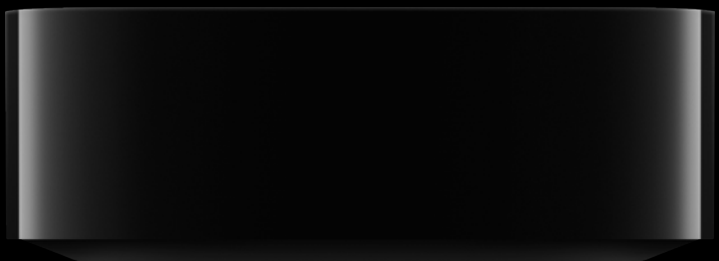
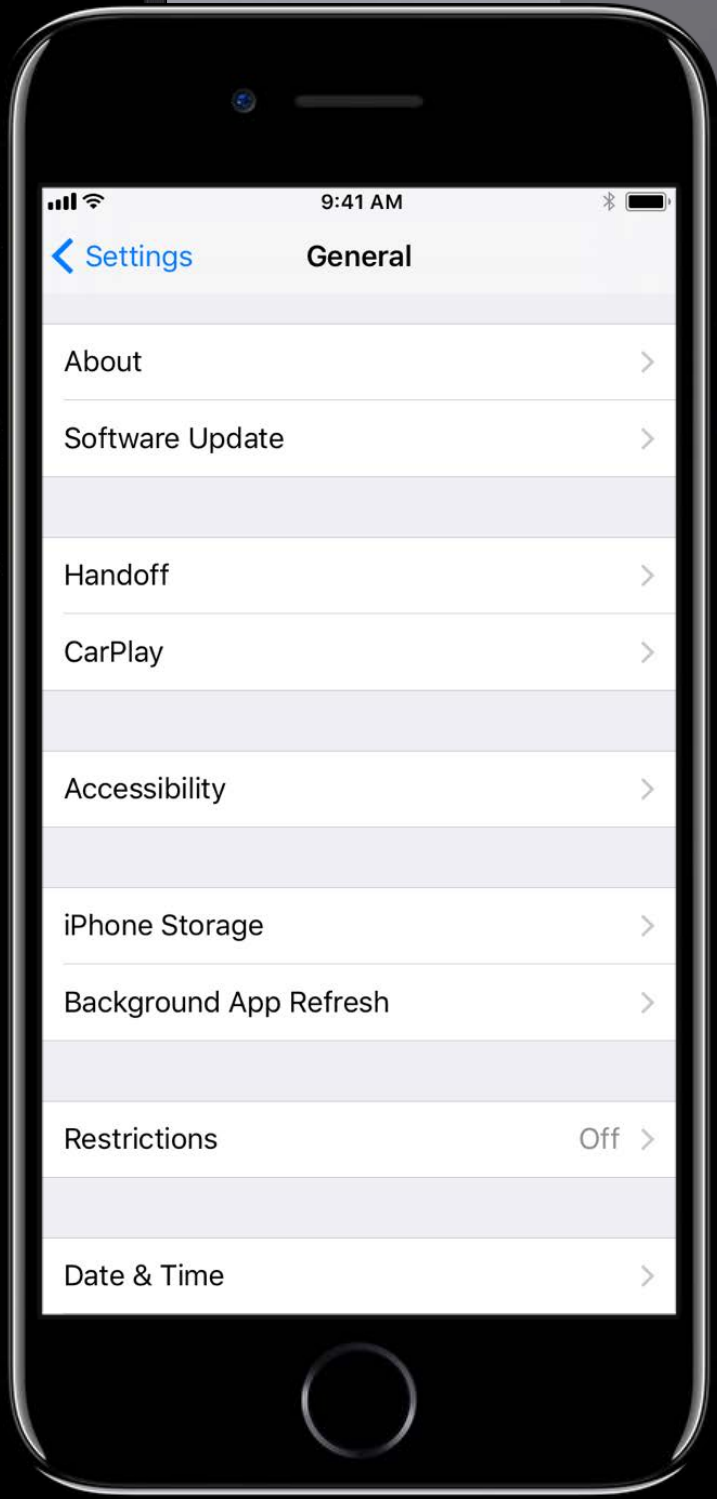
Start

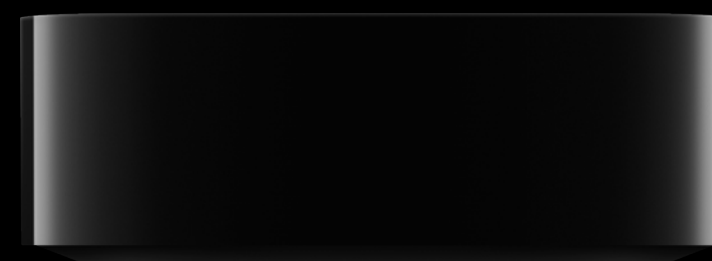
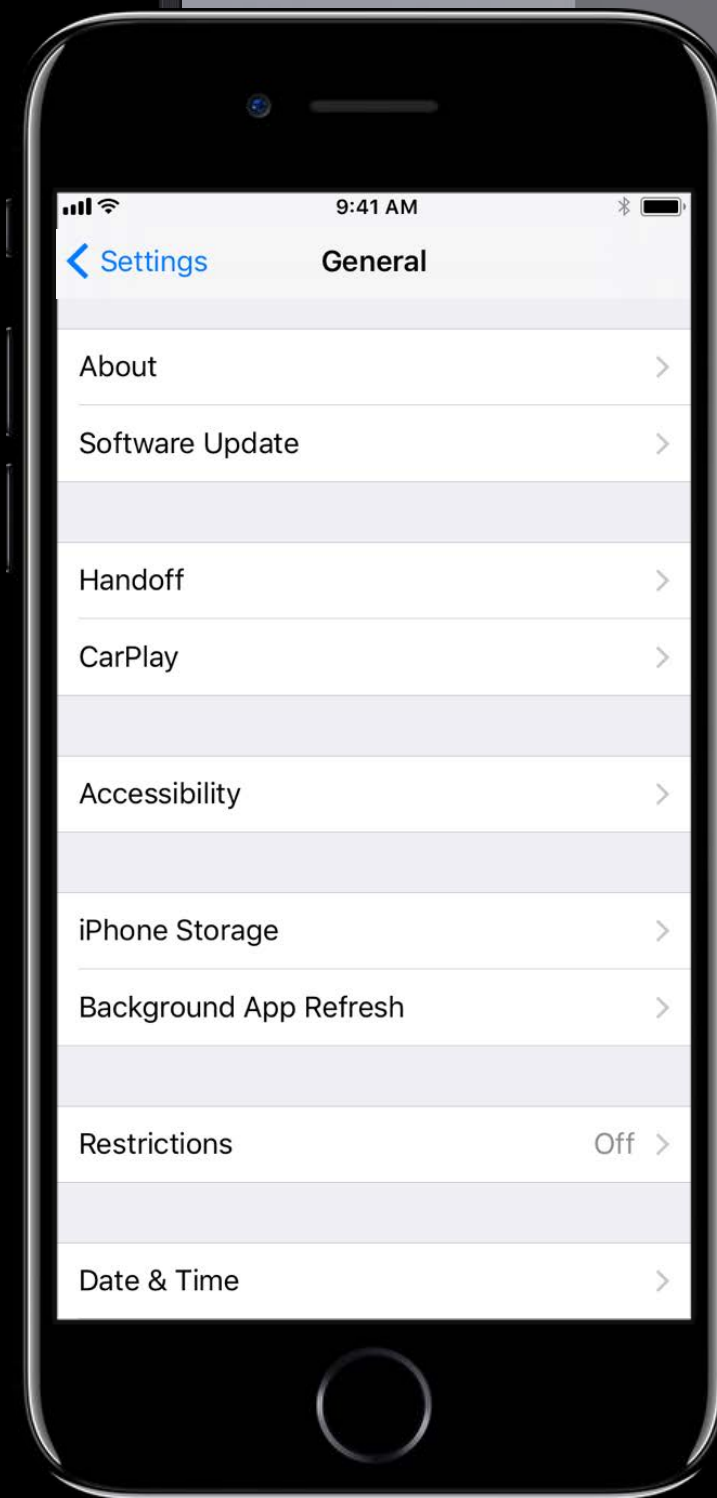
Cancel

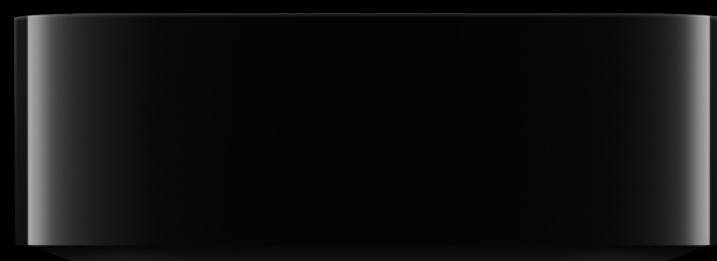


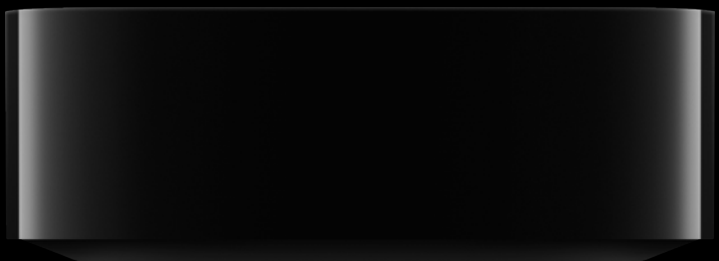
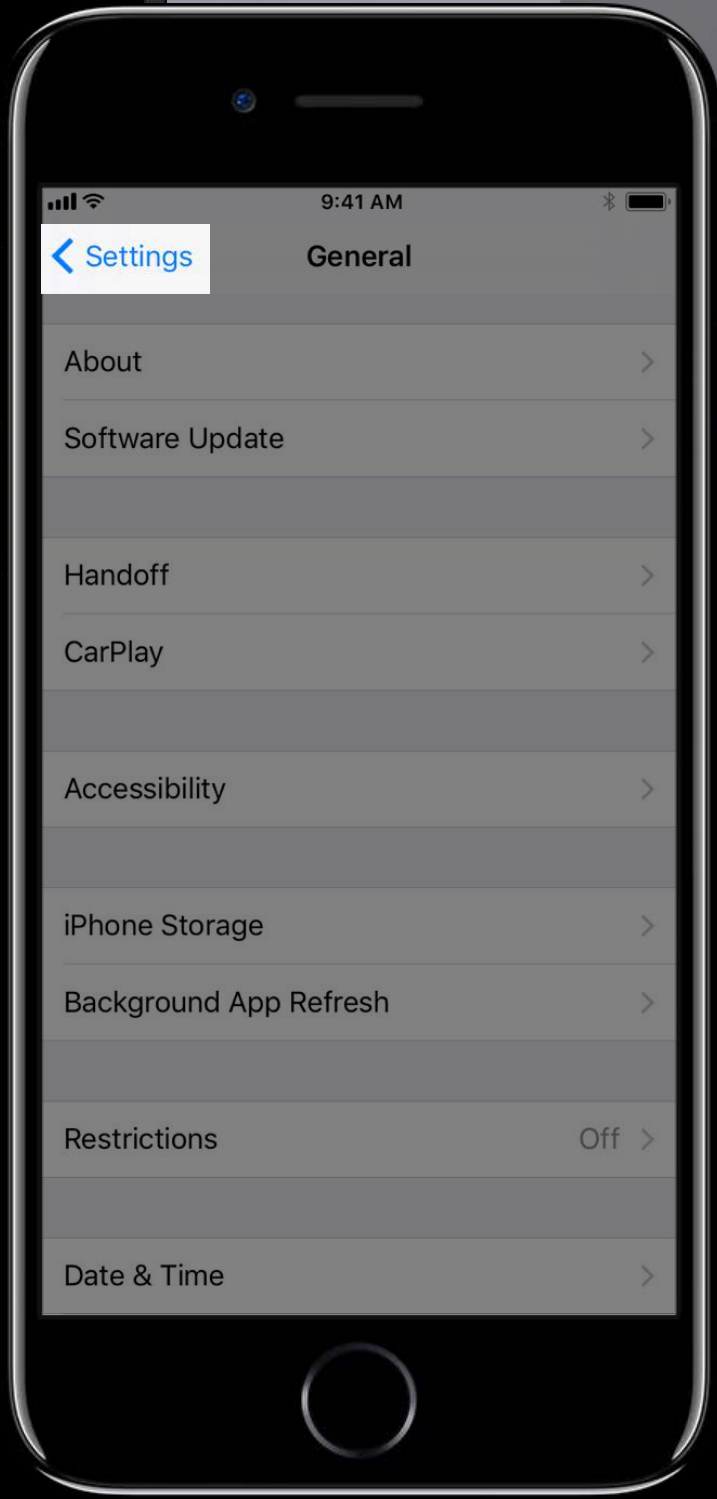


