

Designing for tvOS

Session 802

Lauren Strehlow User Experience Evangelist





tvOS











Design Differently

Designing for tvOS

Designing for tvOS

Basics

Designing for tvOS

Basics

Distance

Designing for tvOS

Basics

Distance

Remote

Designing for tvOS

Basics

Distance

Remote

Features

Designing for tvOS

Basics

Distance

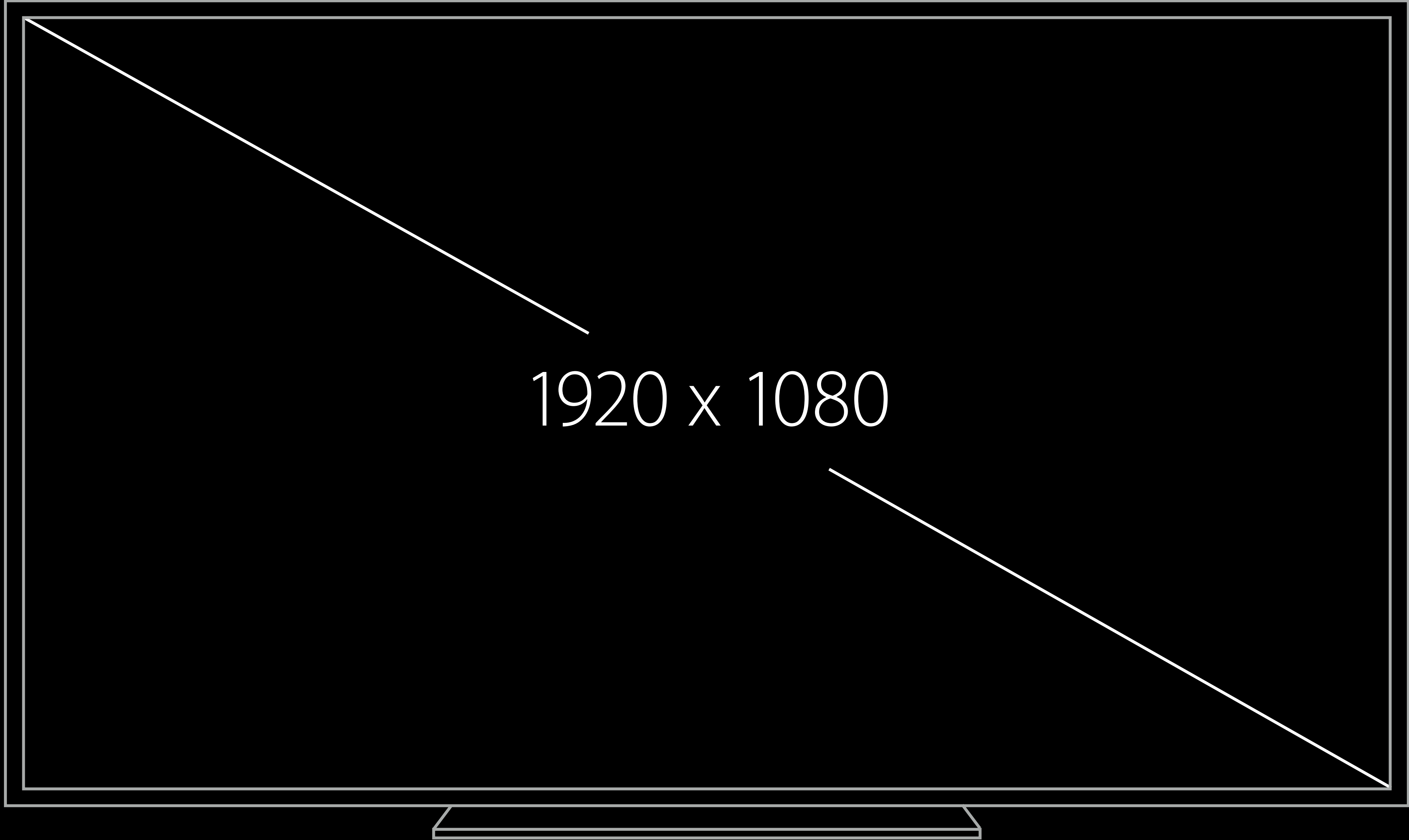
Remote

Features

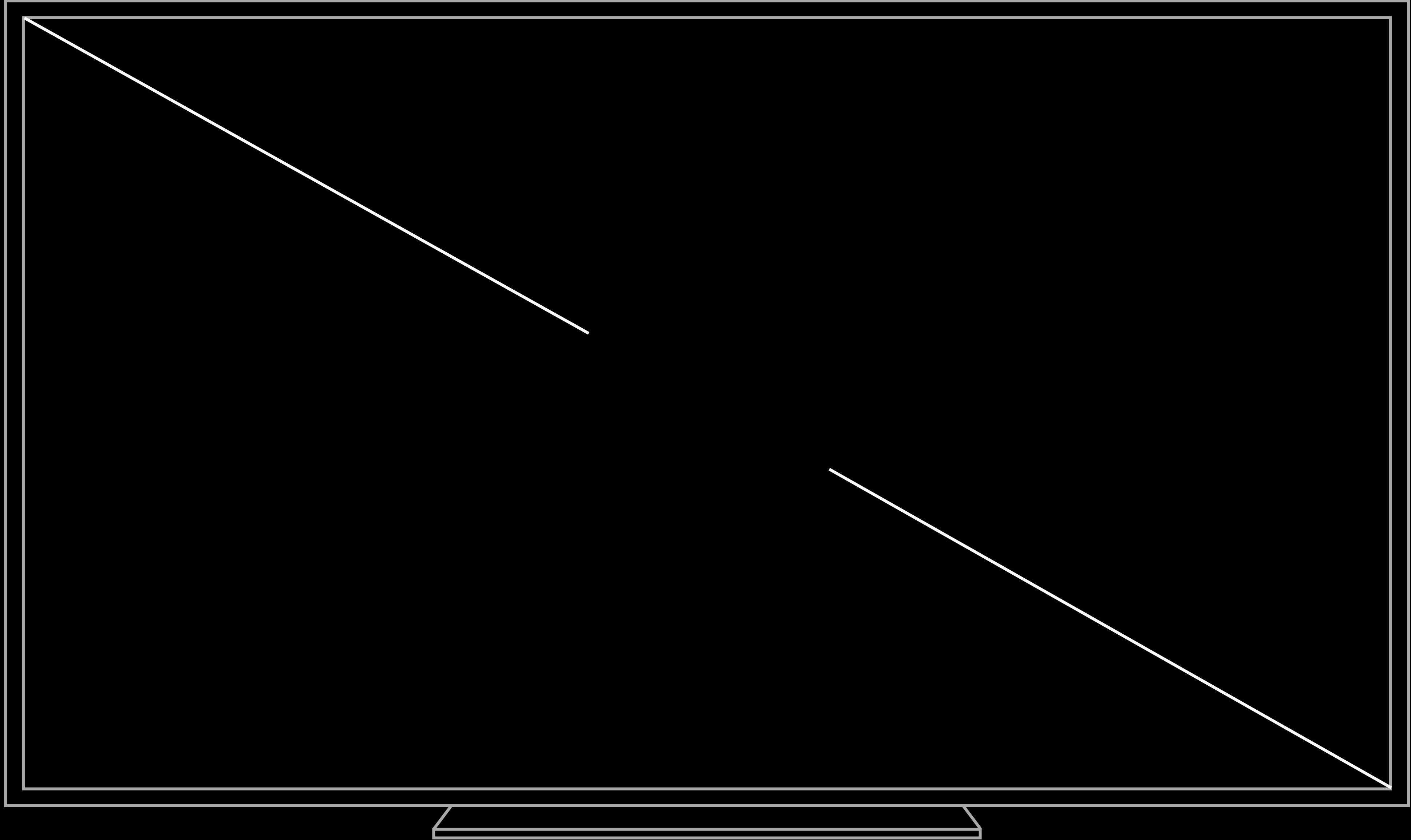
Apps

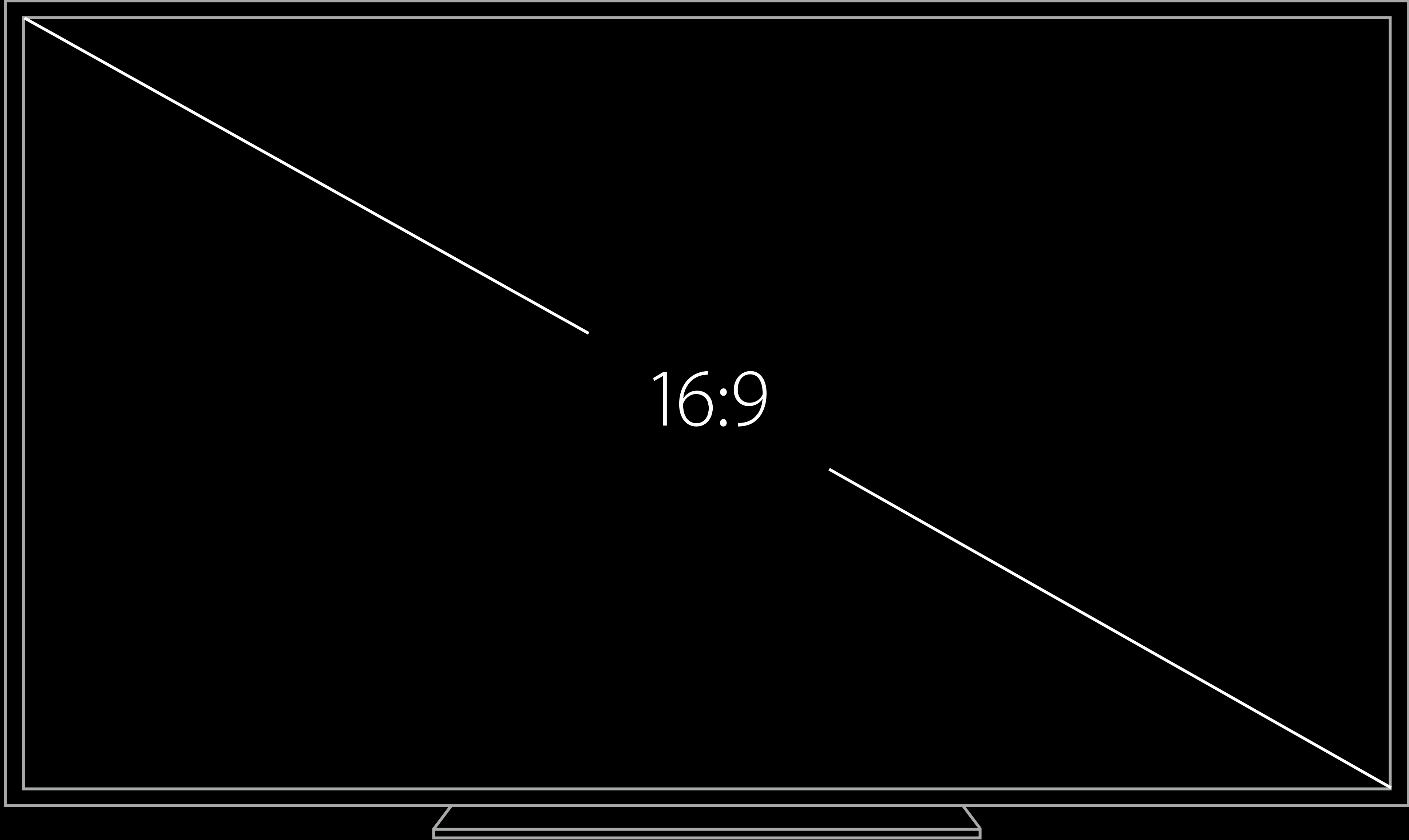
Basics