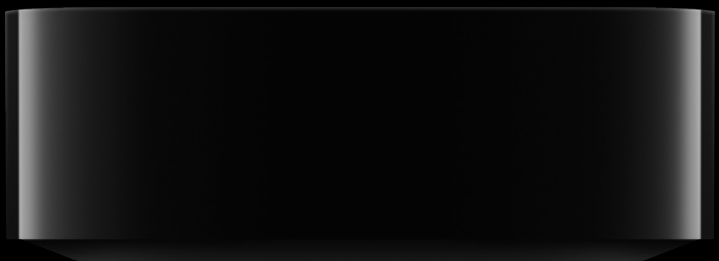
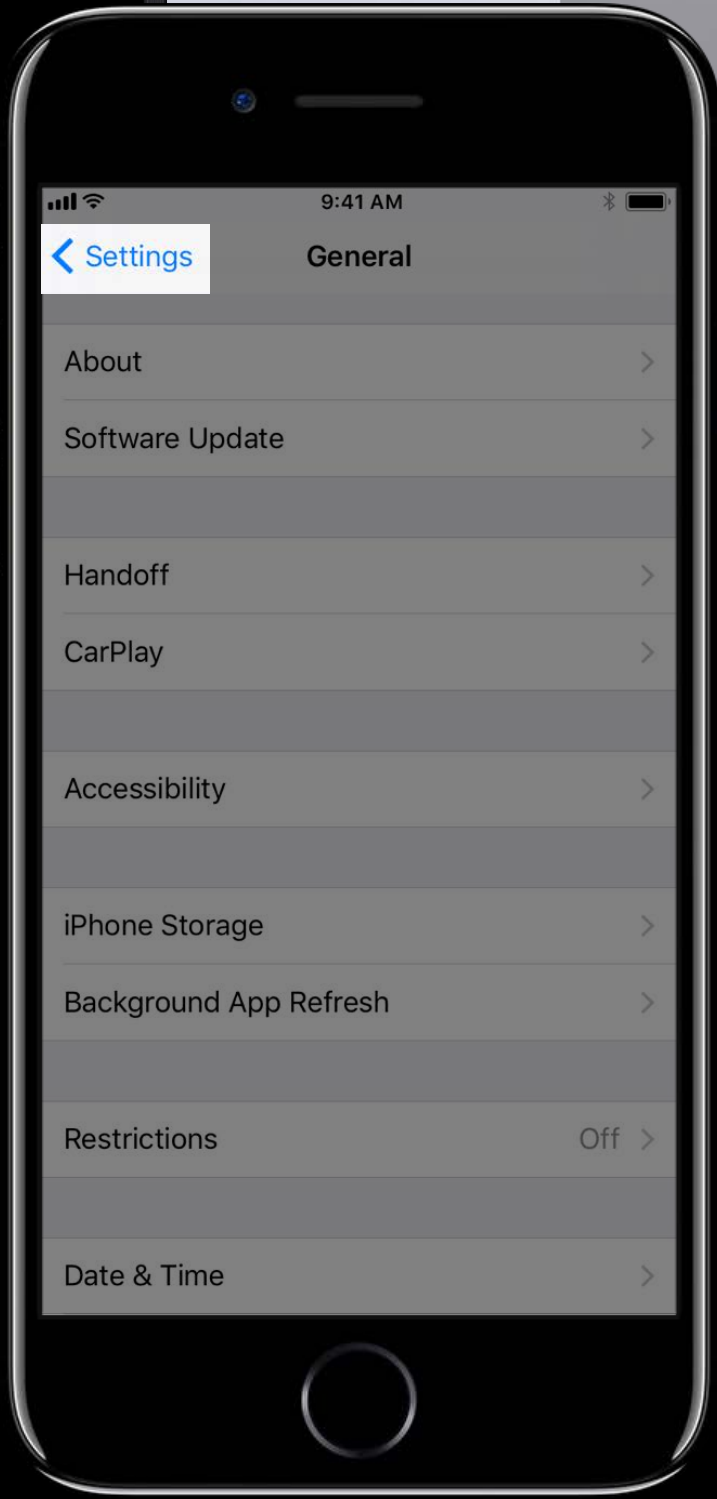
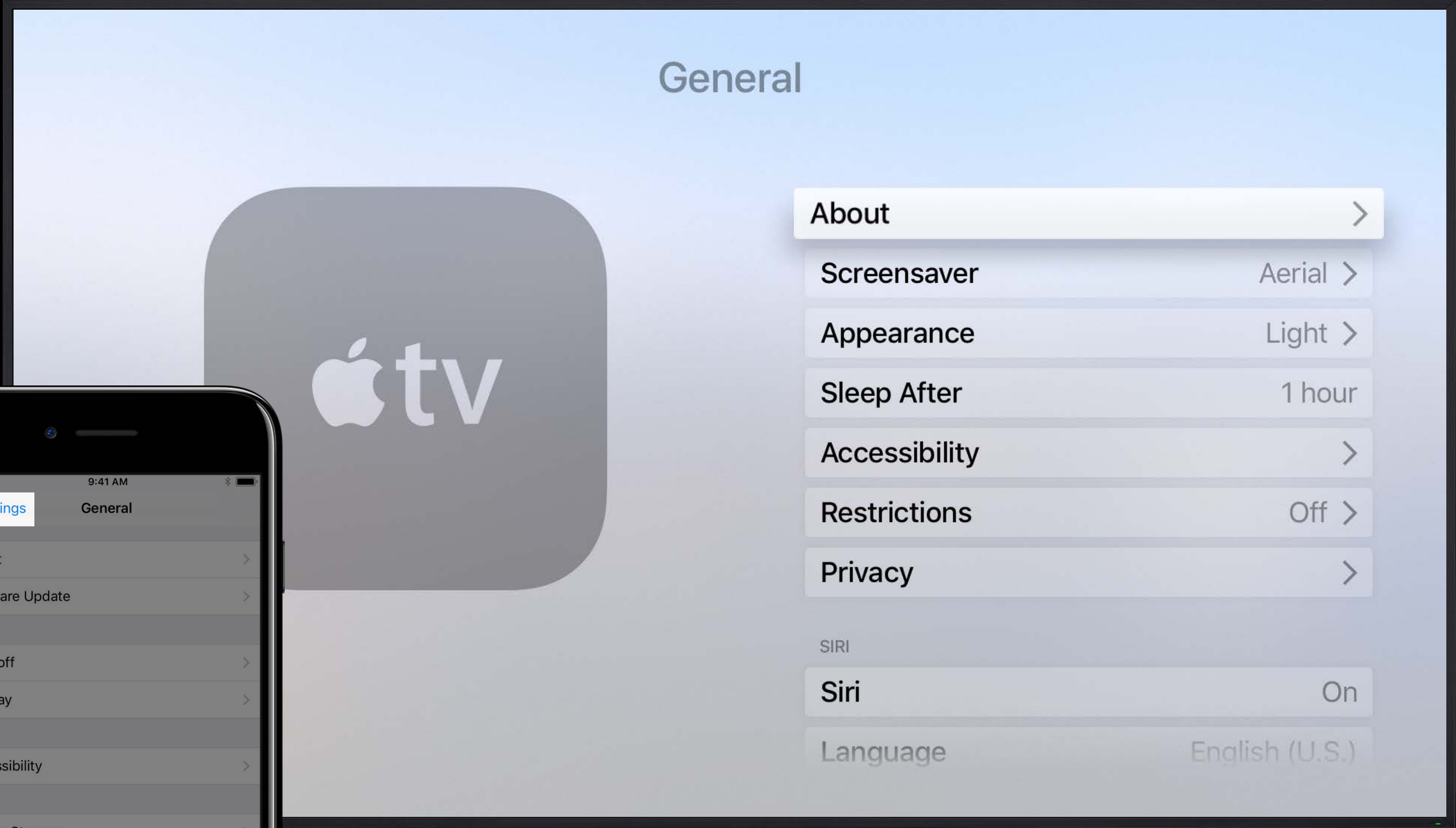


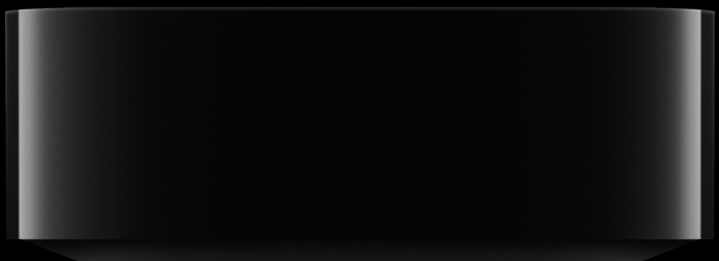
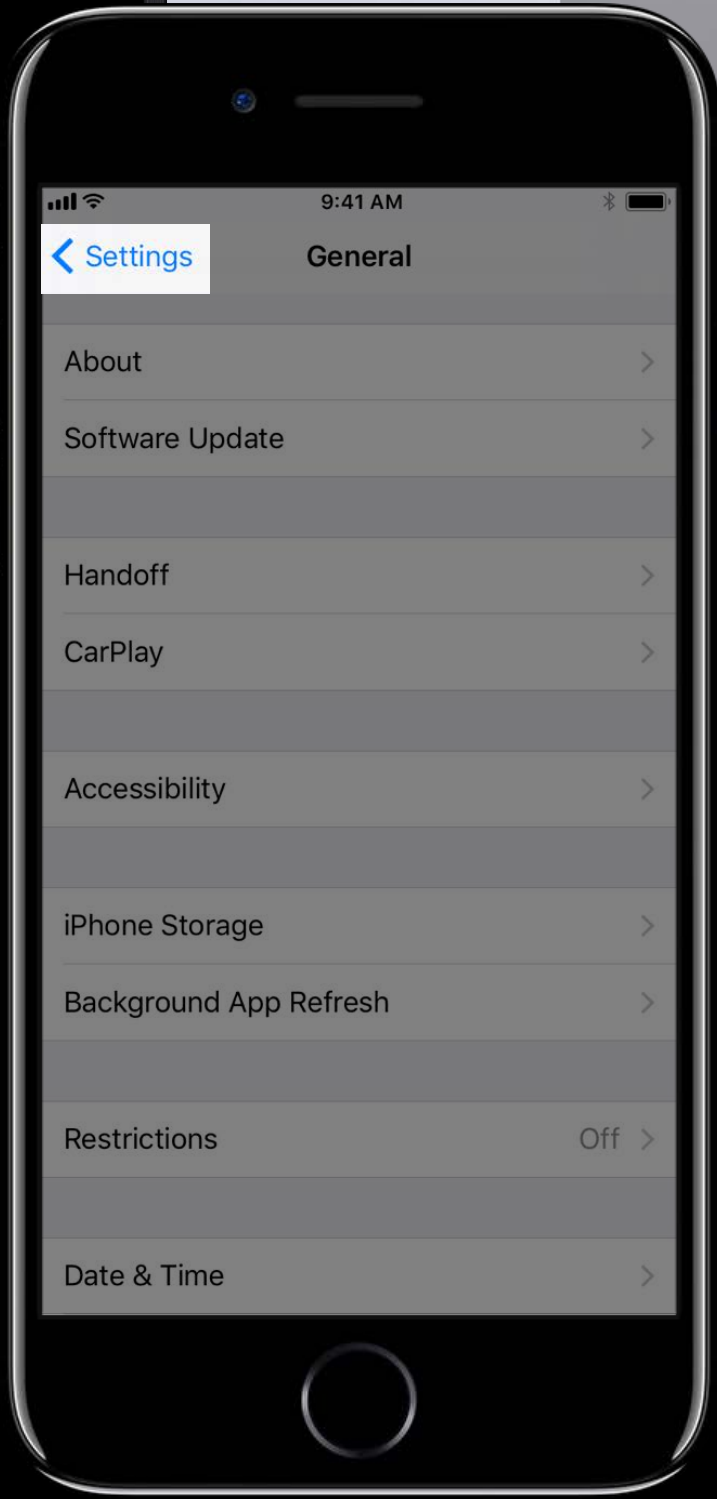
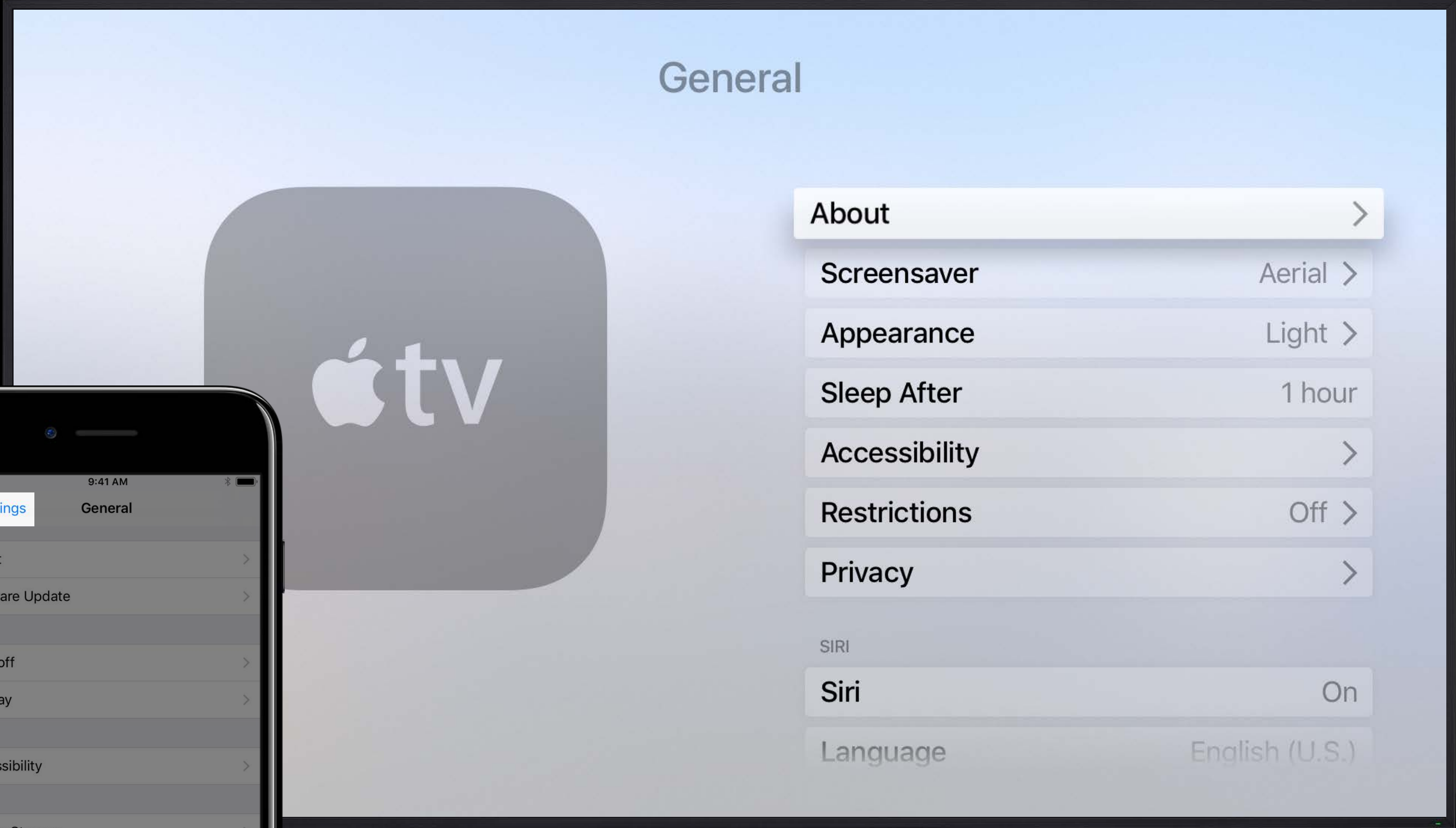