1920 x 1080





16:9

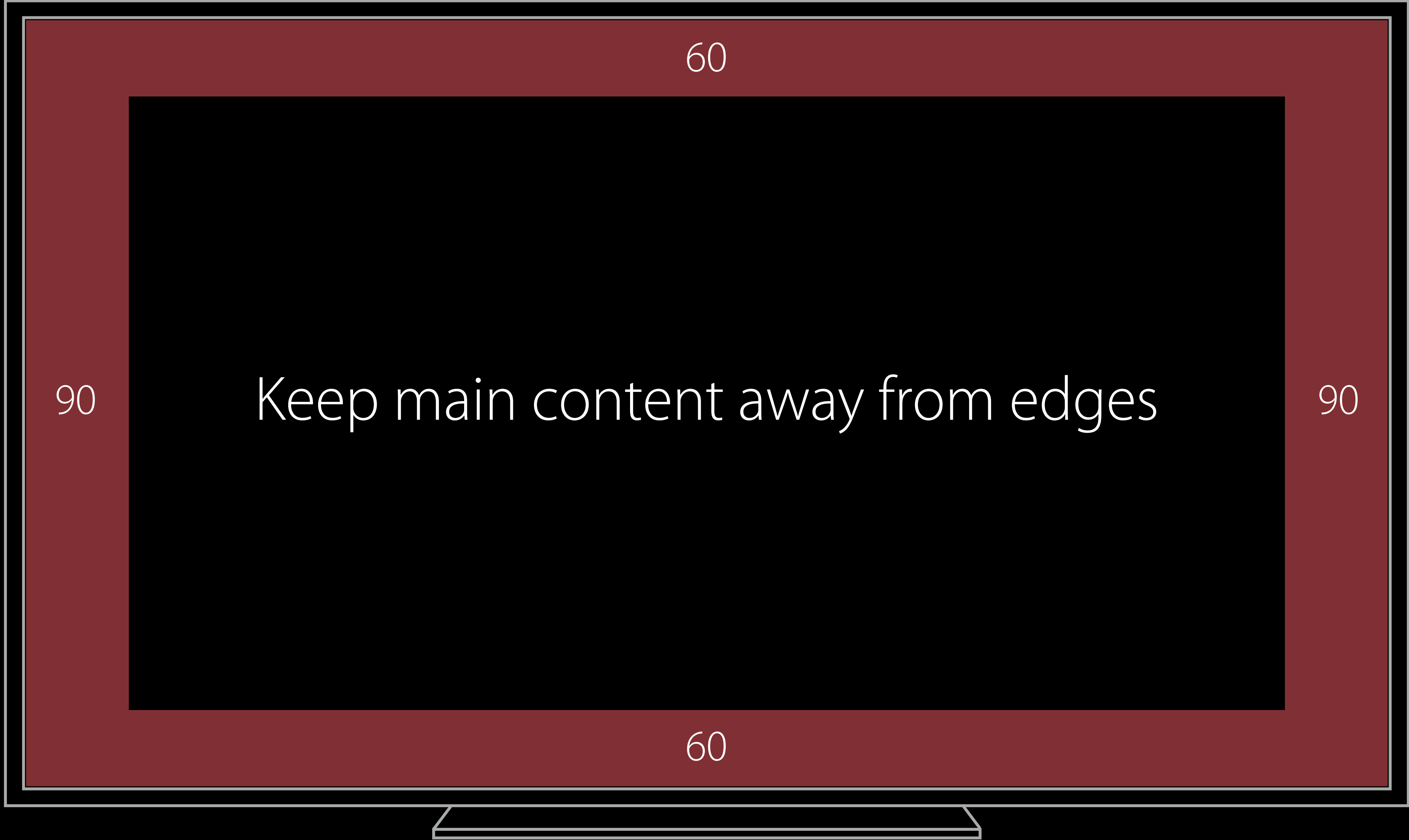




1x Resolution







60

90

Keep main content away from edges

90

60

Designing for tvOS

Basics

Distance

Remote

Features

Apps

Designing for tvOS

Basics

Distance

Remote

Features

Apps

10

Feet





Consider your layout

E

F P

T O Z

L P E D

P E C F D

E D F C Z P

F E L O P Z D

D E F P O T E C

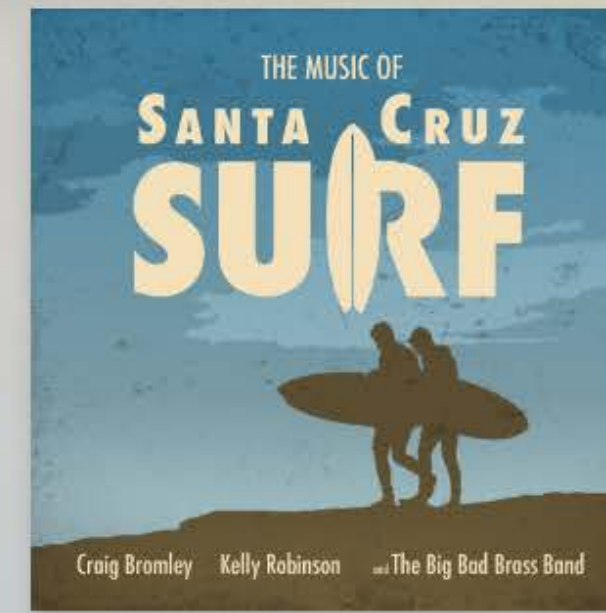
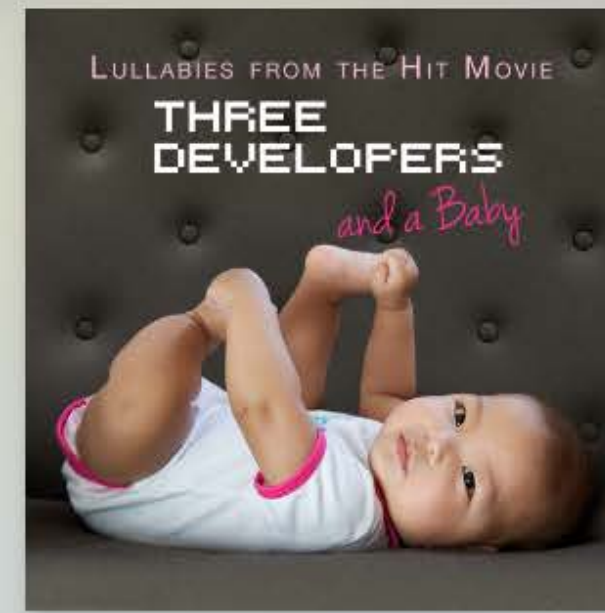
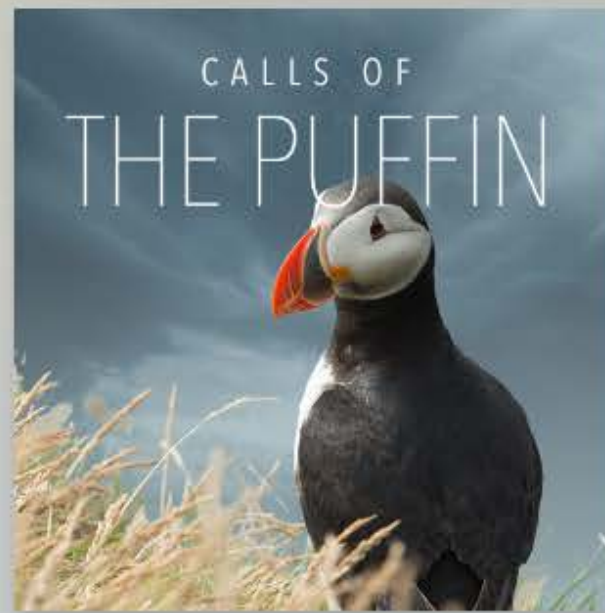
L E F O D P C T