3

Conform

3

Conform

Balance between brand and platform guidelines

3

Conform

Balance between brand and platform guidelines

Make your brand recognizable

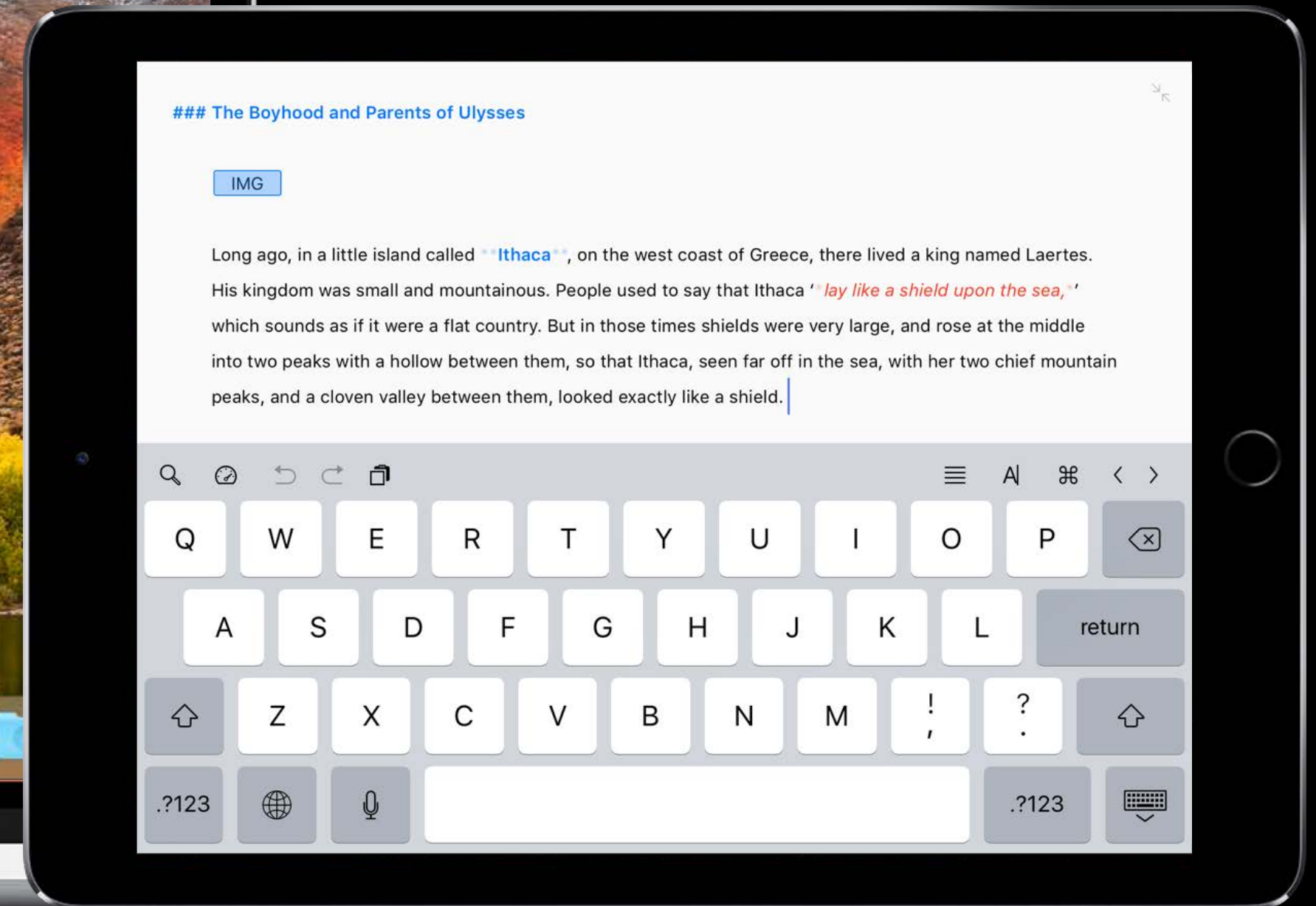
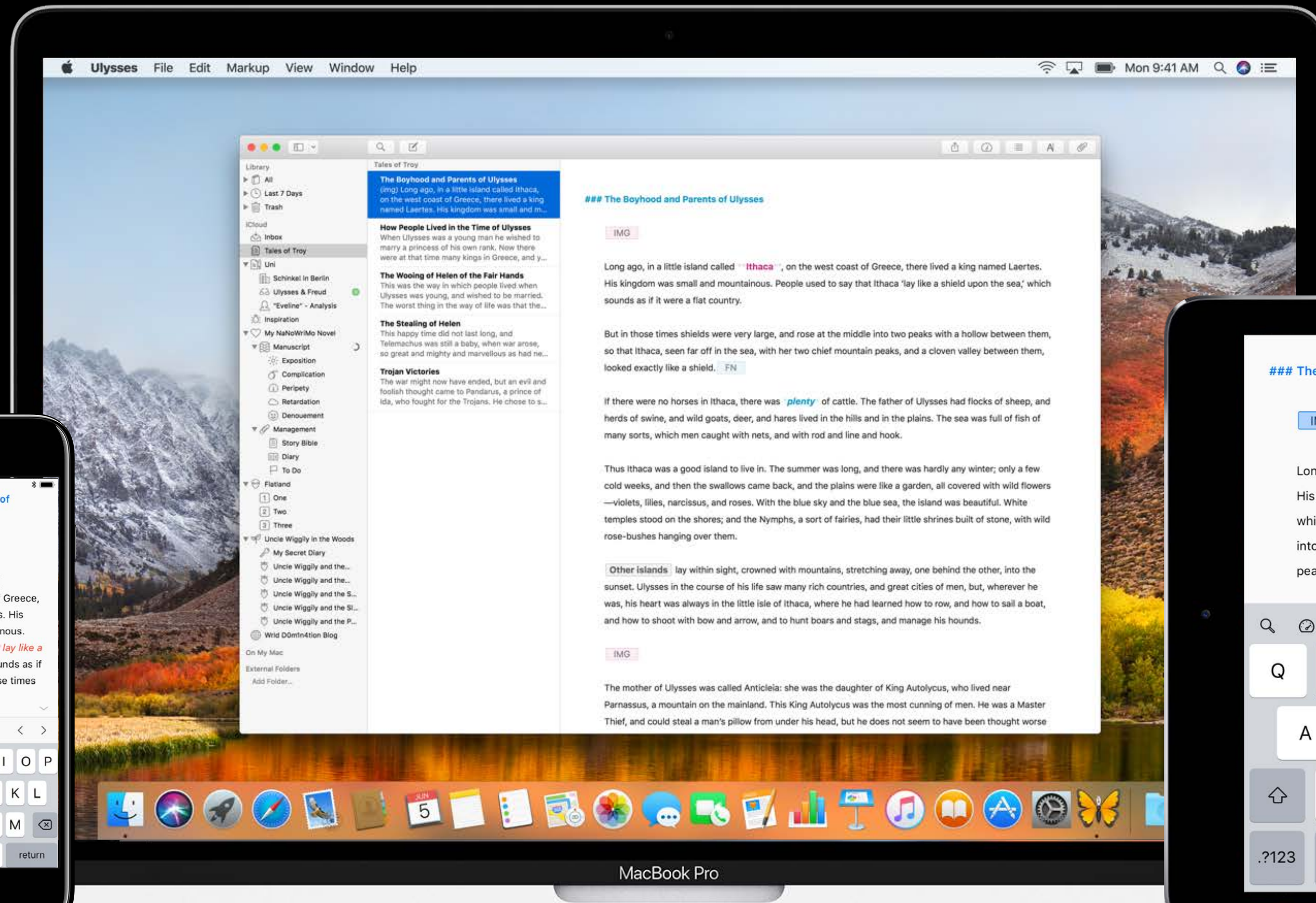
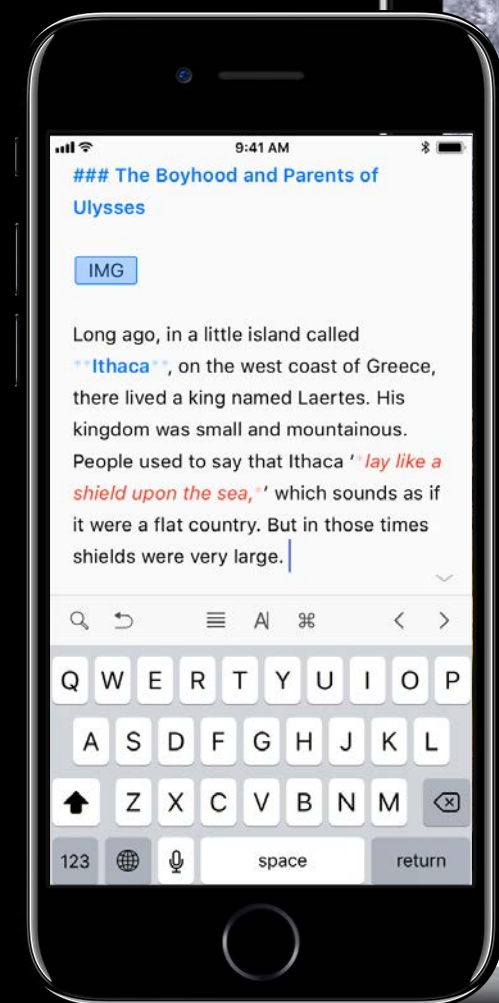
3

Conform

Balance between brand and platform guidelines

Make your brand recognizable

Align to platform guidelines





5 LUNGES



9 SQUAT JUMPS



8 BICYCLE CRUNCHES

Don't rush through each crunch.



10/32



1:21



Here Is How It Works:



OK, GOT IT





Select



Adapt



Conform



Connect



Extend



Select



Adapt



Conform



Connect



Extend



Select



Adapt



Conform



Connect



Extend



Select



Adapt



Conform

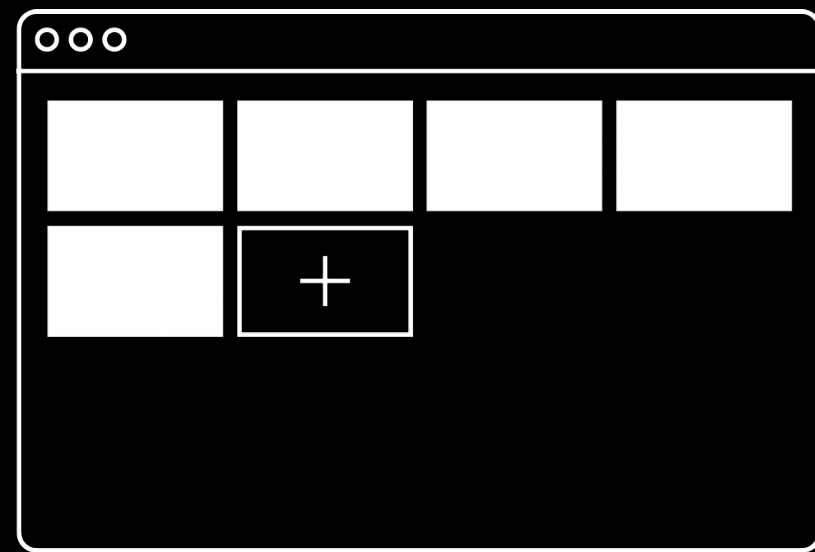


Connect



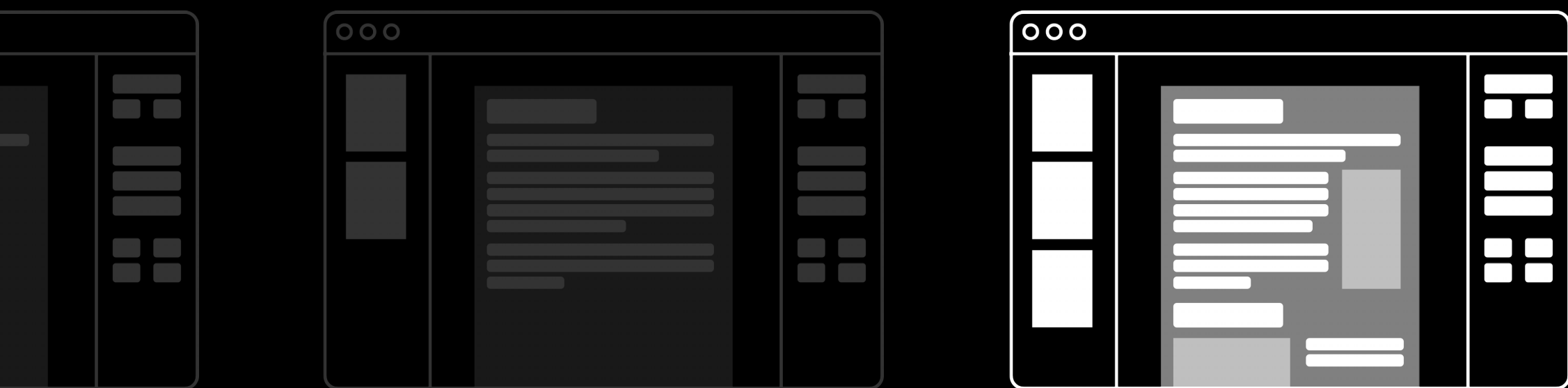
Extend





Enter

Exit



Exit

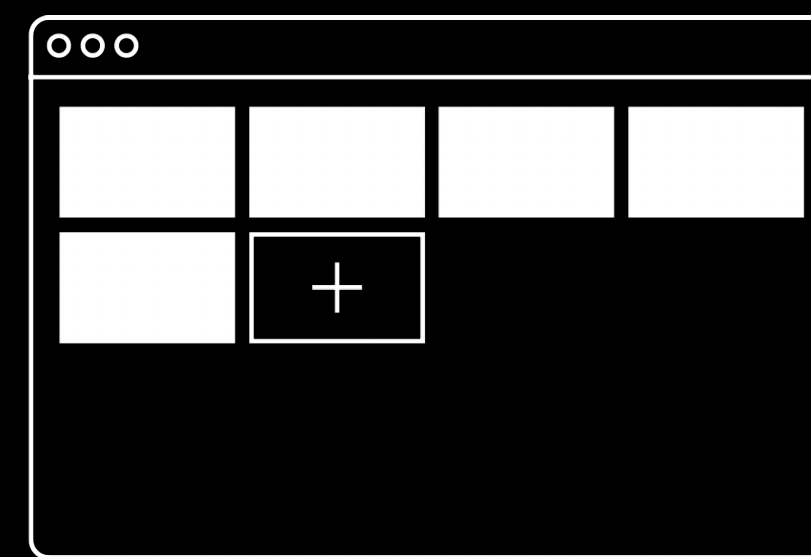
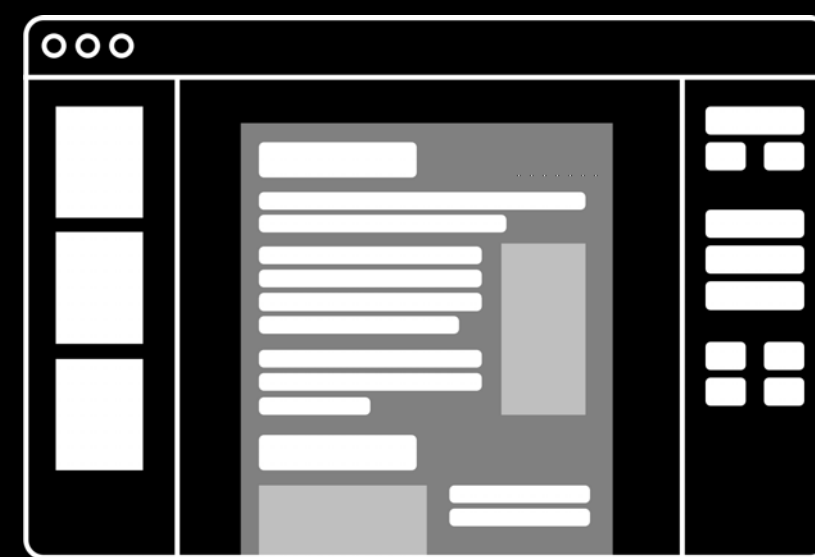
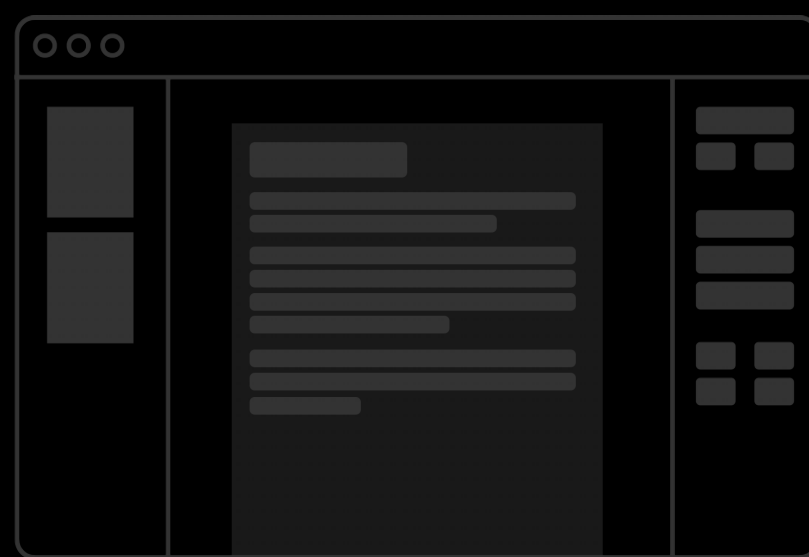


Enter



Exit

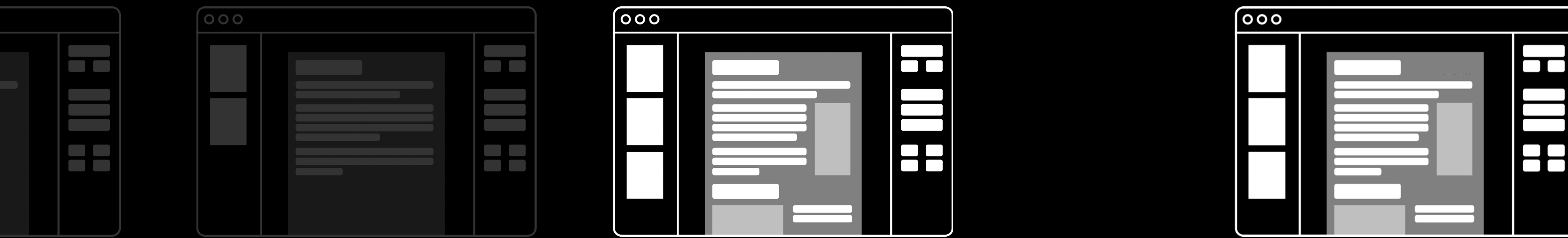
Enter



Exit



Enter



Exit

Enter



9:41 AM



San Jose

Mostly Cloudy

68°

Saturday Today 76 55

Now 11AM 12PM 1PM 2PM



68° 71° 74° 76° 77°

Sunday 76 53



Monday 82 56



Tuesday 80 56



Wednesday 78 57



Thursday 80 61



Friday 71 54



Mono Lake Weekend

9:21 AM We should aim to leave by n...

California Farmers' Market

10:24 AM The California Farmers' Mar...

Yosemite Trip

10:32 AM Make sure to pick...



Golden Circle

05/18/16 The three places we should...

Chocolate Cookies

05/14/16 4/12 cups all-purpose flour...

tomsmith@me.com

05/10/16 Locked

Soccer Practice

05/06/16 Defense weak. Rota...



Condo Remodel Ideas

05/04/16 sync with contractors regar...

Dinner Plans

04/28/16 Locked

Japan Trip

04/24/16 San Francisco to Tokyo fligh...

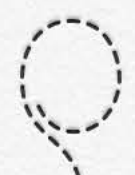
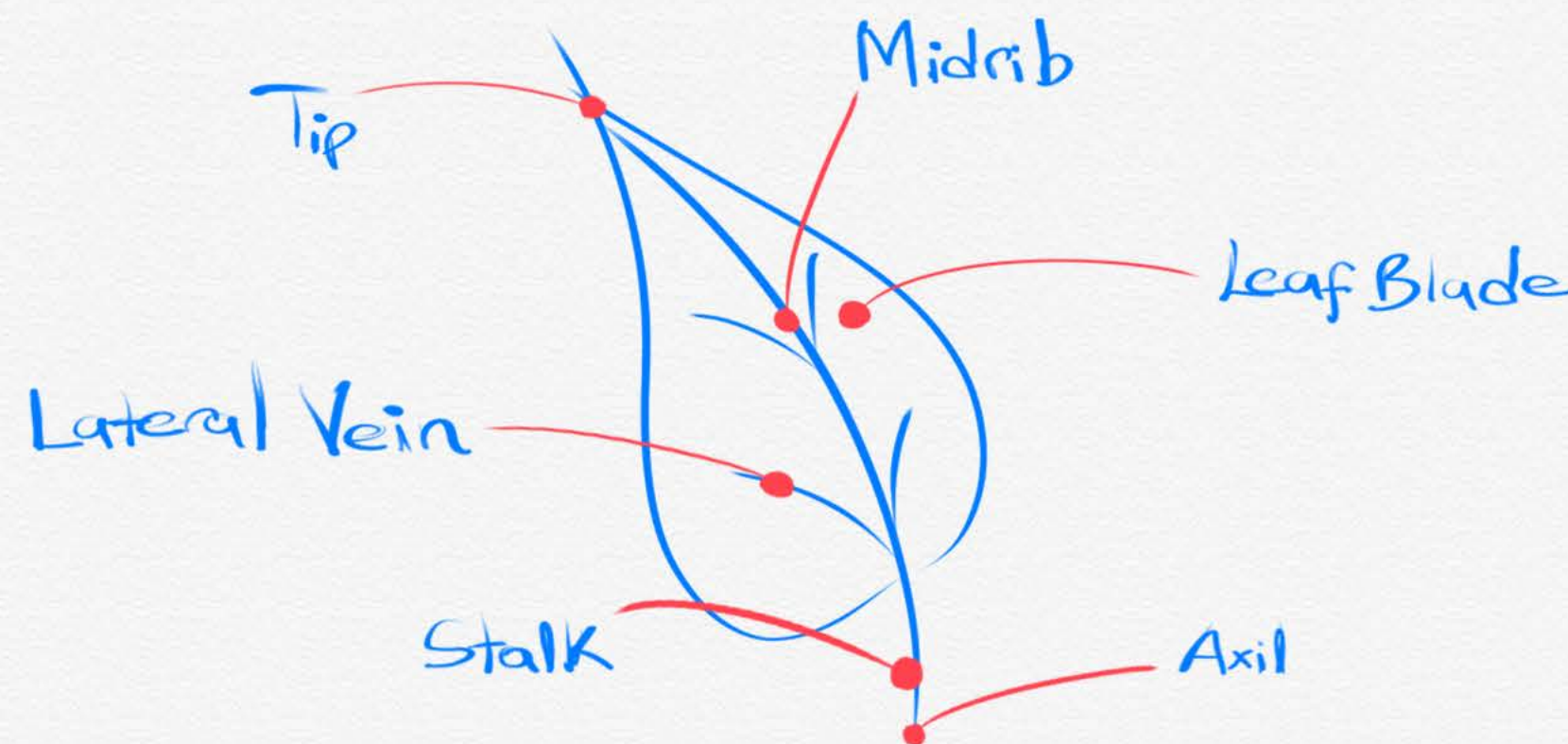


50 Notes



California Farmers' Market

The California Farmers' Markets are known for their ability to showcase high quality, trend setting fruits and vegetables which have provided a source of education for numerous food editors and writers around the country who come to the Farmers' Markets just to learn about the new explosion of varieties that are offered.



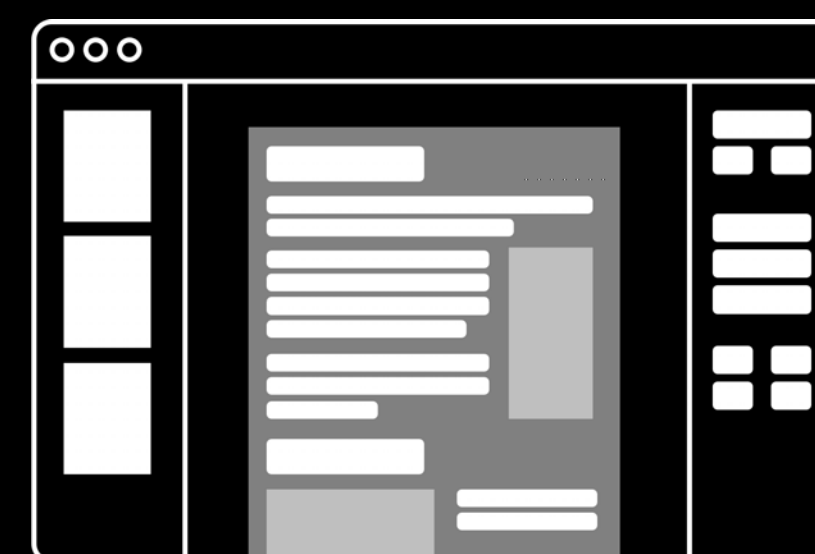
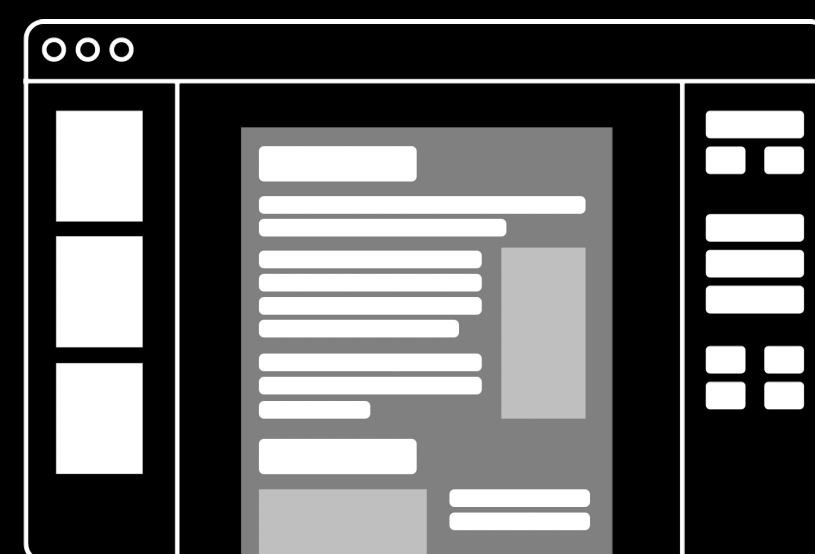
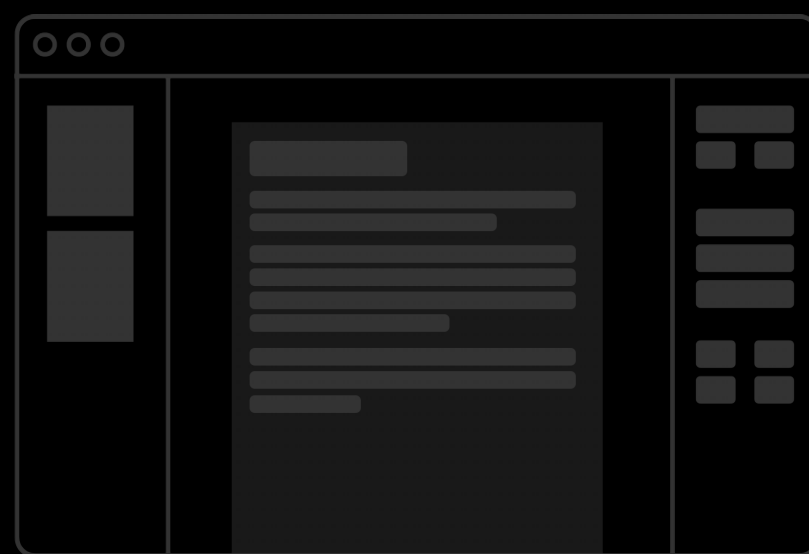


lap 1/5
2:02.808

Tiesha
Francione
+14.7

Eric Hertz

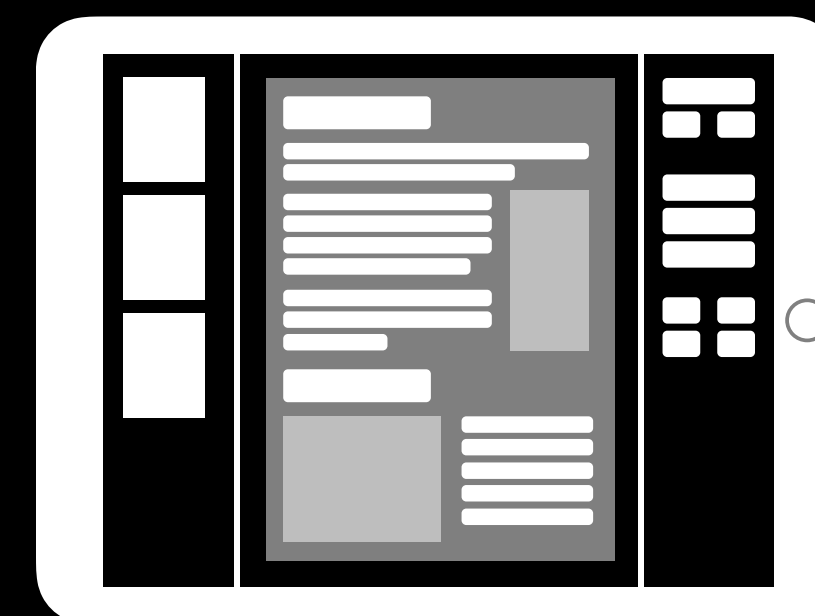
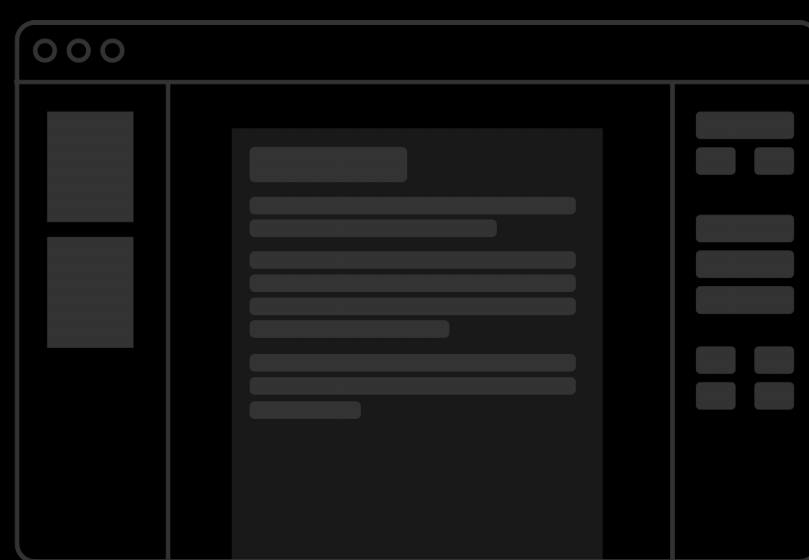
16th
37 mph



End



Start



End



Start

Watch Now

HBO NOW

Continue
Season 1, Episode 3

Up Next



Westworld



SCI-FI & FANTASY

Fresh Off the Boat

Watch Now

Up Next

CONTINUE



Westworld
Season 1, Episode 3

NEW EPISODE



Atlanta
Season 1, Episode 10

NEXT EPISODE



Power
Season 3, Episode 1

See All

What to Watch



SCI-FI & FANTASY
Star Trek Beyond

Explosive thrills and sly wit drive this energetic third chapter in the smash reboot.



COMEDY
Fresh Off the Boat

A hilarious, stereotype-smashing sitcom about an offbeat family in '90s Florida.