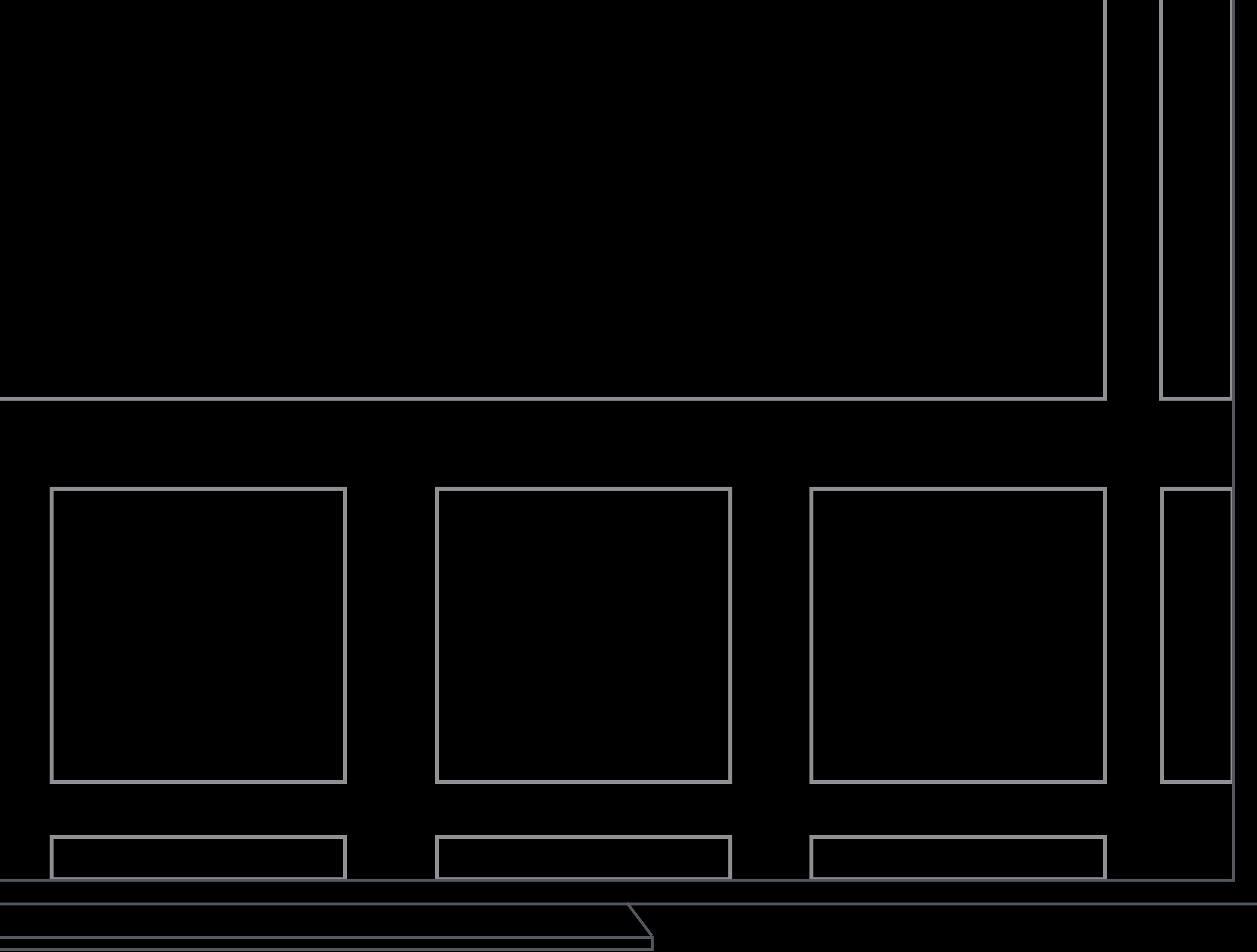
F D F L T C D O

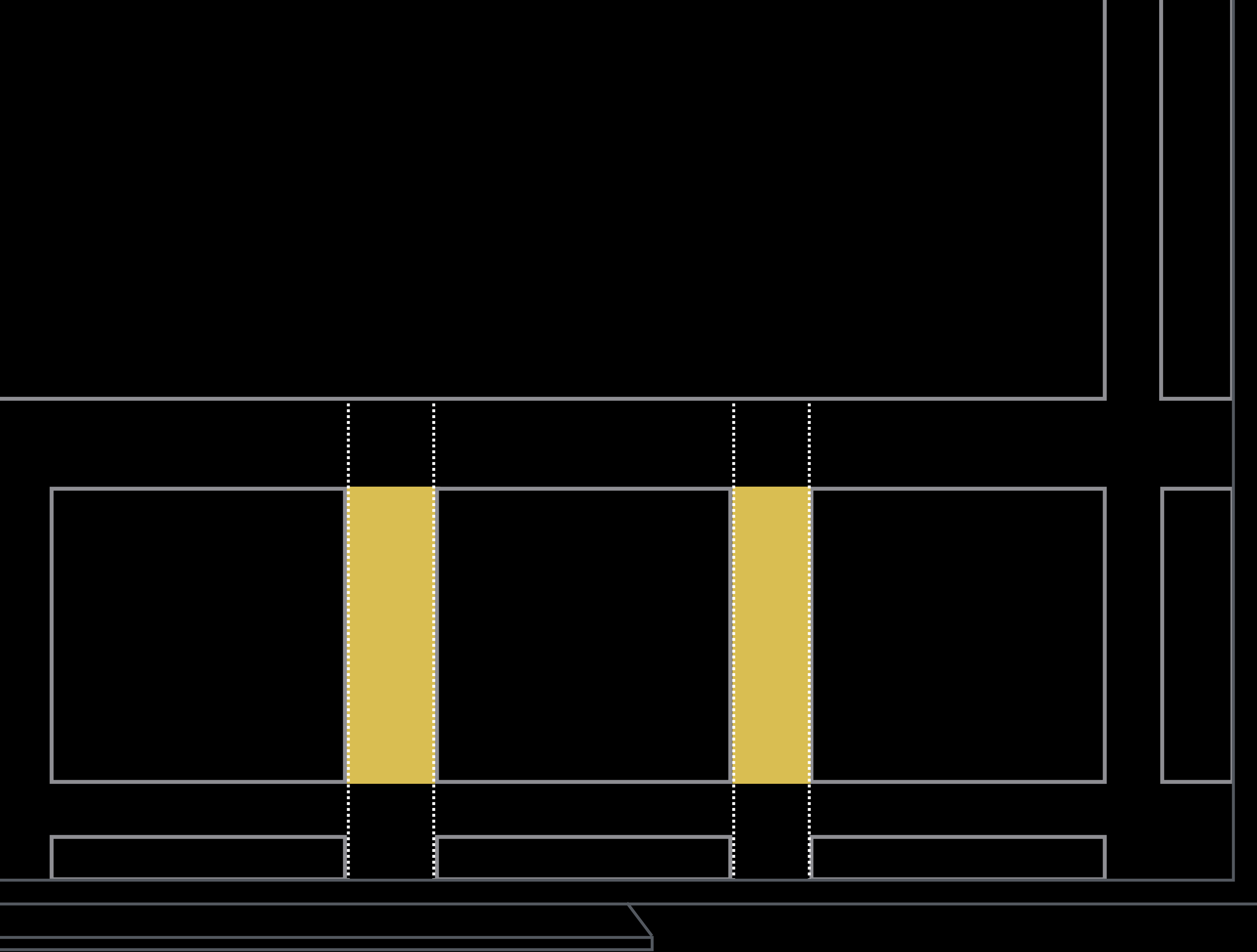
L F N H Q O R P

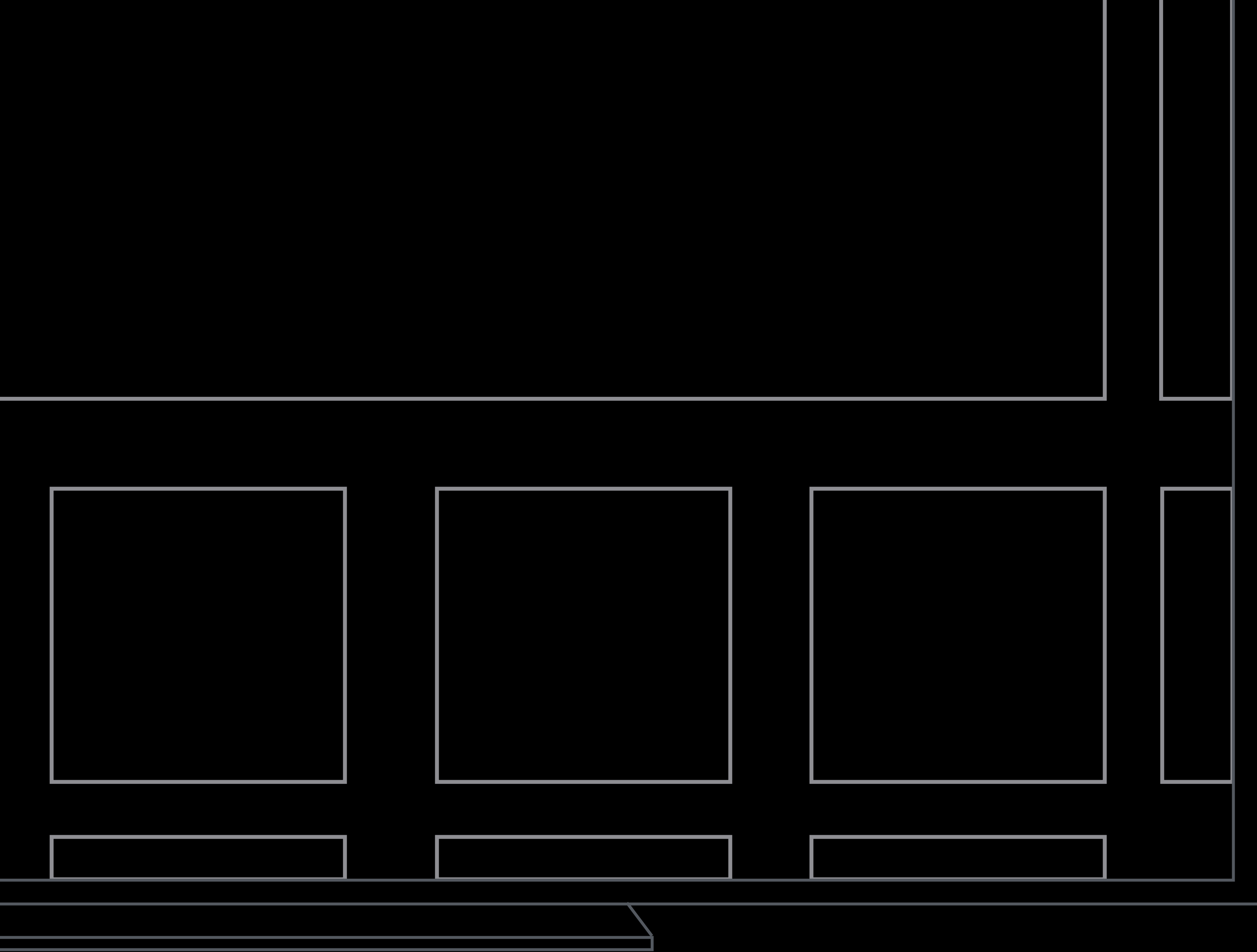


Shelf title













Title

Road to Firenze

Subtitle

Text

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate veli... MORE



Title 1



Title 2

Text

Title 3

Shelf Header



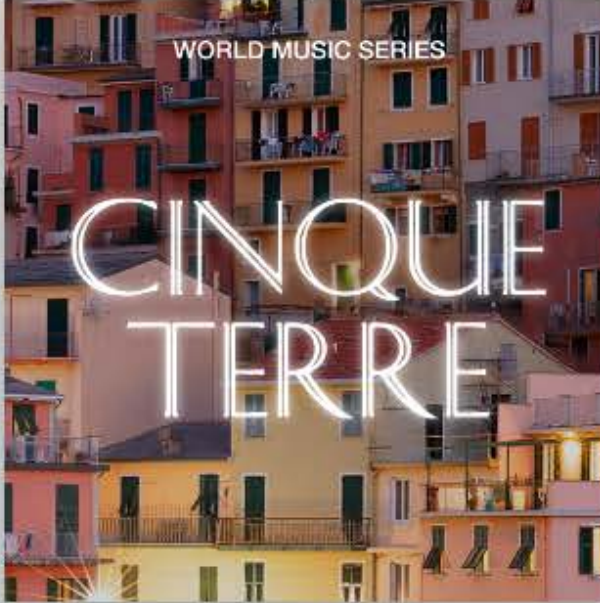
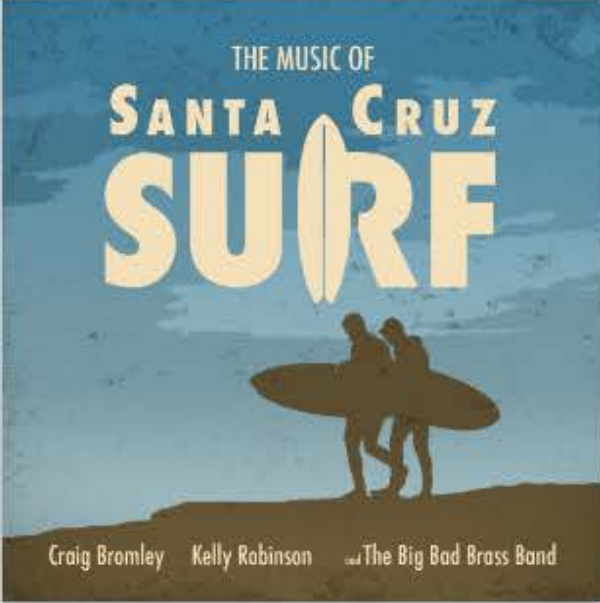
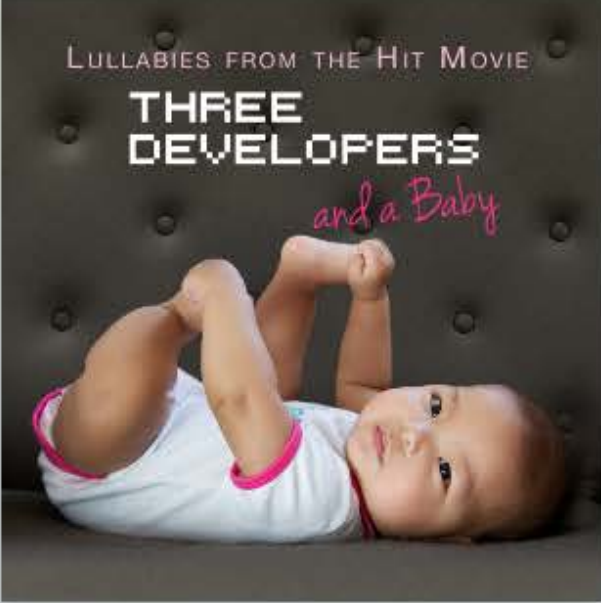
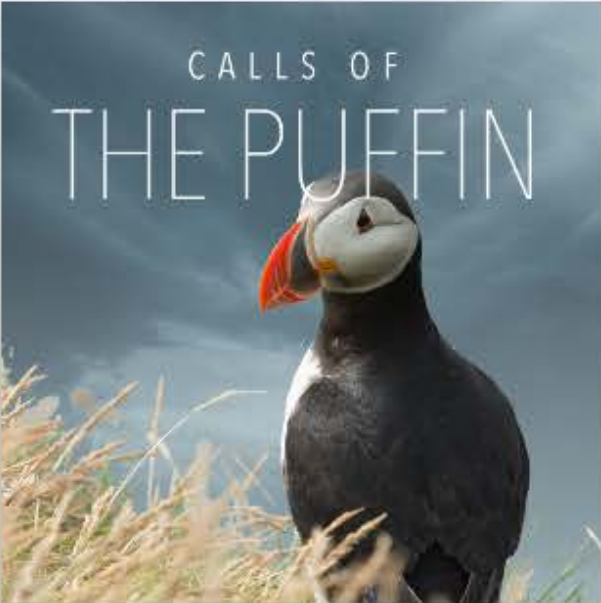
Title

SECTION HEADER

Title 1 6

Title 2 8

Title 3 12



Apple Inc.

Visual Design ▾

- Layout
- Typography
- Branding
- Color
- Textures
- Video
- Animation

Icons and Images

Interface Elements

Resources

Use layout templates to build media-centered apps. If your app layout requires minimal customization and simply needs to present content beautifully, use a predesigned layout template. See [Layout Templates](#).

Grids

Collections of content tend to work well in grid format on Apple TV. They showcase content well, are easy to browse at a distance, and are quick to navigate with the remote.

The following grid layouts and content widths provide an optimal viewing experience. Be sure to use appropriate spacing between unfocused rows and columns to prevent overlap when an item is brought into focus.