Library Watch Now Store Search

Watch Now

Up Next

CONTINUE

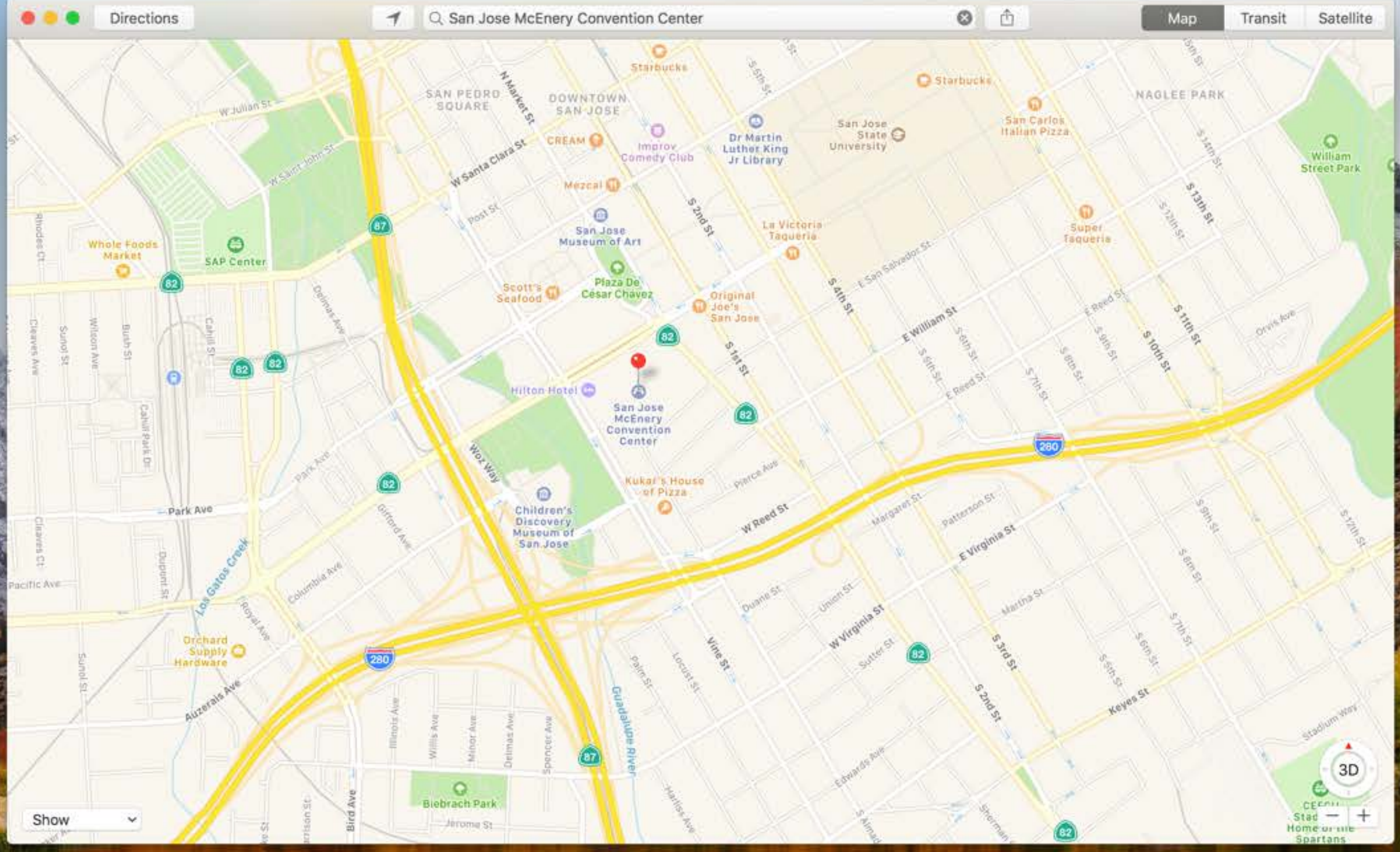


Westworld
Season 1, Episode 3

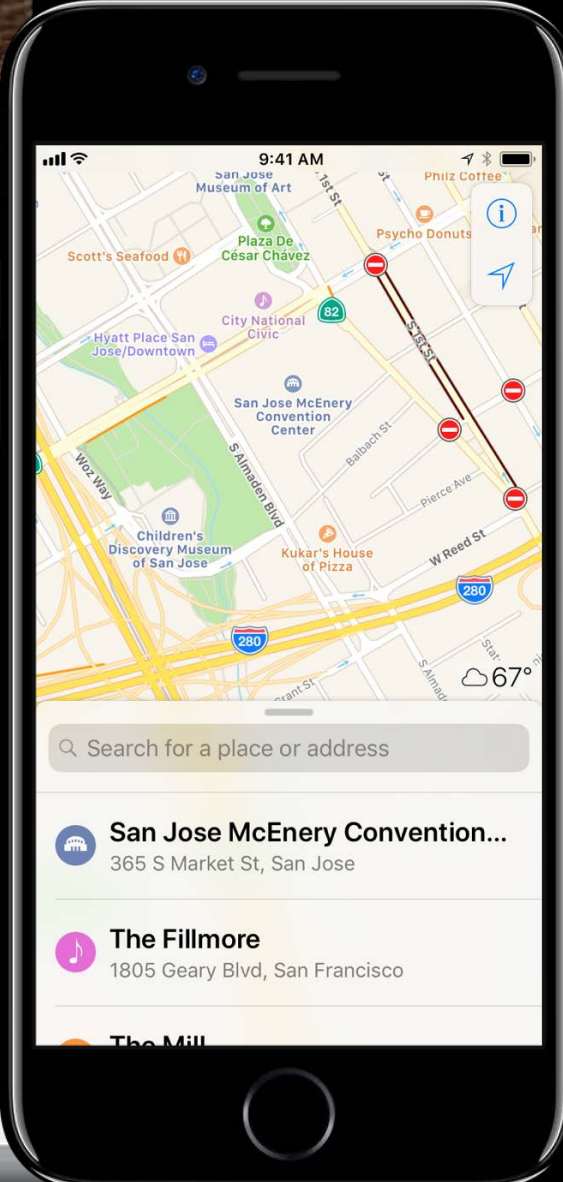
What to Watch

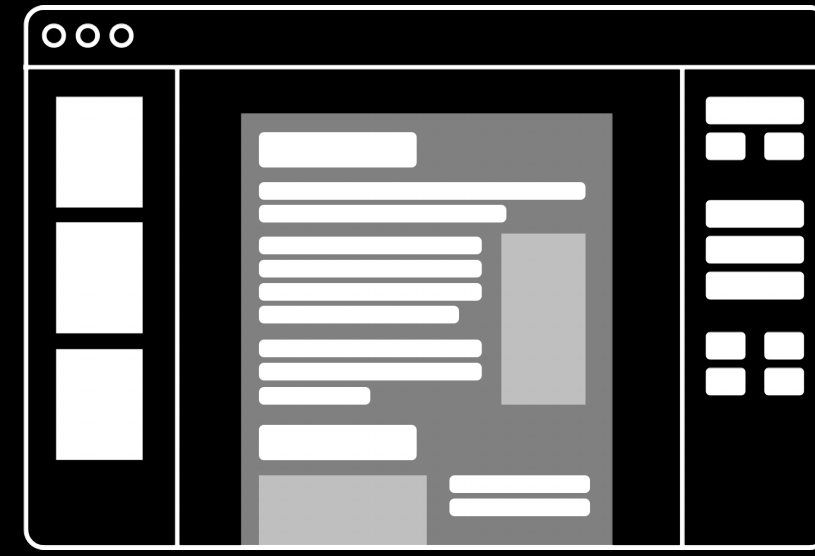
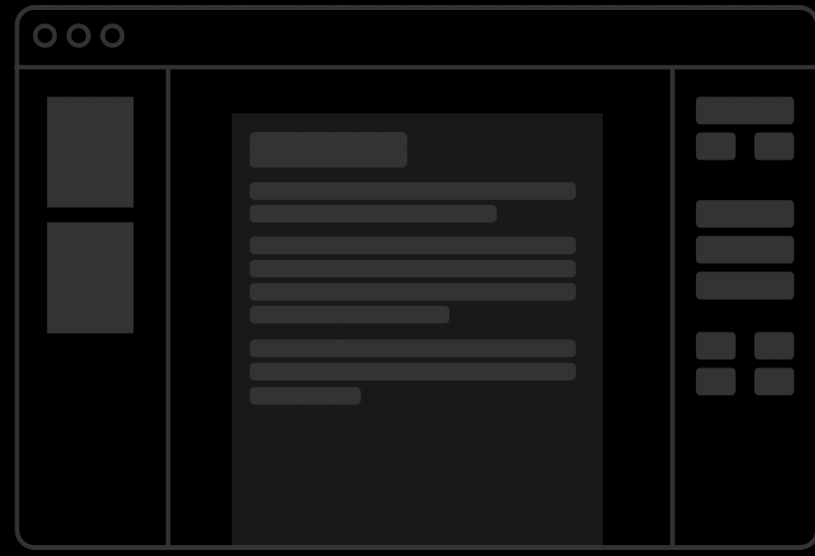


Library Watch Now Store Search



MacBook Pro

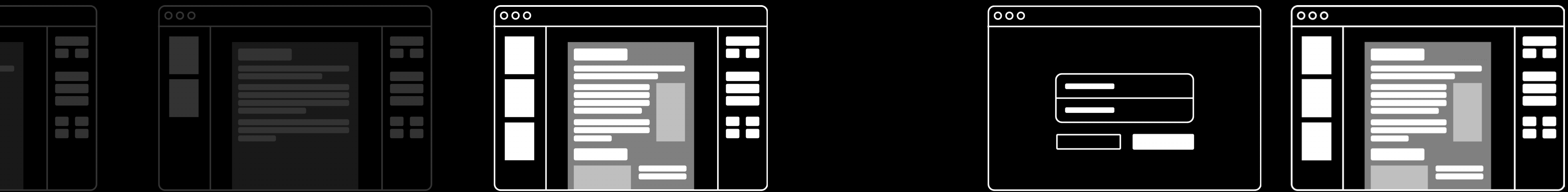




End



Start



End

Setup

Start



9:41 AM



Find My iPhone

Apple ID example@icloud.com

Password required

[Sign In...](#)

[Forgot Apple ID or Password?](#)

[Setup Instructions](#)



9:41 AM



Find My iPhone

Apple ID example@icloud.com

Password required

Sign In...



Passwords

Done

q w e r t y u i o p

a s d f g h j k l

⏏ z x c v b n m ⌫

123 😊 space @ . return



9:41 AM



Find My iPhone

Apple ID example@icloud.com

Password required

Sign In...



Passwords

Done

q w e r t y u i o p

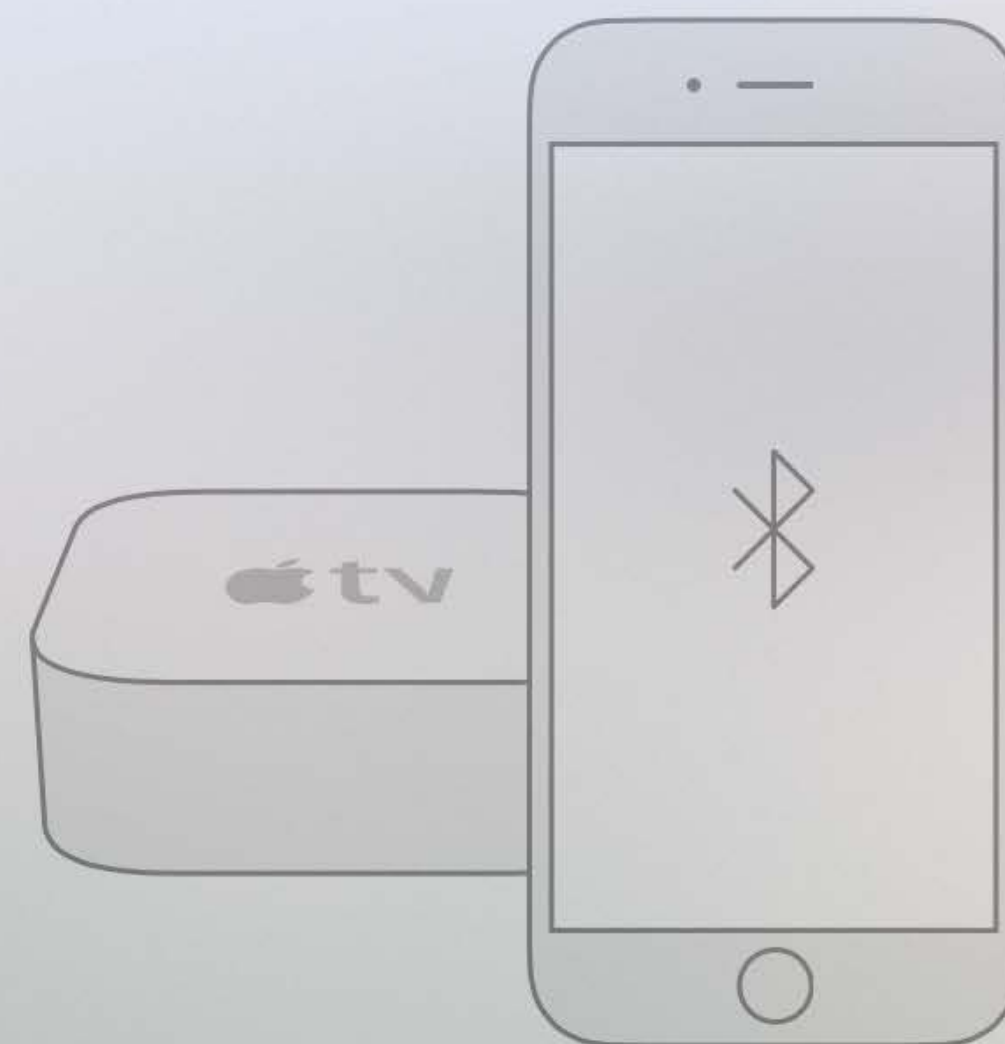
a s d f g h j k l

⏪ z x c v b n m ⏩

123 😊 space @ . return

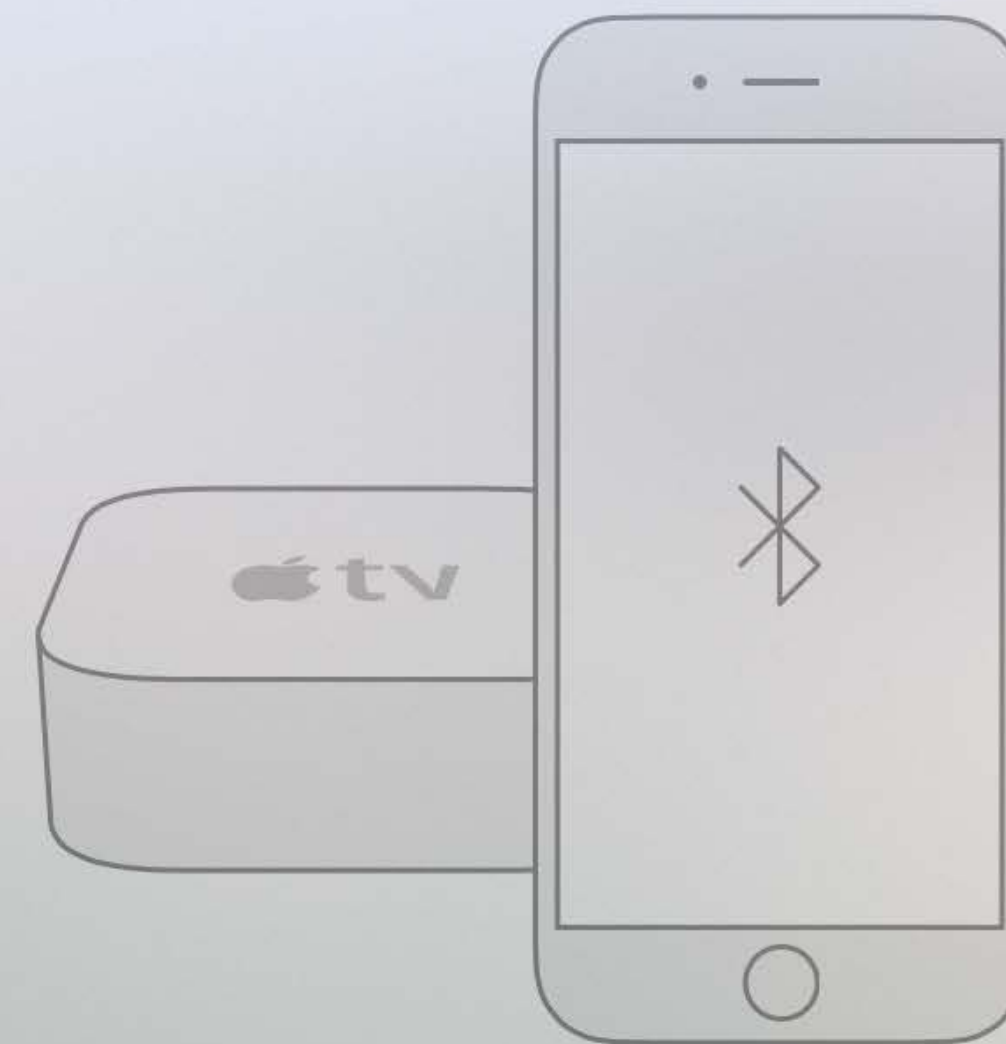
Set Up Your Apple TV

- 1 Unlock your iPhone, iPad, or iPod touch
- 2 Connect to a Wi-Fi network
- 3 Enable Bluetooth
- 4 Hold the device close to your Apple TV



Set Up Your Apple TV

- 1 Unlock your iPhone, iPad, or iPod touch
- 2 Connect to a Wi-Fi network
- 3 Enable Bluetooth
- 4 Hold the device close to your Apple TV



4

Connect

4

Connect

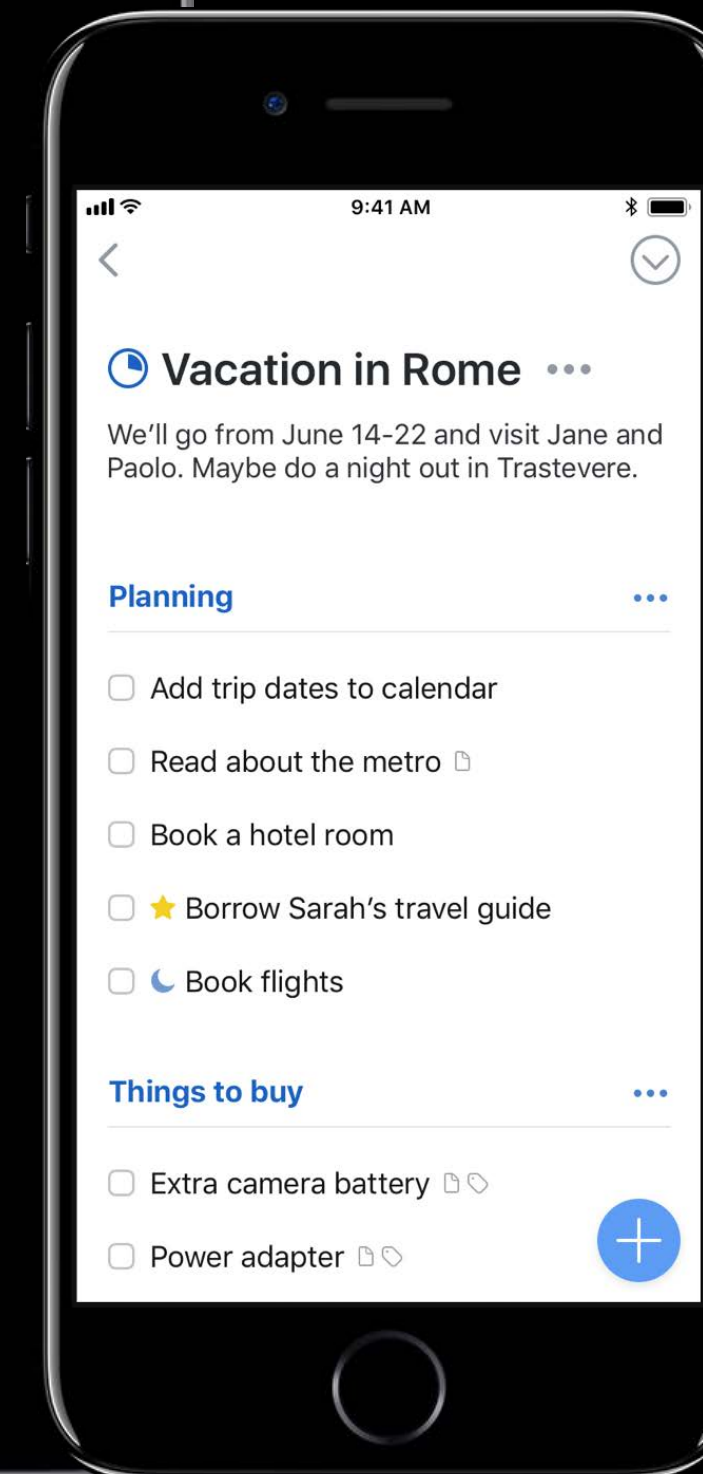
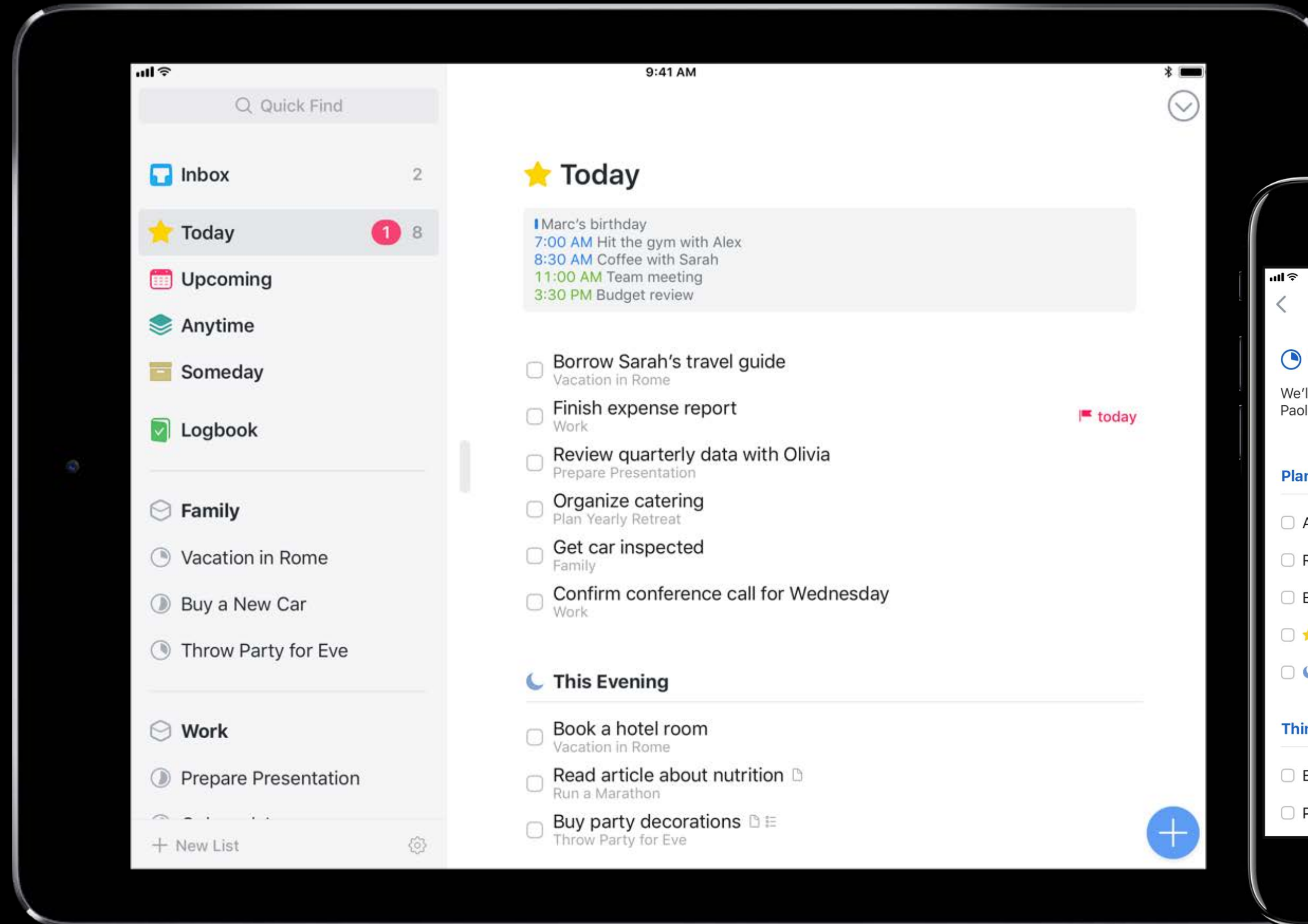
Recreate state based on last usage

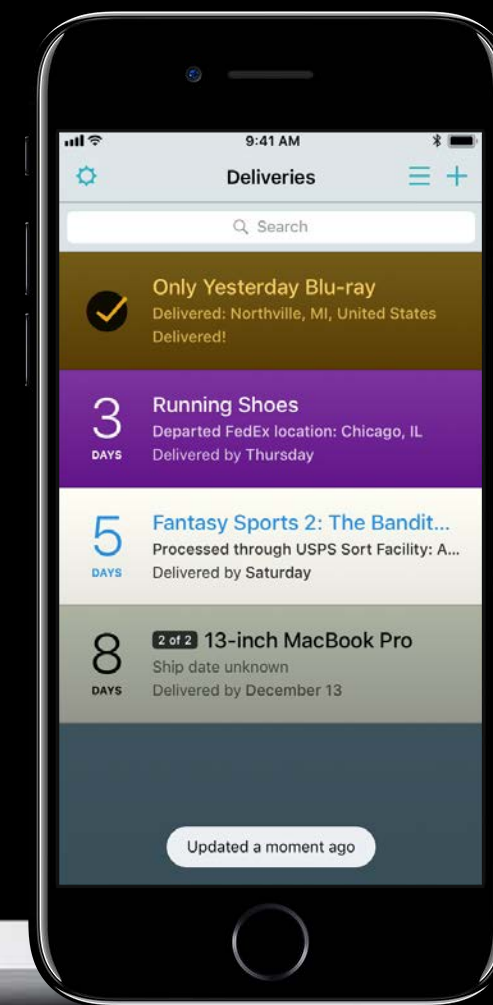
4

Connect

Recreate state based on last usage

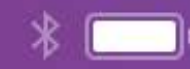
Allow for quick setup on new platforms







9:41 AM



Instagram

Sign up to see photos and videos
from your friends.



Log In With Facebook

OR

[Sign Up With Phone or Email](#)

Already have an account? [Sign In.](#)