Three-Column [Four-Column](#) [Five-Column](#) [Six-Column](#) [Seven-Column](#) [Eight-Column](#) [Nine-Column](#)

Three-Column Grid	
Unfocused content width	548px
Horizontal spacing	48px
Minimum vertical spacing	100px

If you use the collection view flow element provided by UIKit, the number of columns in a grid is automatically determined based on the width and spacing of your content. For implementation details, see [UICollectionViewFlowLayout Class Reference](#).

Adhere to the screen's safe zone. Inset primary content 60px on the top and bottom of the screen, and 90px on the sides. Only partially displayed offscreen content and elements that deliberately flow offscreen should appear in this zone.

Include additional vertical spacing for titled rows. If a row has a title, provide appropriate spacing between the bottom of the previous unfocused row and the center of the title. Then, provide additional spacing between the



A

Text

Can you see this?

Can you see this?

Can you see this?

Ultralight

Thin

Regular

Medium

Semibold

Bold

Ultralight

Thin

Regular

Medium

Semibold

Bold



Ultralight

Thin

Regular

Medium

Semibold

Bold



Ultralight

Thin

Regular

Medium

Semibold

Bold



San Francisco

Settings



General >

Accounts >

Audio and Video >

Notifications >

AirPlay >

Remotes and Devices >

Apps >

Network >

System >

Sleep Now

Settings



General >

Accounts >

Audio and Video >

Notifications >

AirPlay >

Remotes and Devices >

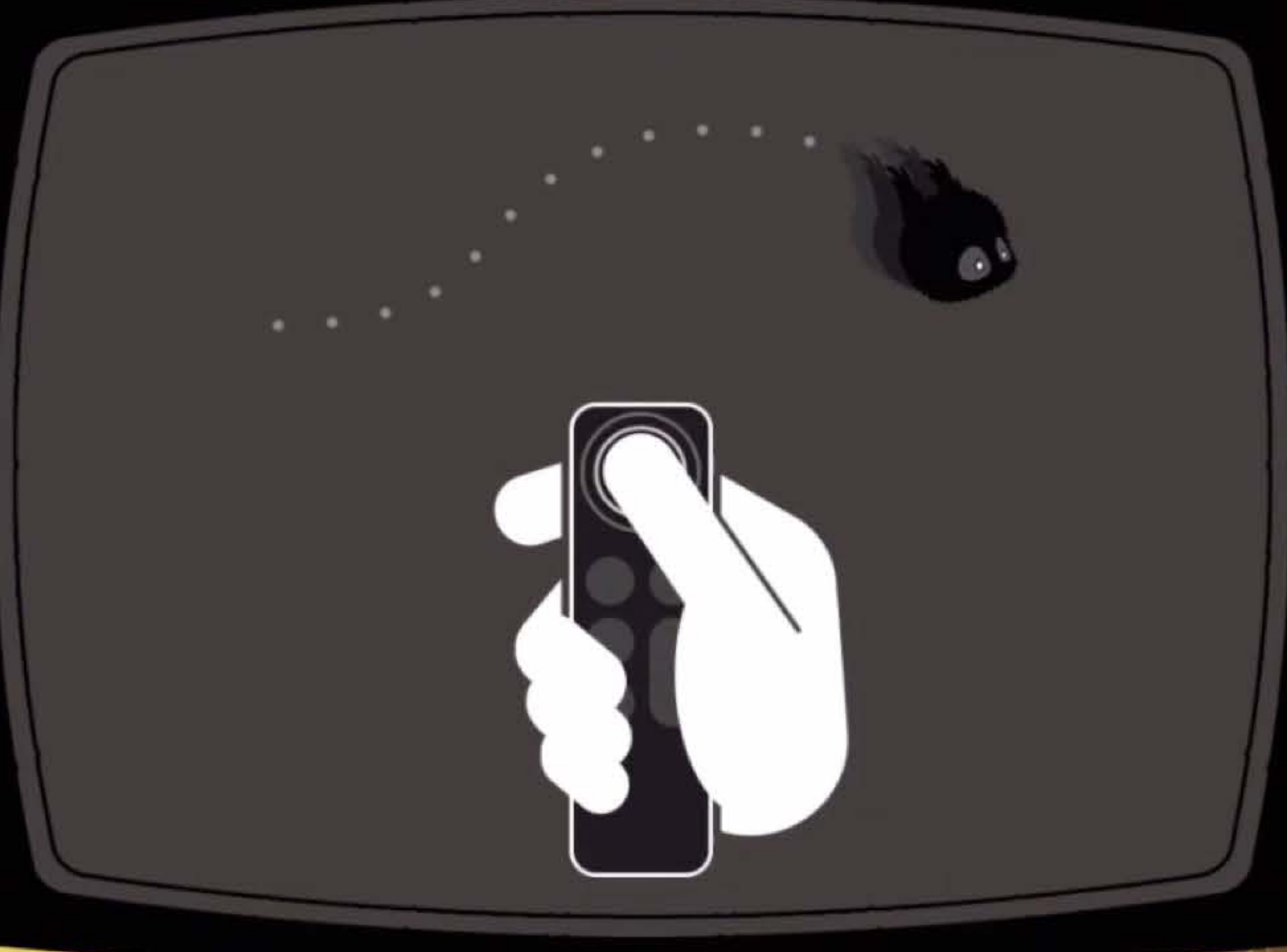
Apps >

Network >

System >

Sleep Now

SPIRAL



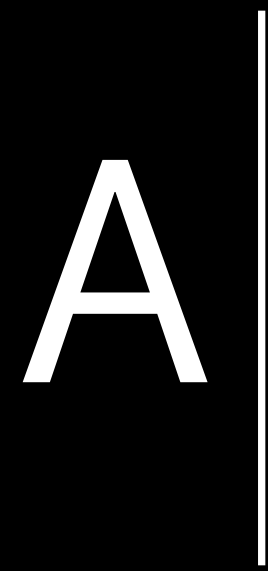
RESUME



MENU



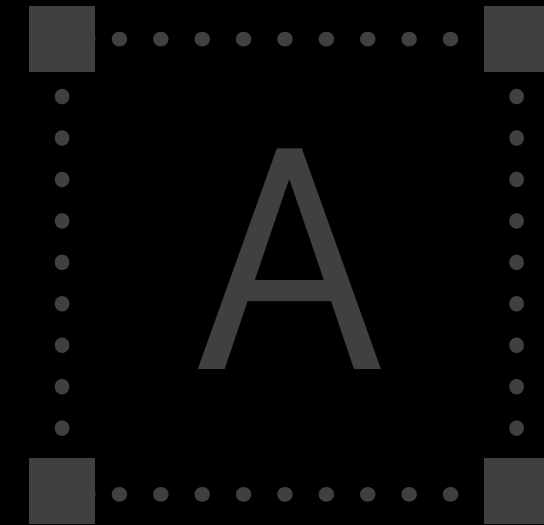
LEVEL



Text



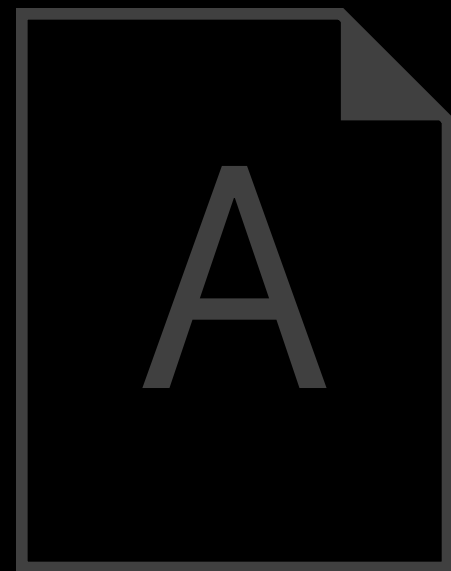
Character



Glyph



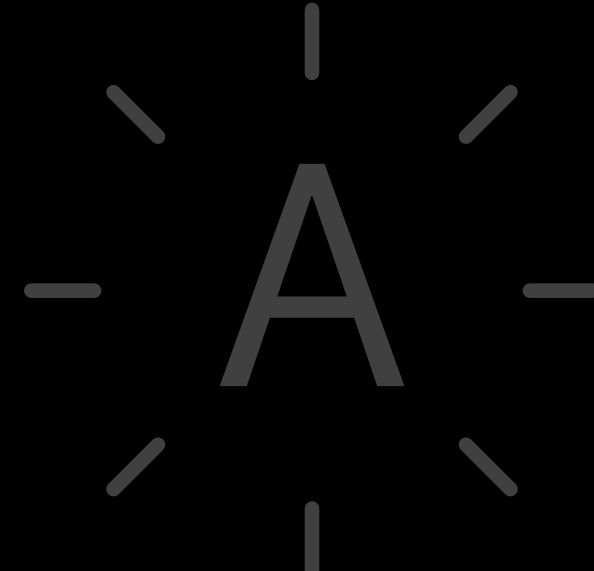
Feature



Font



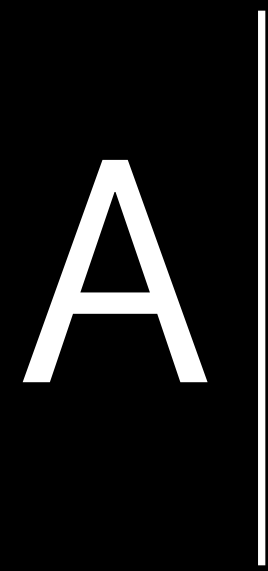
Style



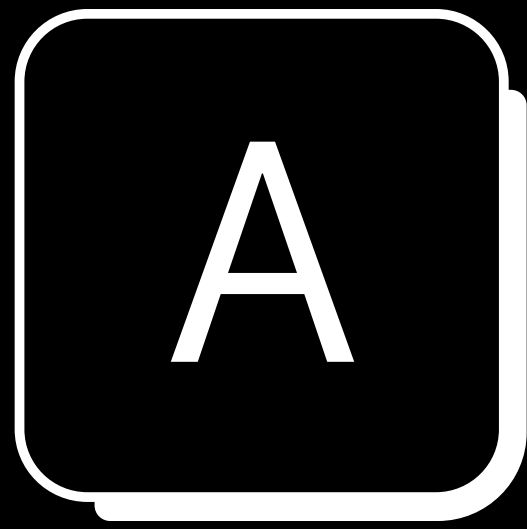
Typeface



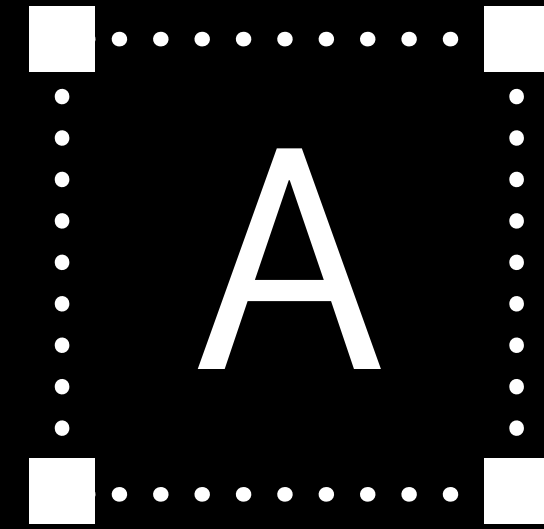
Typography



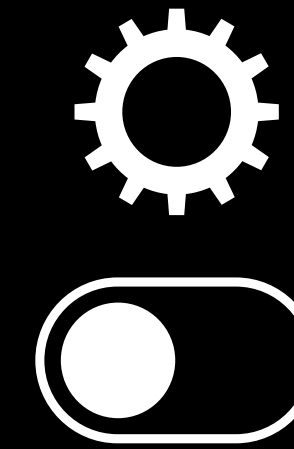
Text



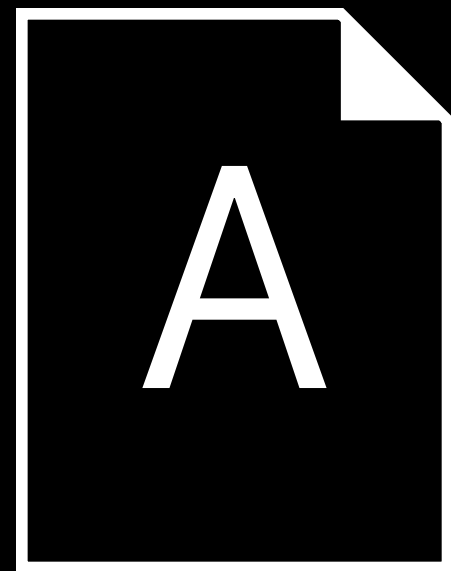
Character



Glyph



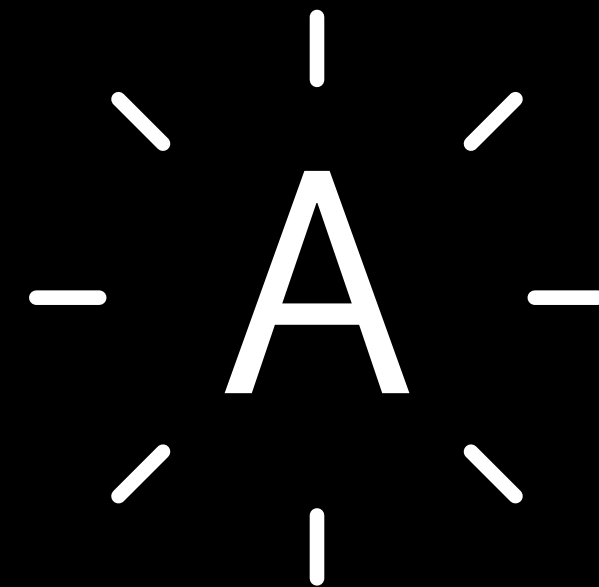
Feature



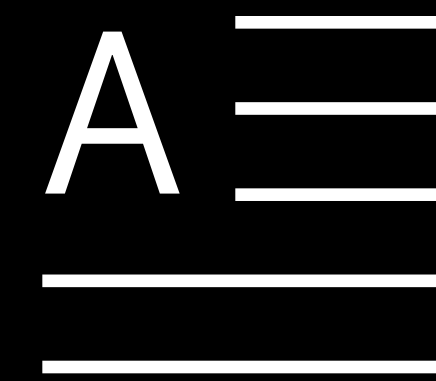
Font



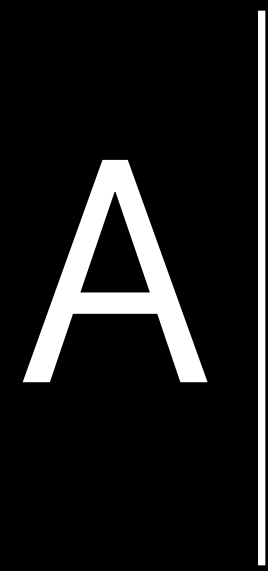
Style



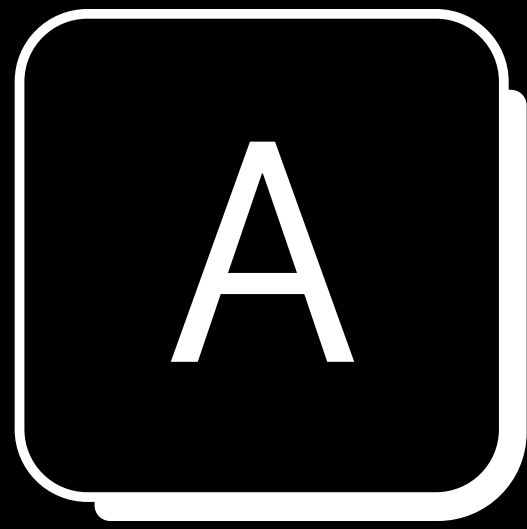
Typeface



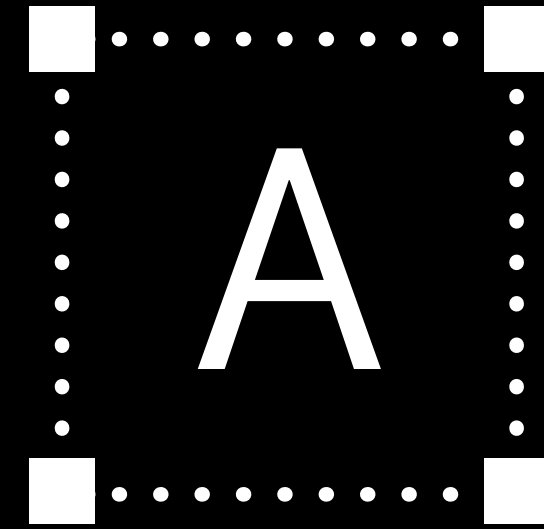
Typography



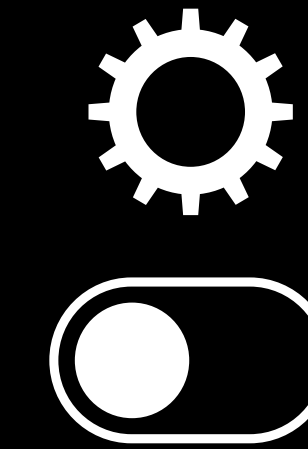
Text



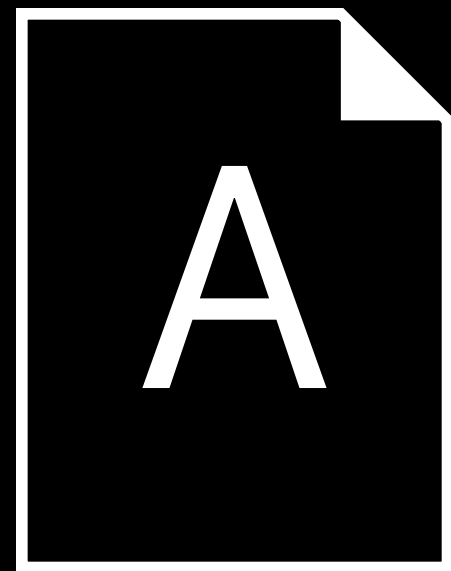
Character



Glyph



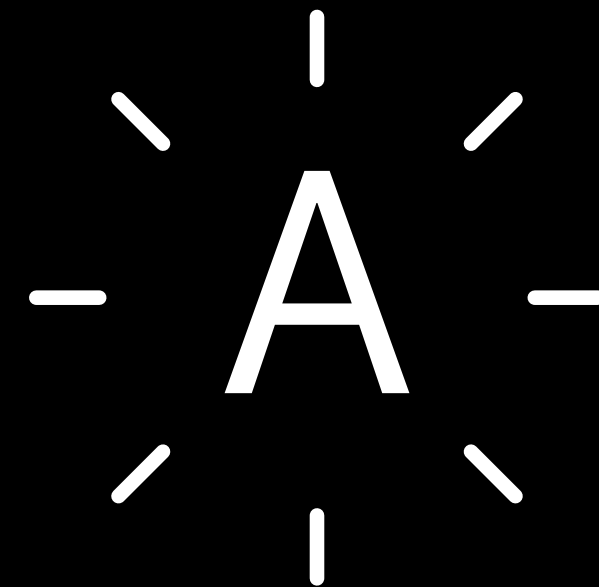
Feature



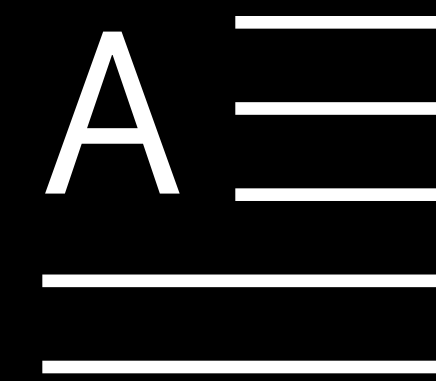
Font



Style



Typeface



Typography





Keep it simple.

Featured

Top Charts

Categories

Purchased

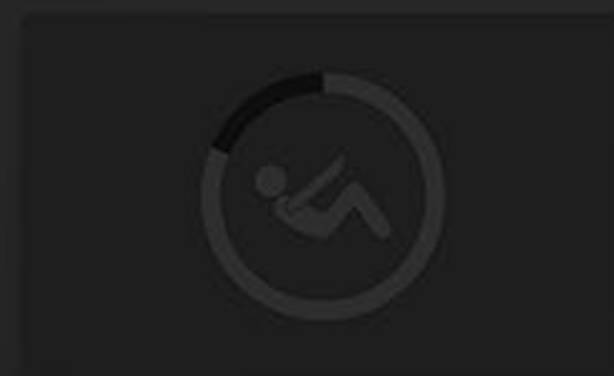
Search



Best New Apps & Games



Lumino City



Streaks Workout



GT Spirit



BADLAND



Duet Game



Settings



General >

Accounts >

Audio and Video >

Notifications >

AirPlay >

Remotes and Devices >

Apps >

Network >

System >

Sleep Now

Distance

Distance

Use large graphics and interface elements

Distance

Use large graphics and interface elements

Provide space and padding

Distance

Use large graphics and interface elements

Provide space and padding

Text legibility is essential

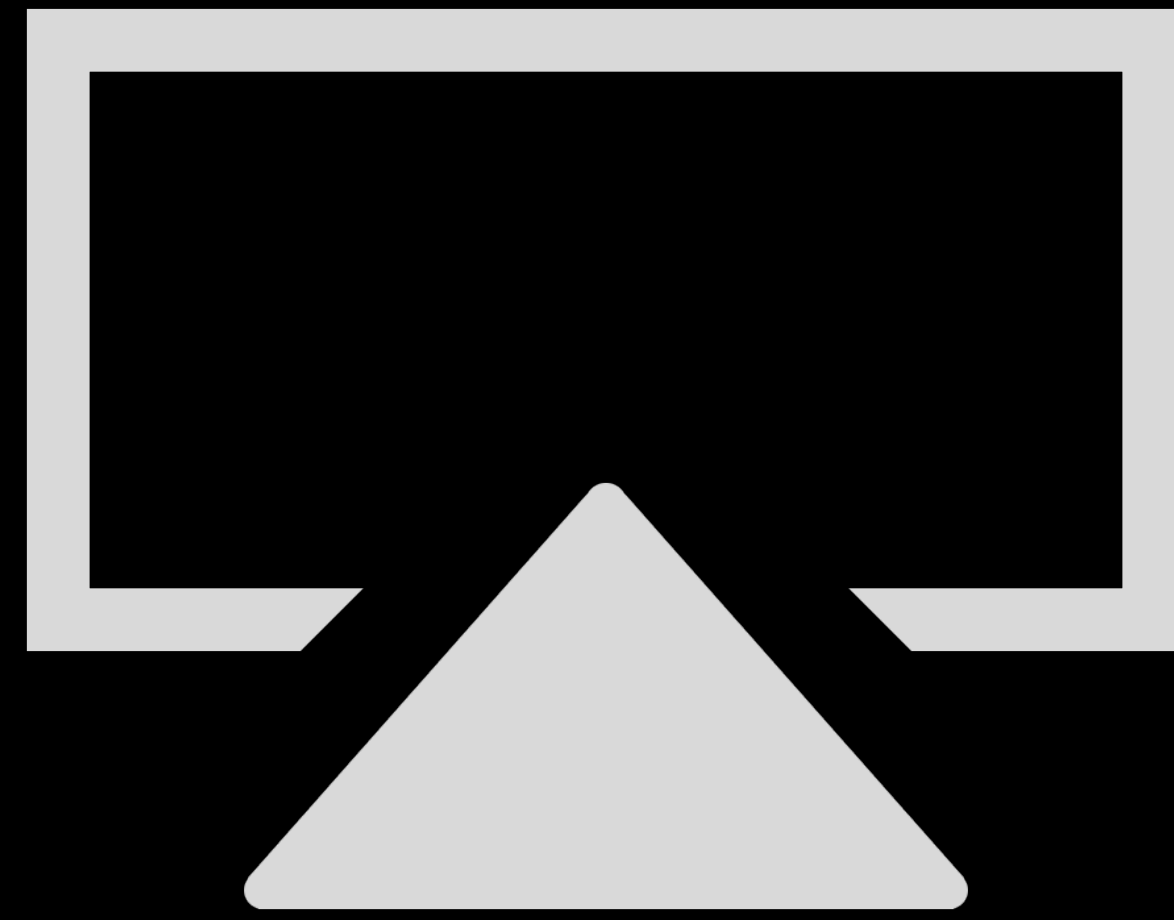
Distance

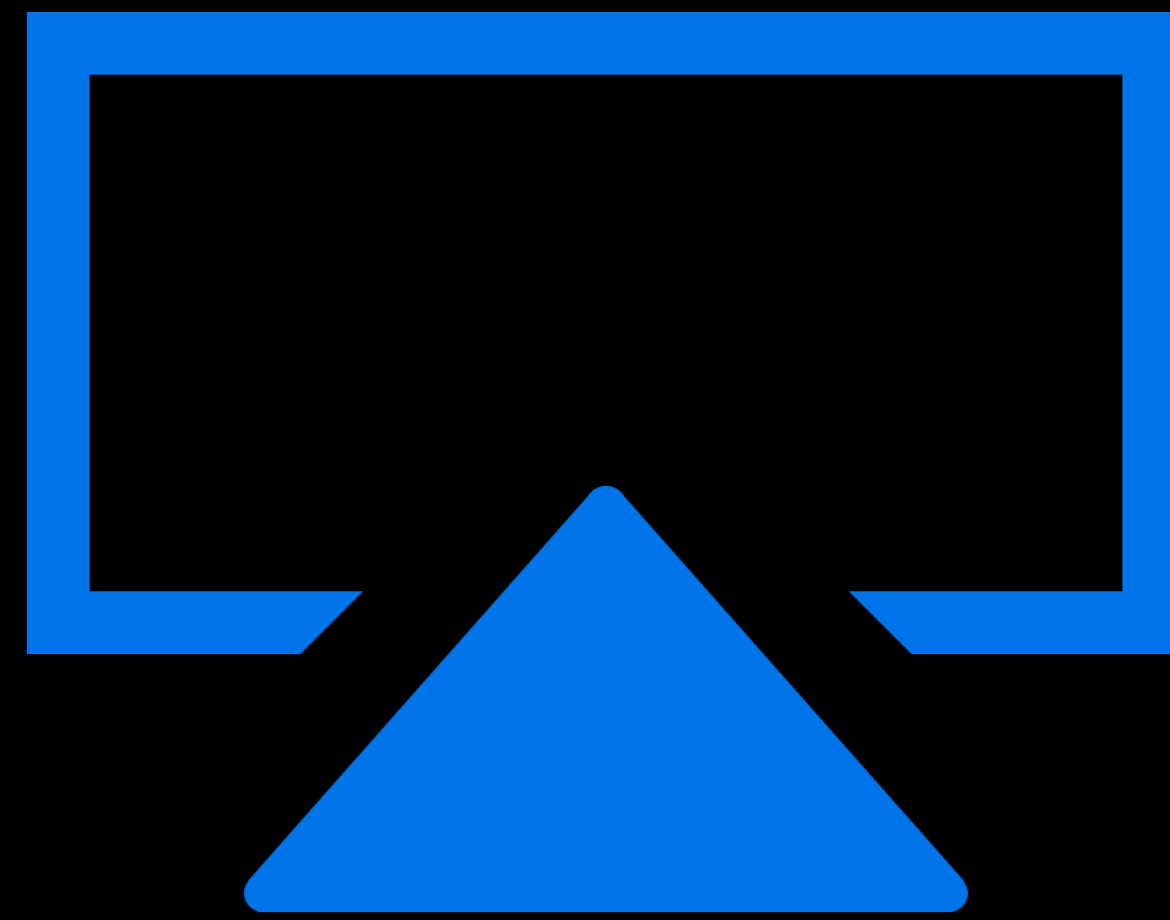
Use large graphics and interface elements

Provide space and padding

Text legibility is essential

Approachable hierarchy







Designing for tvOS

Basics

Distance

Remote

Features

Apps

Designing for tvOS

Basics

Distance

Remote

Features

Apps









Swipe





Click





MENU



Tap





Menu





Play/Pause

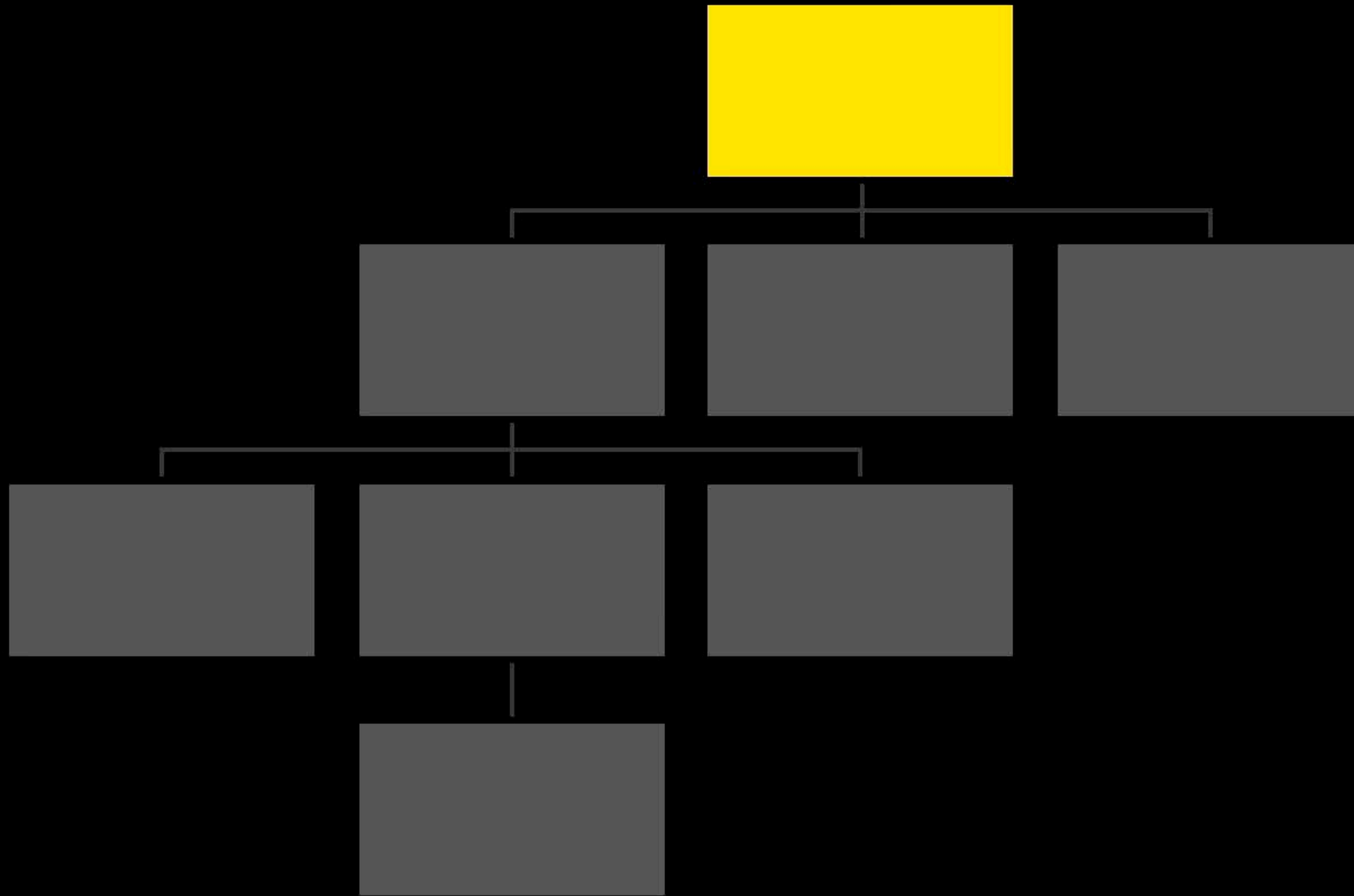














44

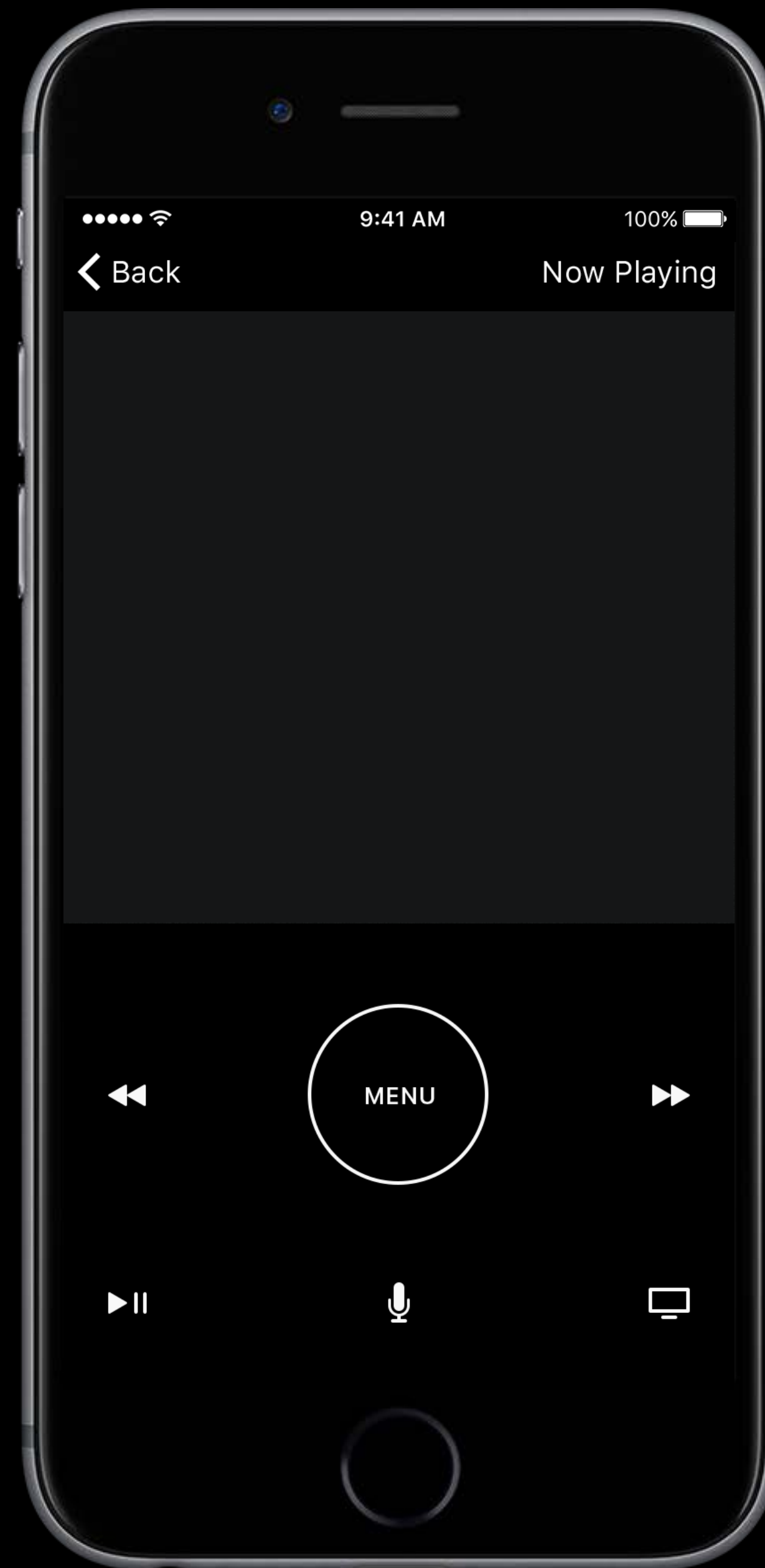
FIGHT TO THE FINISH!