Select



Adapt



Conform



Connect



Extend



Select



Adapt



Conform



Connect



Extend



Select



Adapt



Conform



Connect



Extend



Select



Adapt



Conform



Connect



Extend



70%   Fri 12:30 PM



Alexis Kay

Enter Password

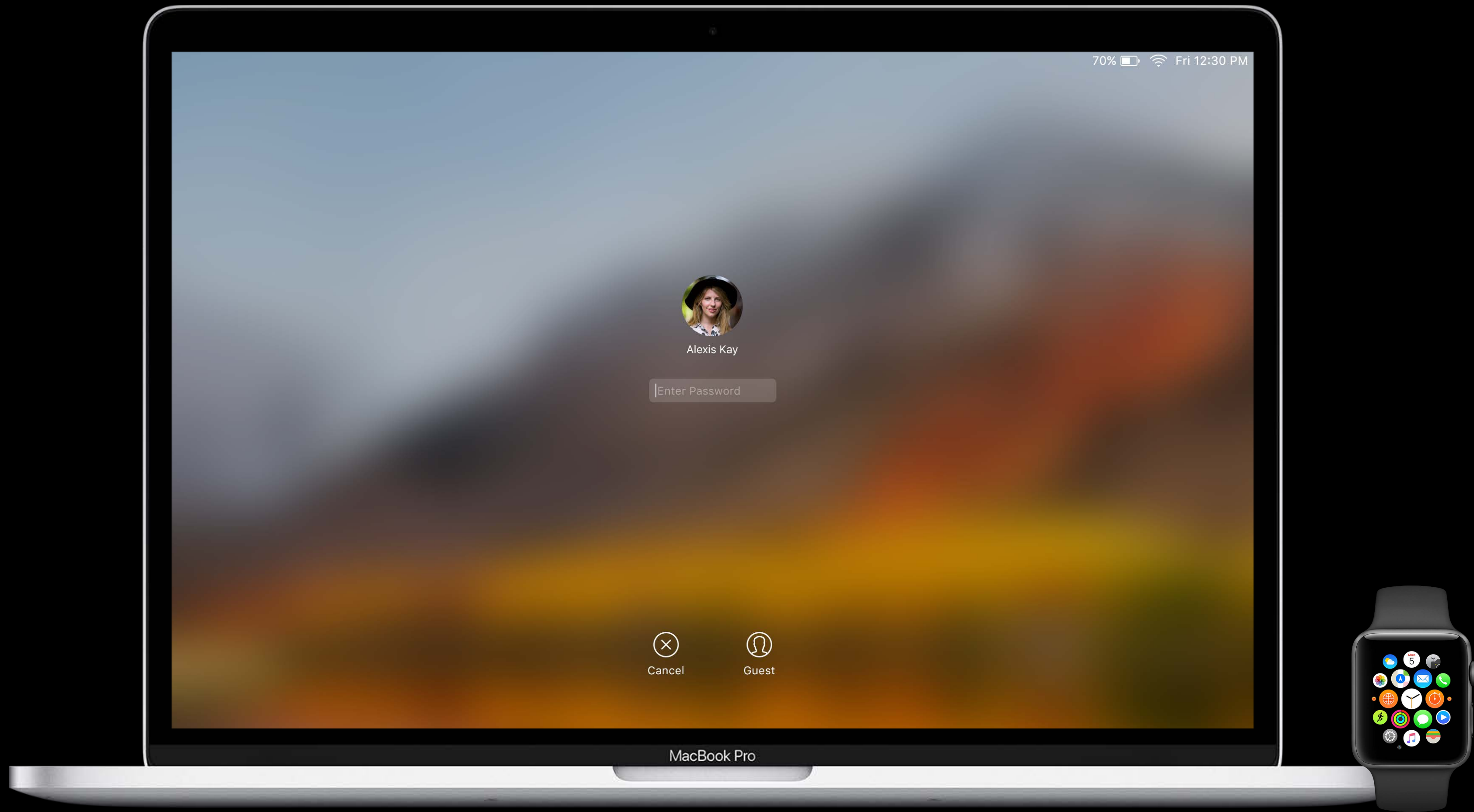


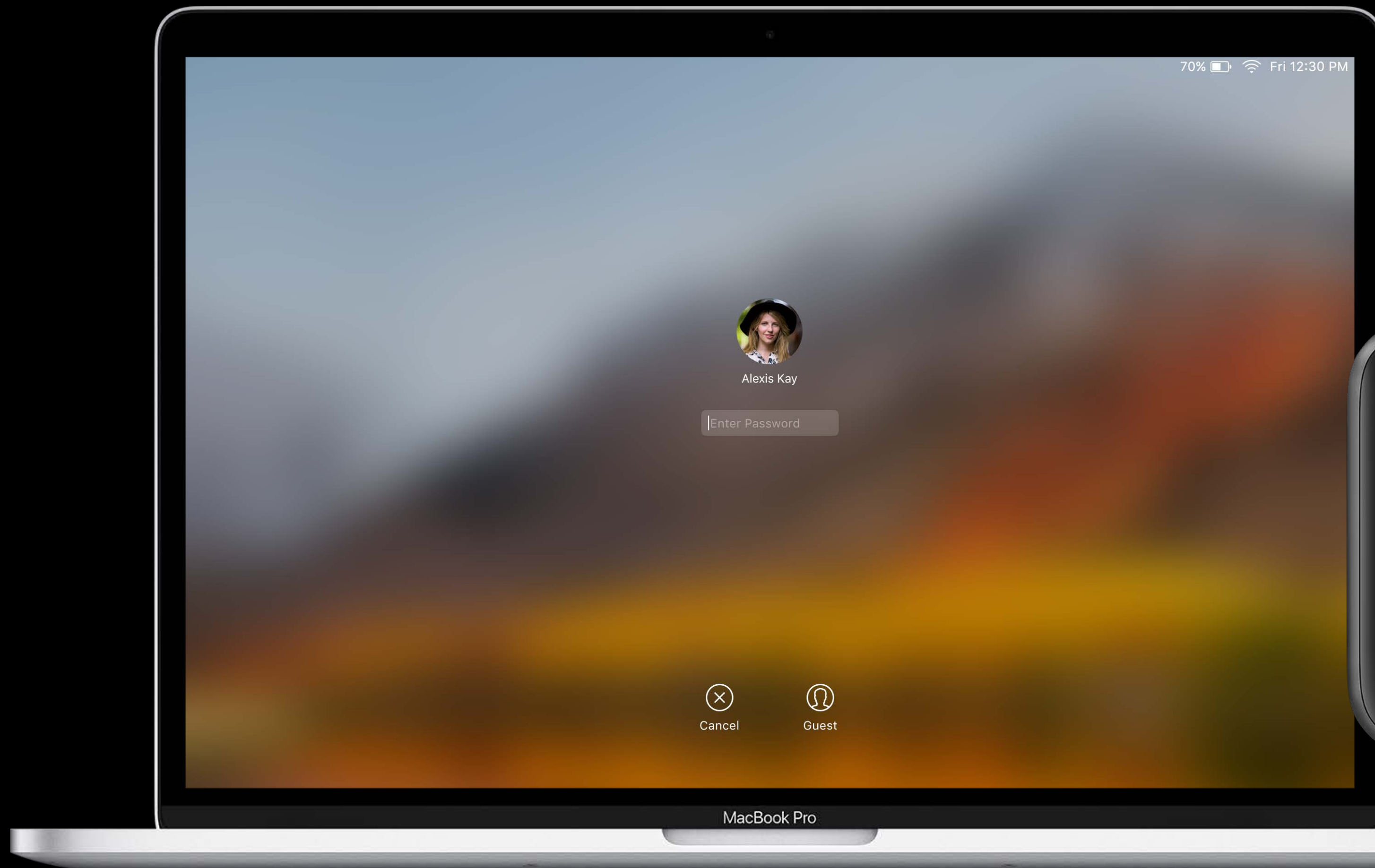
Cancel

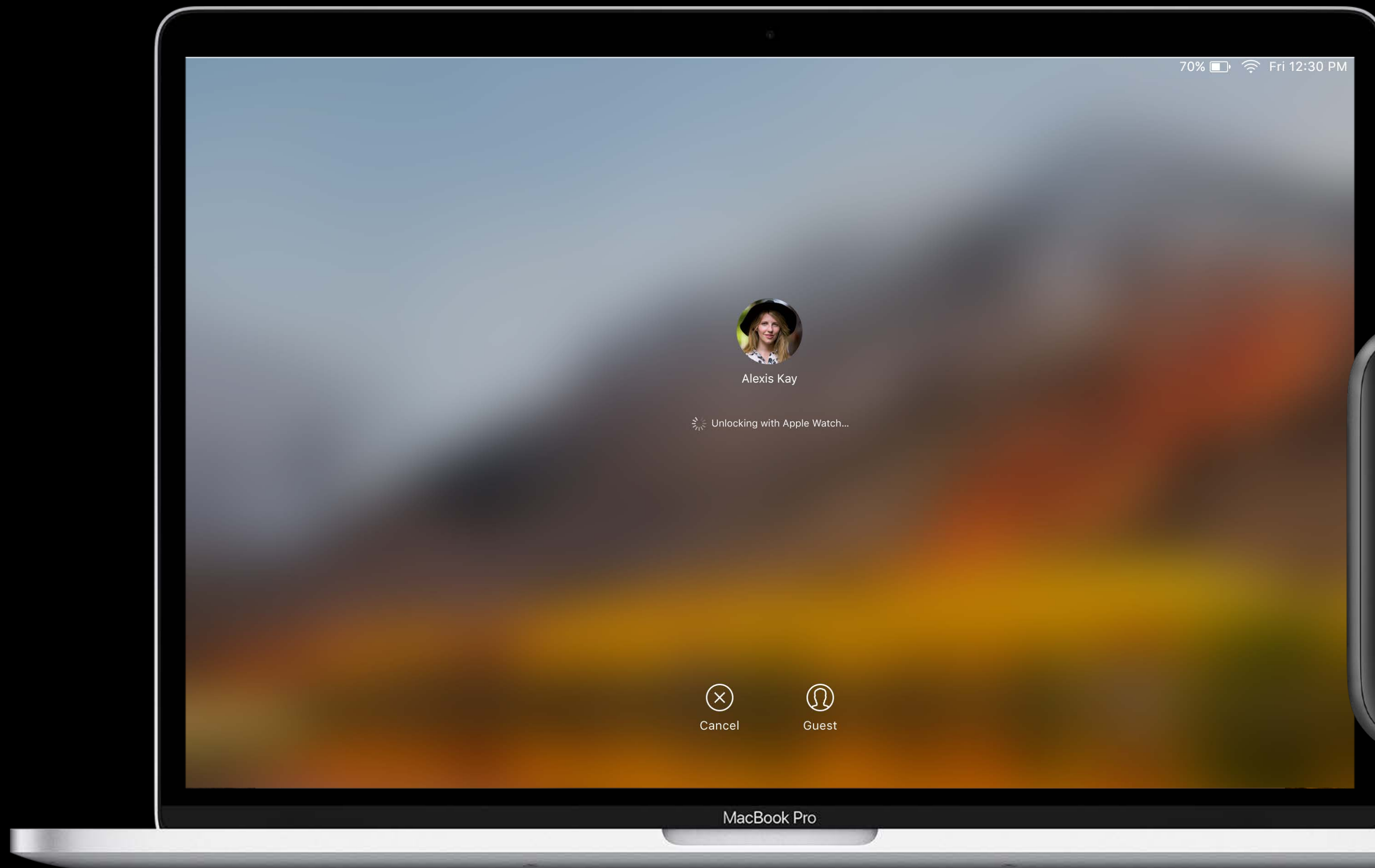


Guest

MacBook Pro



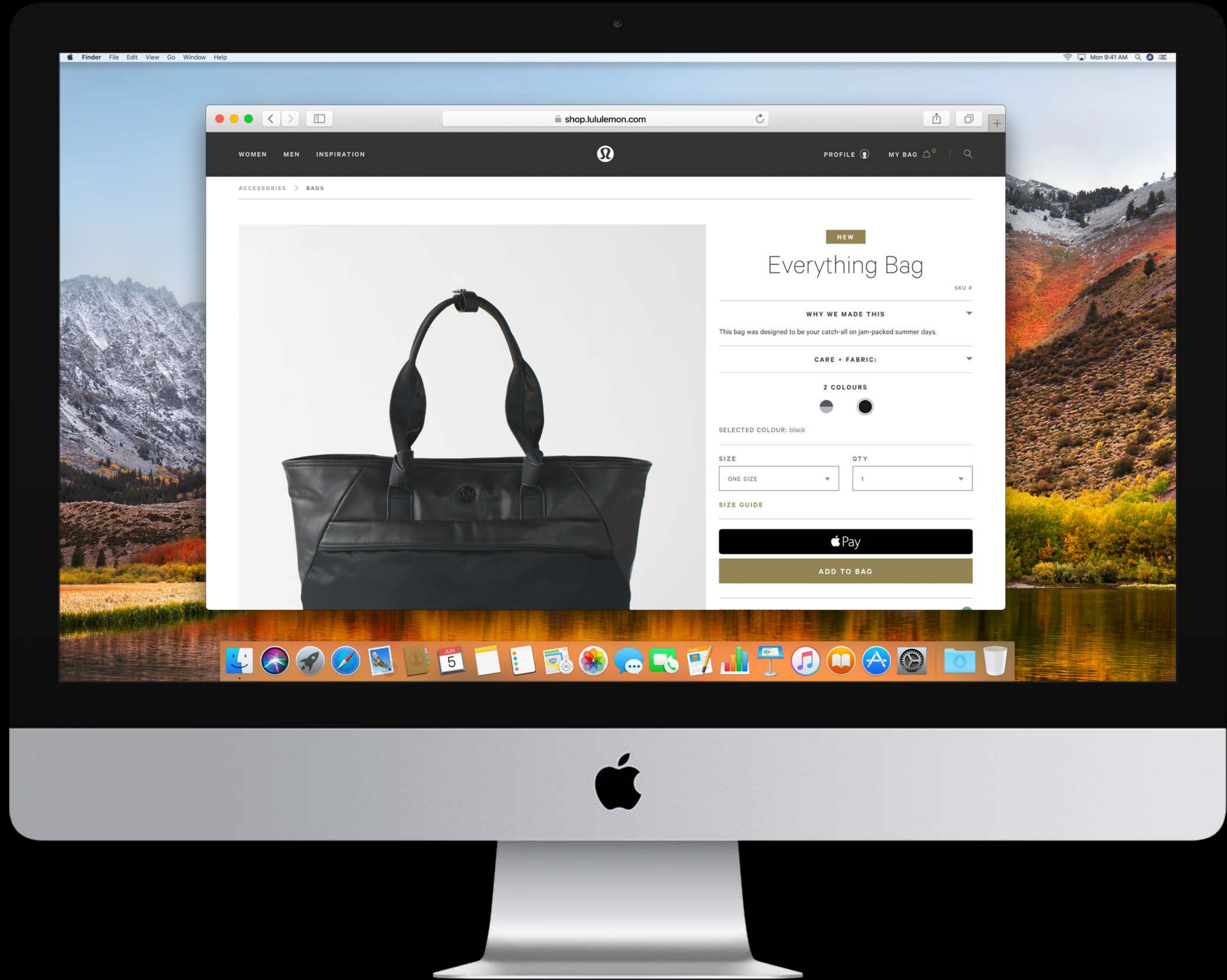


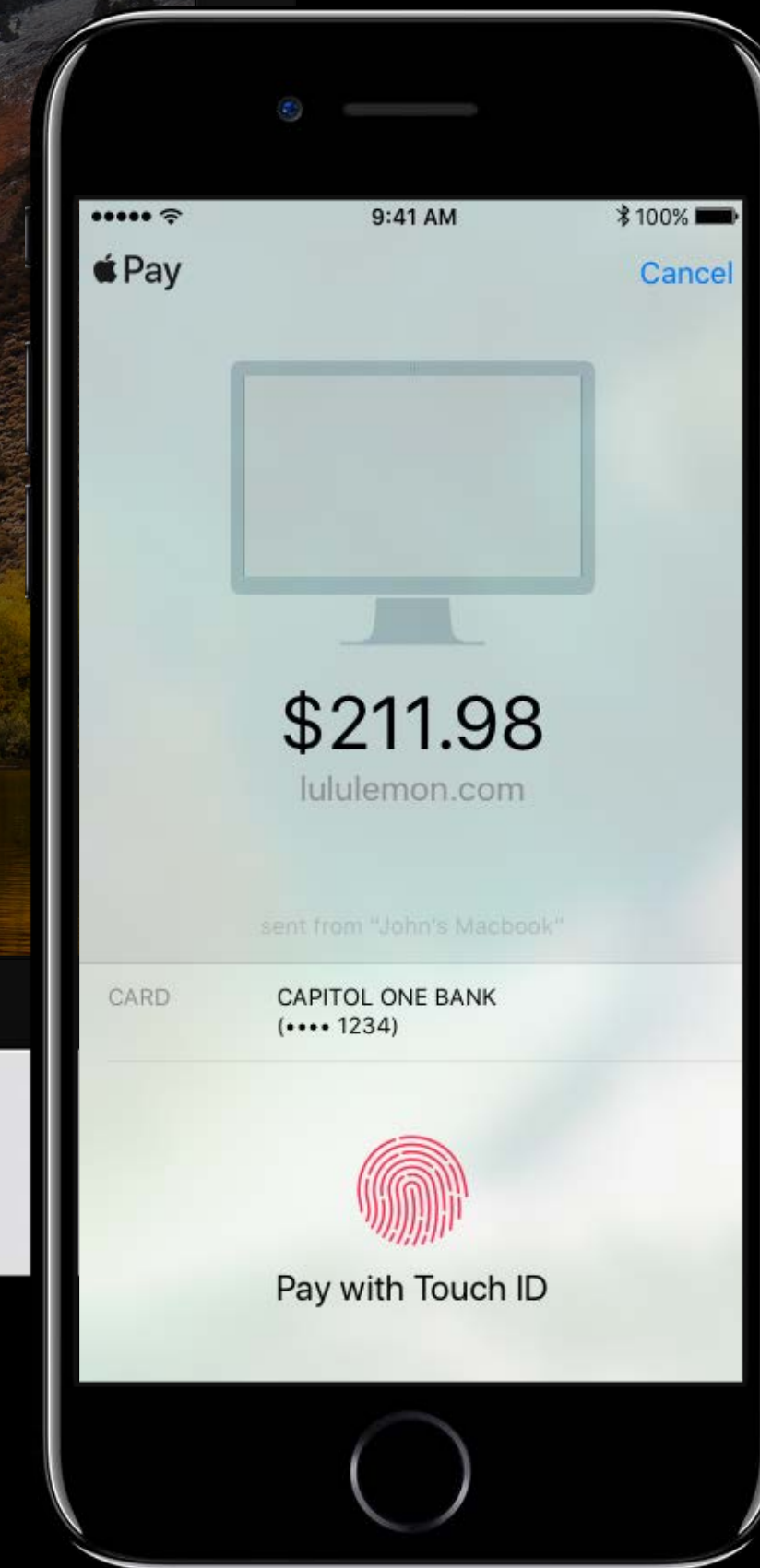
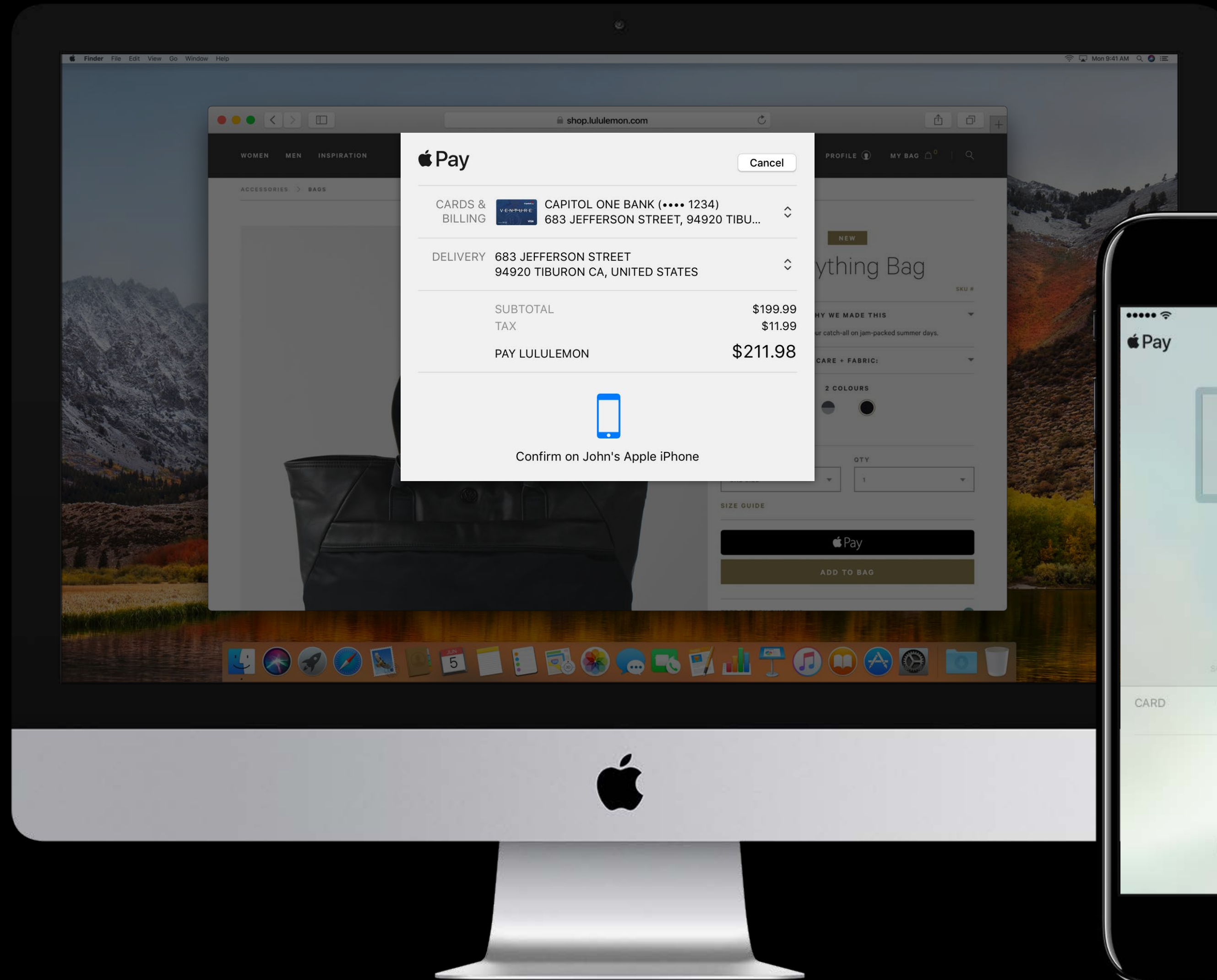