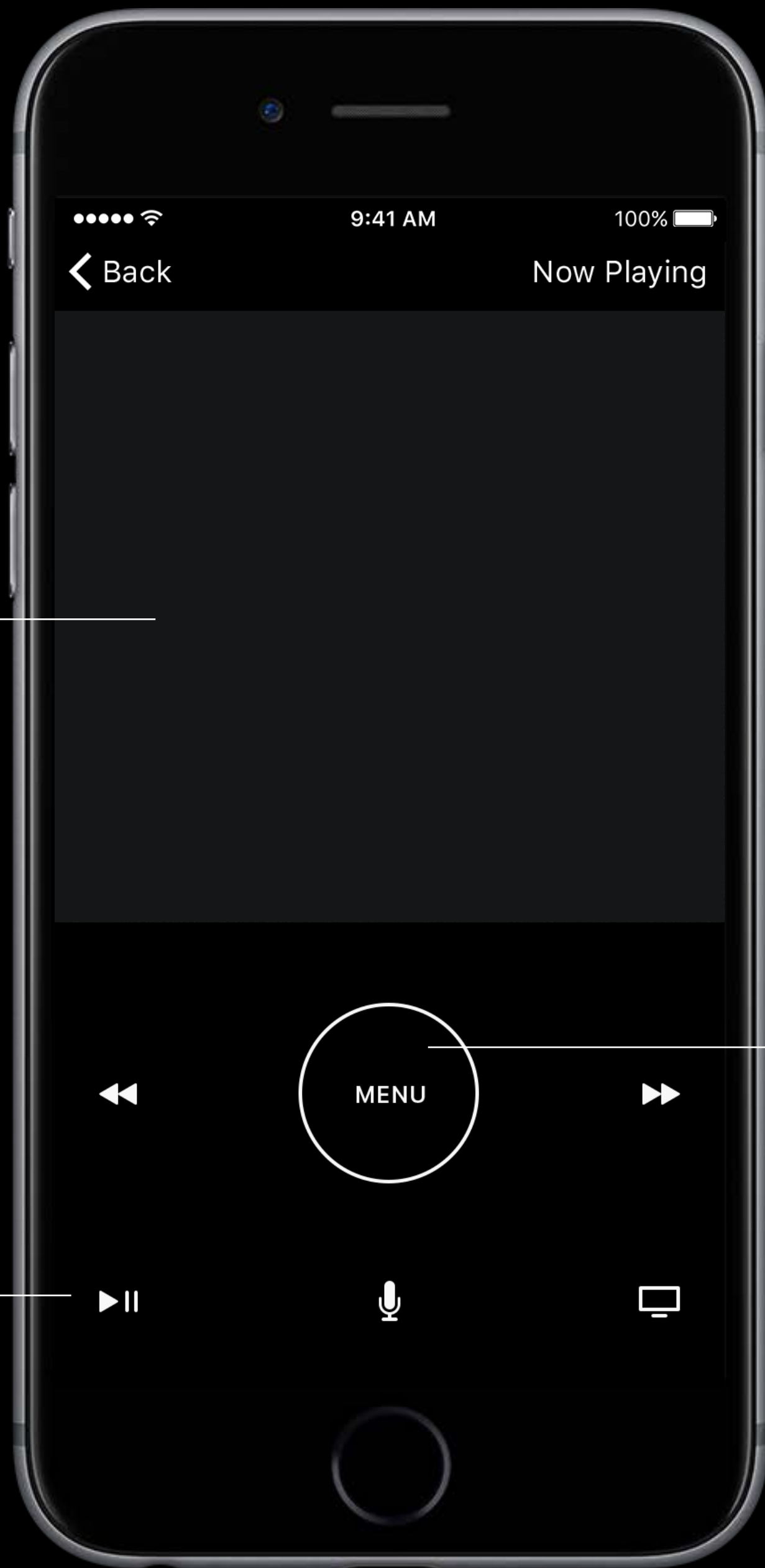


MENU





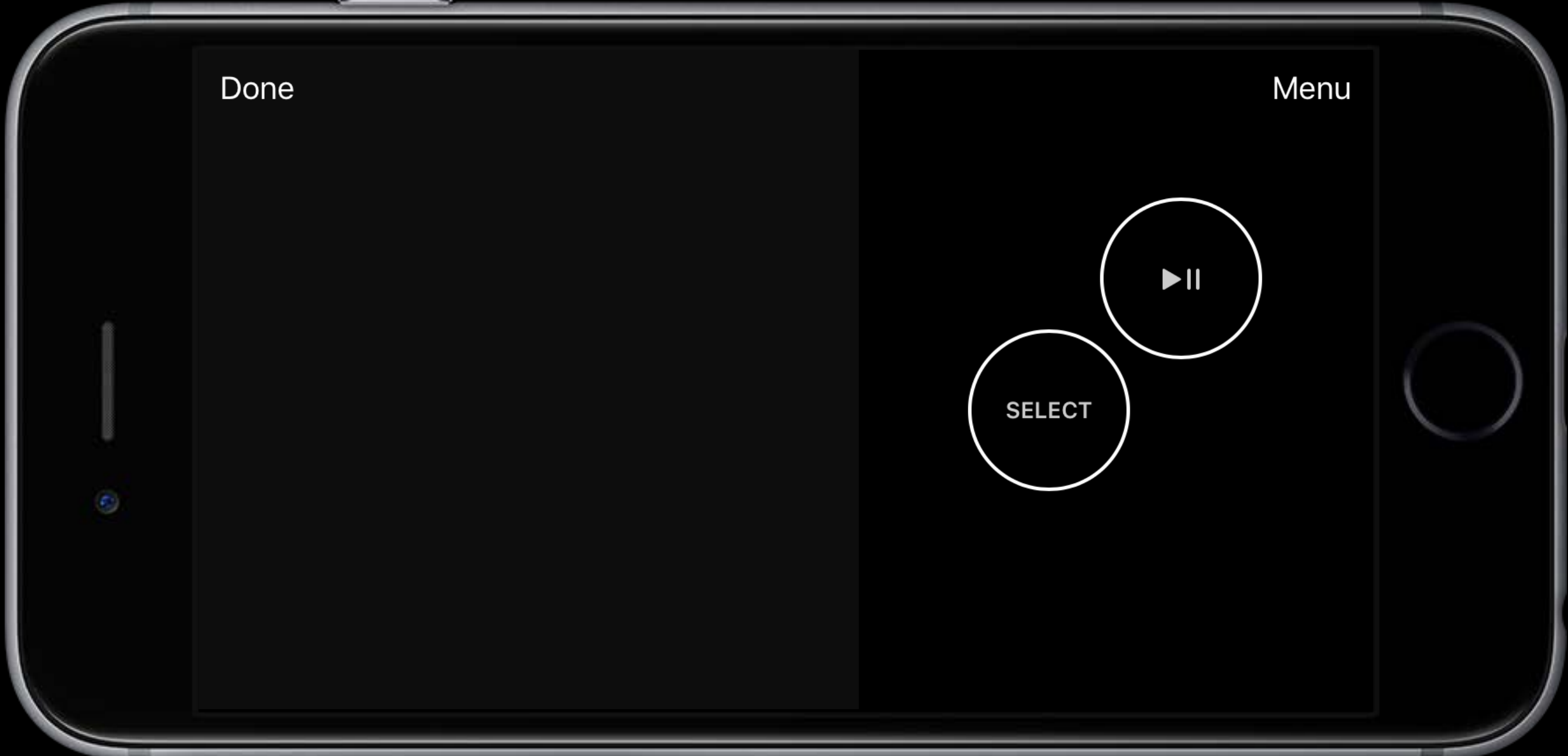




Swipe
Click
Tap

Play/Pause

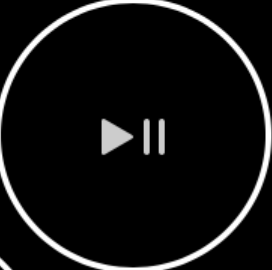
Menu



Done

Menu

SELECT





Game Controller Best Practices



Game Controller Best Practices

Navigate and Play



Game Controller Best Practices

Navigate and Play

Inform if required



Game Controller Best Practices

Navigate and Play

Inform if required

Inform if not connected



Game Controller Best Practices

Navigate and Play

Inform if required

Inform if not connected

Siri Remote



Game Controller Best Practices

Navigate and Play

Inform if required

Inform if not connected

Siri Remote

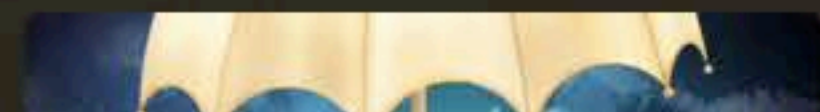
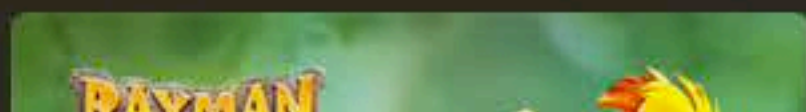
Don't miss out!





Focus

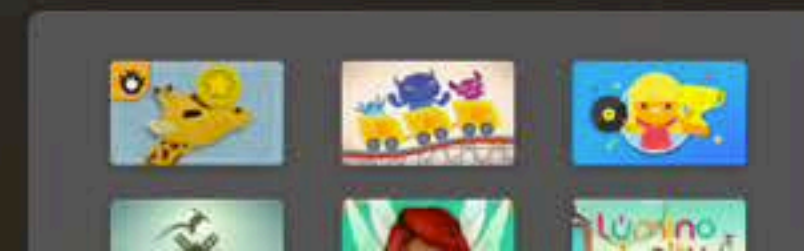
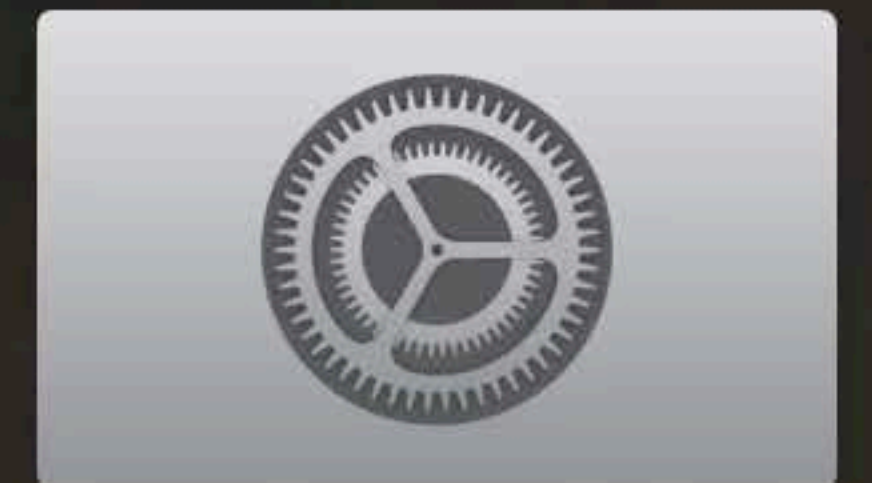
```
print("Hello, WWDC!")  
  
learnAbout(OSX, iOS, watchOS, tvOS)  
  
let videos = liveStreaming  
let date = "June 13-17"  
let location = yourLivingRoom  
let WWDC16 = gameChanging  
  
watchNow()
```



watchNow()



App Store



Disney Zootopia

GENRE
Kids & Family

🍌 98% ✓ 8+ 1 hr 49 min 2016 PG HD CC AD

DIRECTOR
Rich Moore
Byron Howard

Disney presents a heartwarming comedy-adventure set in the modern mammal metropolis of Zootopia. With habitat neighborhoods like ritzy Sahara Square and frigid Tundratown, it's a melting pot where animals from every environment live together—a place where no matter... [MORE](#)