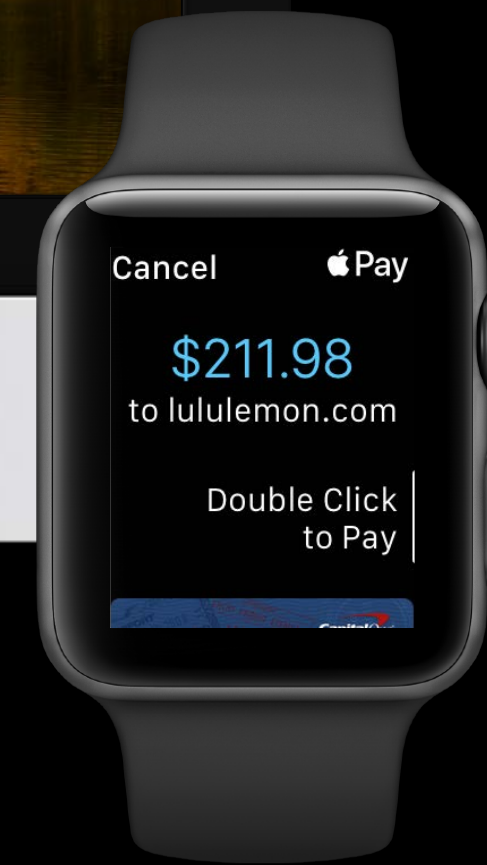
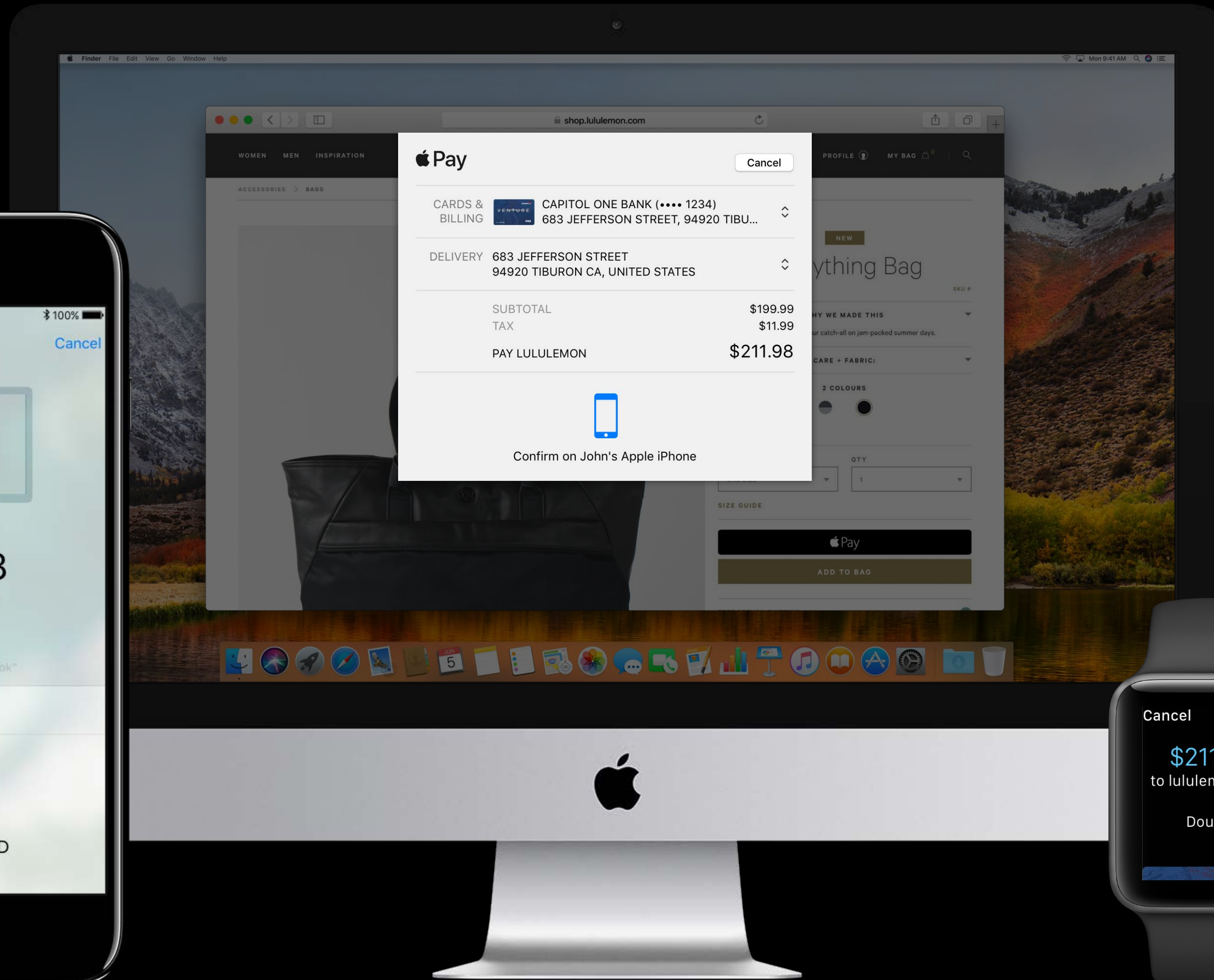
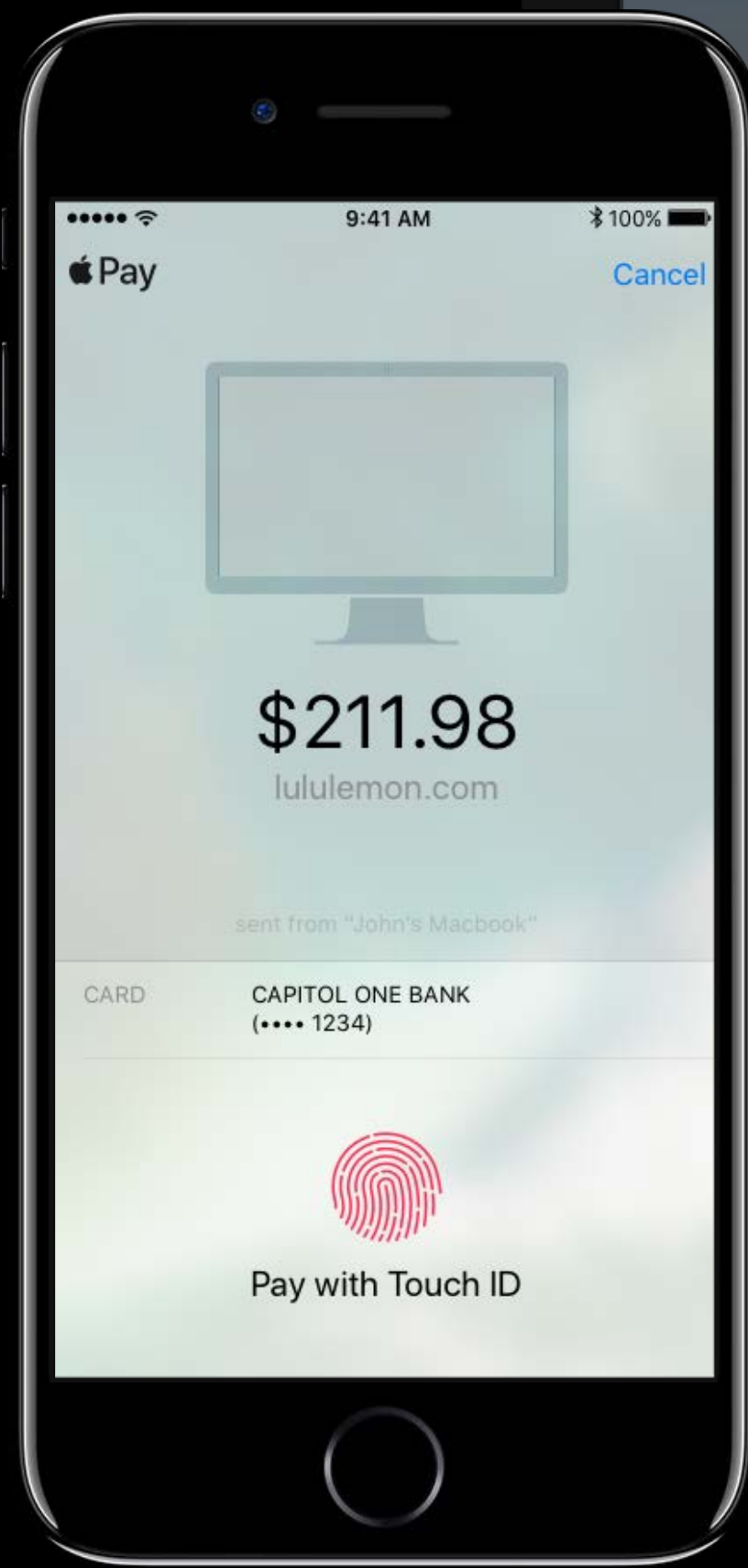




Make it Effortless







Give Clear Control

53% Zoom Add Slide Play Keynote Live Table Chart Text Shape Media Comment Copy Style Paste Style Collaborate Format Animate Document

1 ICELAND

2

3

4

5

6

7

8

9

ICELAND

GEOGRAPHY FIELD TRIP

Style Image Arrange

Image Styles

Border No Border

Shadow No Shadow

Reflection

Opacity 100%

MacBook Pro

6:53:09 PM

Show Navigator



Current: Slide 2 of 9

TRIP OBJECTIVES

WELCOME TO THE LAND OF FIRE AND ICE

The aims of this field trip exploring Iceland's unique geology and geography are:

- Gather primary field data
- Research specialist subject for essay
- Use data as basis for coursework



THE BLUE LAGOON



LAVA FIELDS



THE SIGHTS (AND SMELLS) OF GEOTHERMAL ACTIVITY

Next: Slide 3 of 9

AGENDA

DAY 1
AURORA BOREALIS

- Lecture on aurora borealis
- Drive to Akureyri
- Viewing of northern lights

DAY 3
GLACIERS AND ICE CAVES

- Sail across Skjalafthofn lagoon
- Hike on Eyjafjallajökull glacier

DAY 2
VOLCANOES AND LAVA FIELDS

- Trip to the Hekla and Mornahraun lava fields
- Visit to Bardarbunga volcano and black sand beach

Show Navigator

6:53:09 PM



Current: Slide 2 of 9

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MacBook Pro

Make it Optional

5

Extend

5

Extend

Look for opportunities in combined capabilities

5

Extend

Look for opportunities in combined capabilities

Give clear control

5

Extend

Look for opportunities in combined capabilities

Give clear control

Make it optional

5

Extend

Look for opportunities in combined capabilities

Give clear control

Make it optional

Make it effortless

PLAYER VS PLAYER

PLAYER 1



READY

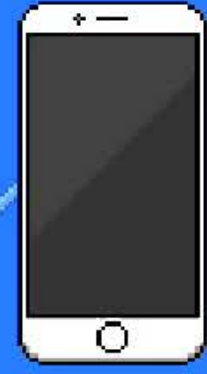
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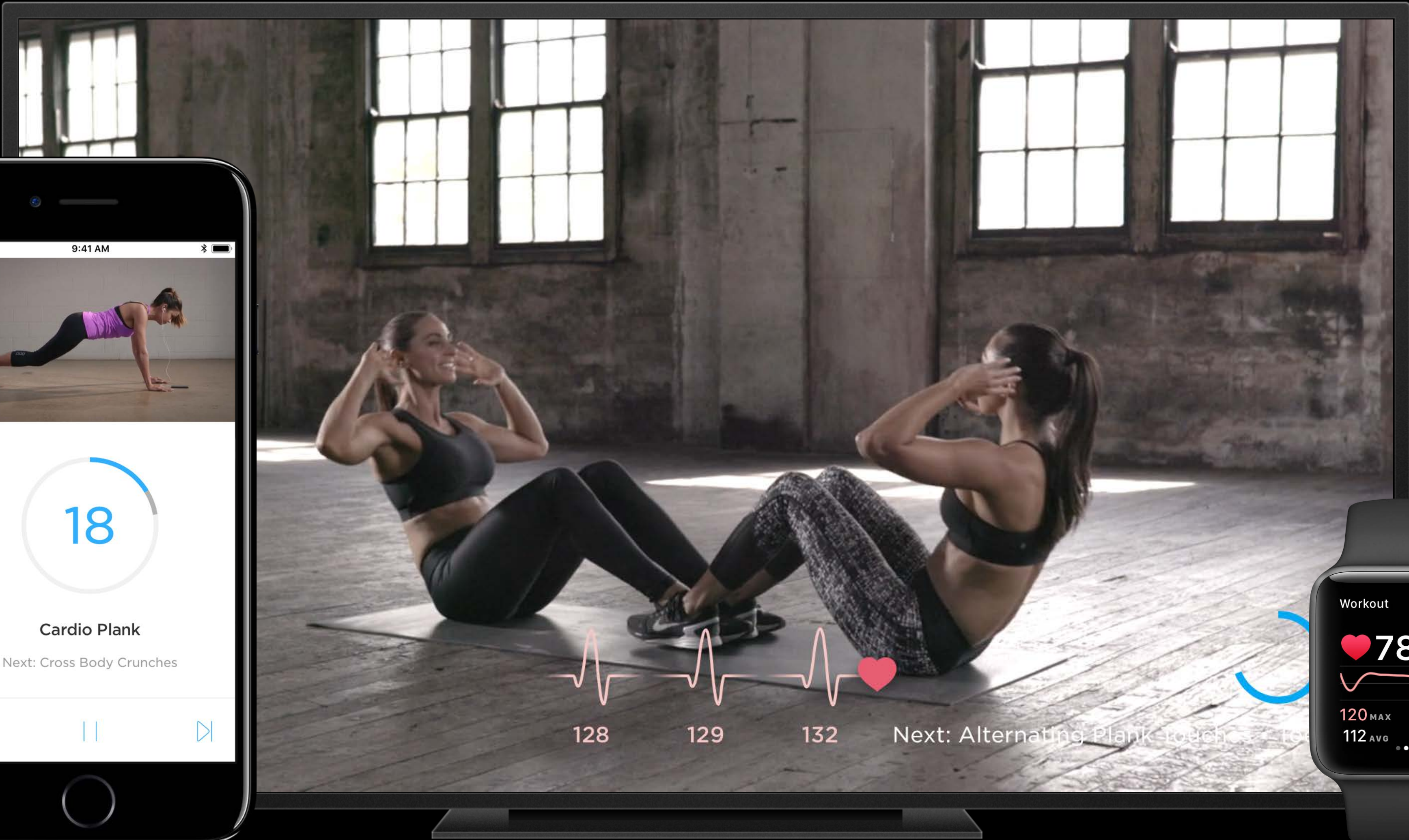
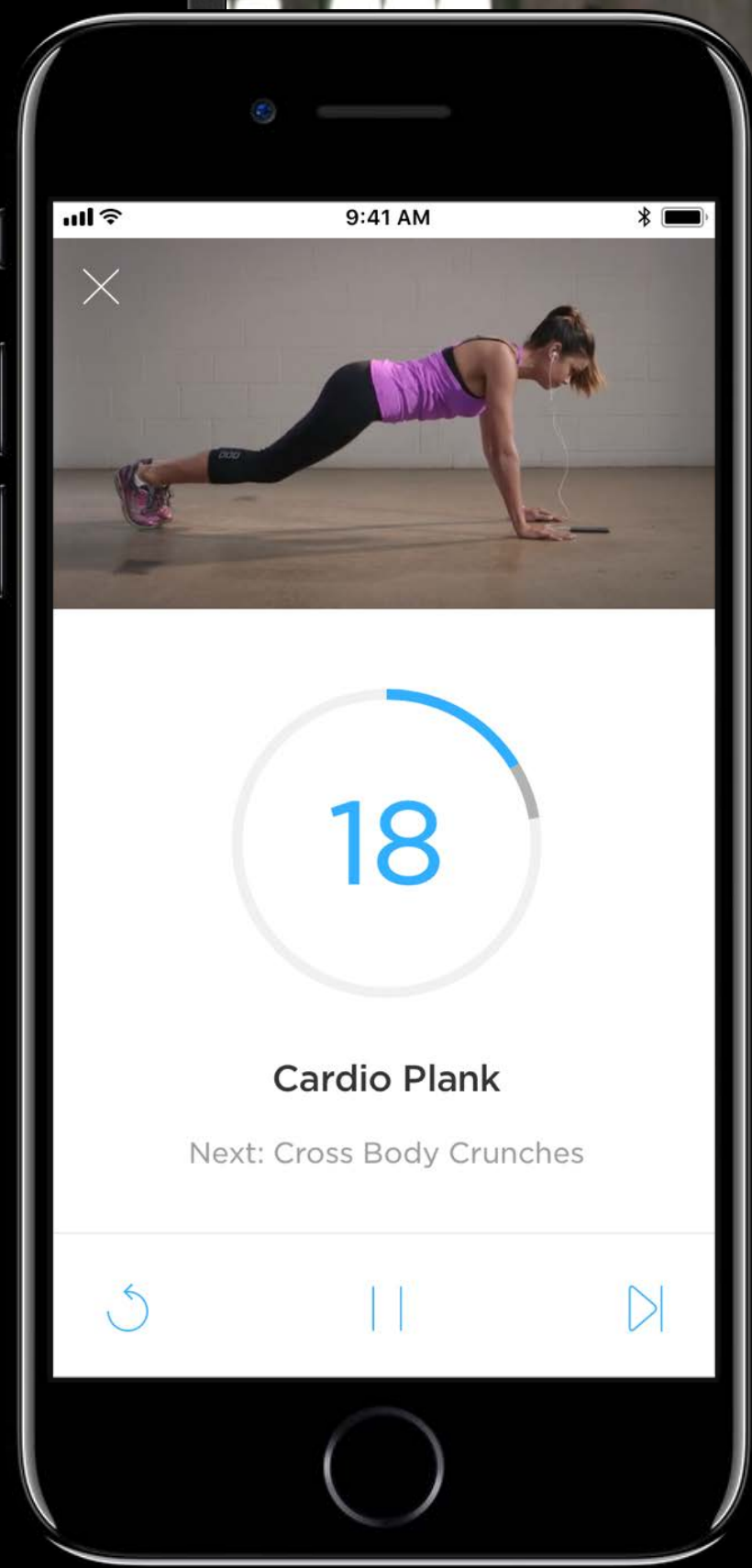


VS

APPLE TV PAD

APPLE TV PAD







Select



Adapt



Conform



Connect



Extend



Select



Adapt



Conform



Connect



Extend



Select



Adapt



Conform



Connect



Extend



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Connect



Extend

A holistic experience
that's greater than its parts.

More Information

<https://developer.apple.com/wwdc17/804>

Related Sessions

Introducing Passwords AutoFill for Apps

WWDC17

Essential Design Principles

WWDC17

Designing Sound

WWDC17

Modern User Interaction on iOS

WWDC17

[Design For Everyone](#)

Hall 3

Thursday 11:00AM

[Building Visually Rich User Experiences](#)

Hall 2

Thursday 5:10PM

[Planning a Great Apple Watch Experience](#)

Grand Ballroom B

Thursday 5:10PM