STARRING
Ginnifer Goodwin
Jason Bateman
Idris Elba
Jenny Slate



Preview

\$19.99

Buy
With iTunes Extras

\$5.99

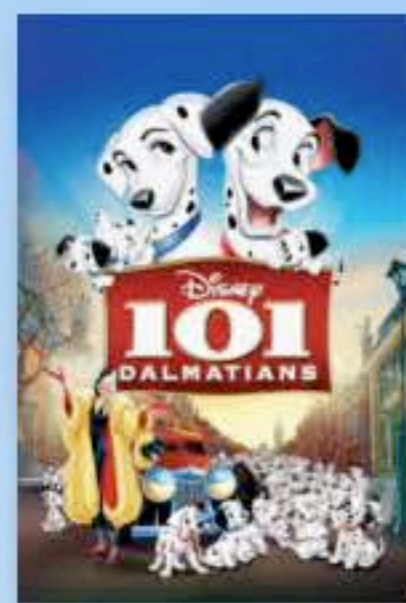
Rent



Wish List



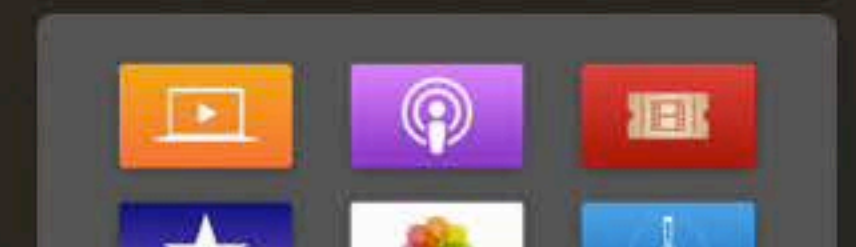
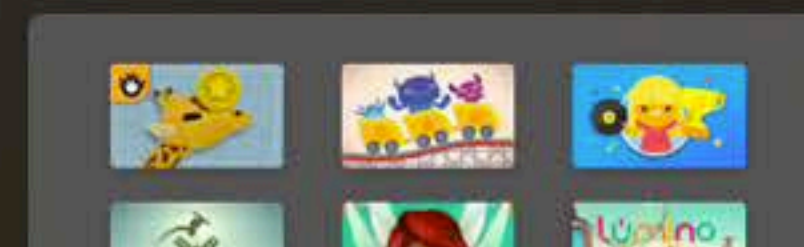
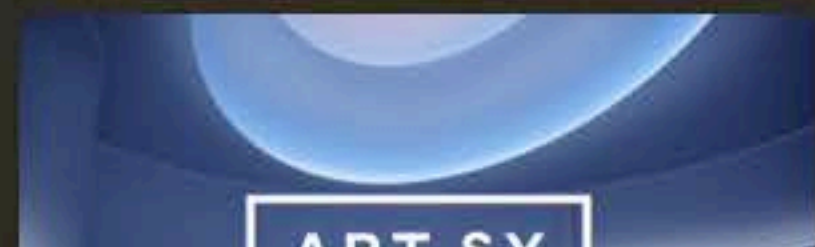
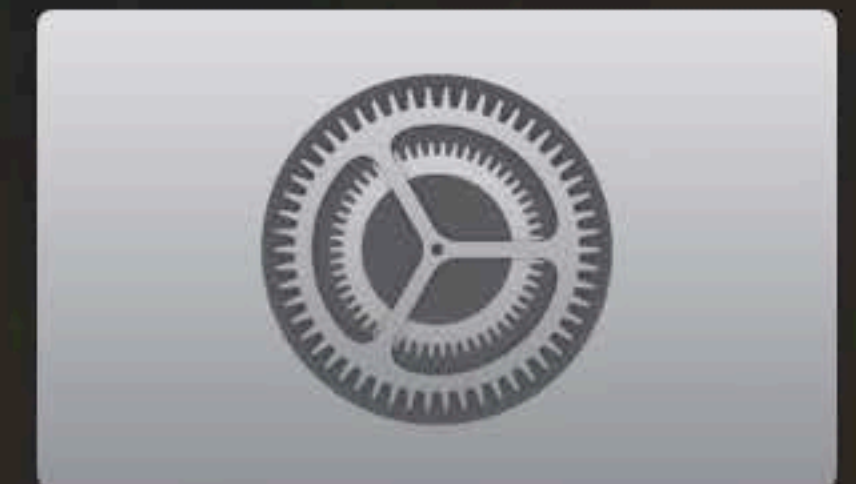
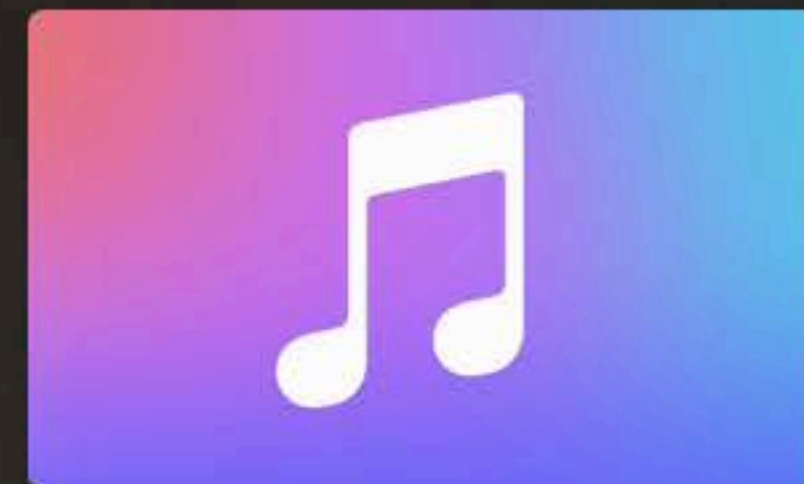
Viewers Also Watched



watchNow()



App Store



SPIRAL



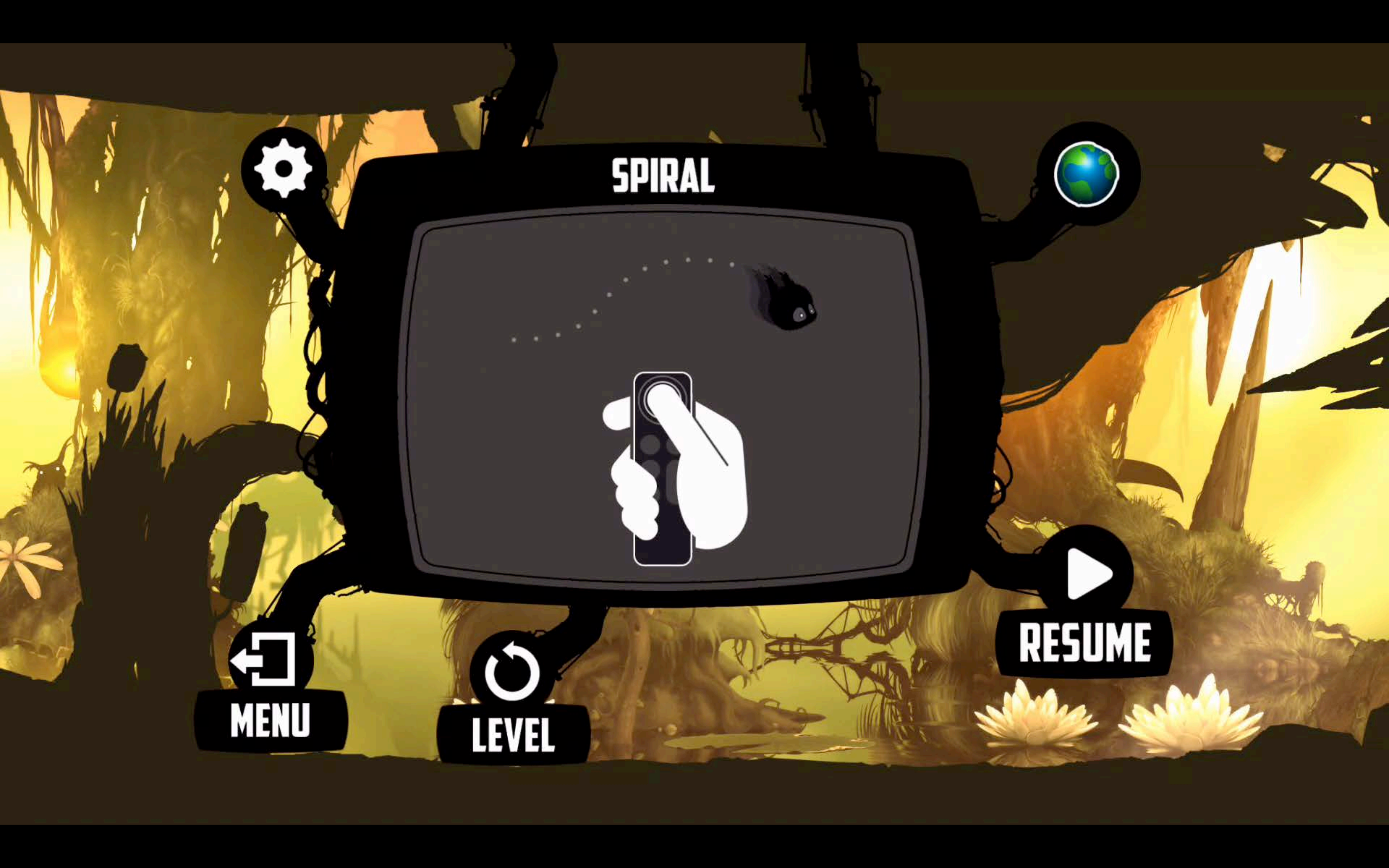
RESUME



MENU



LEVEL



Focus

Focus Interaction on tvOS

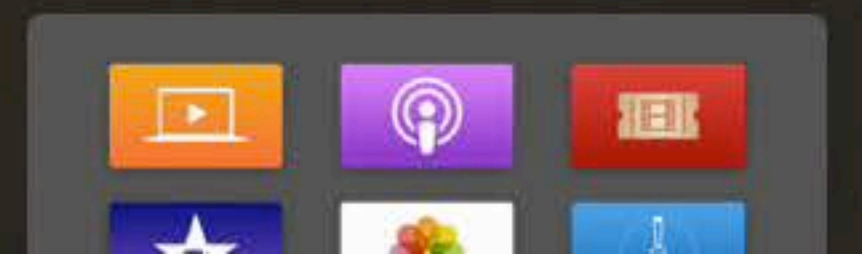
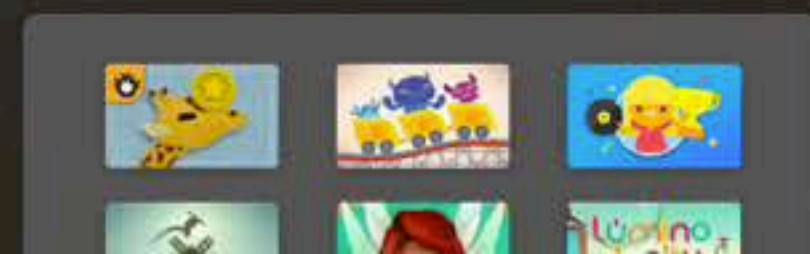
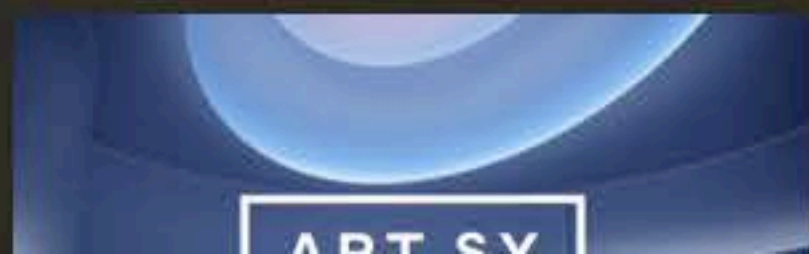
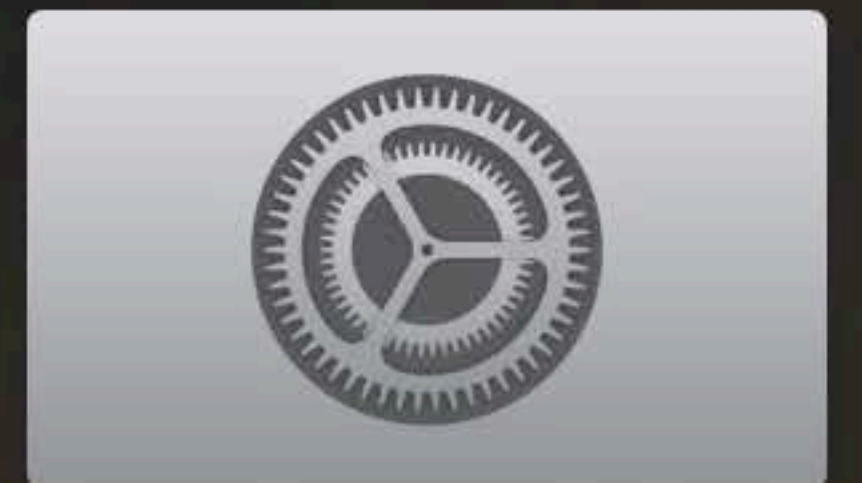
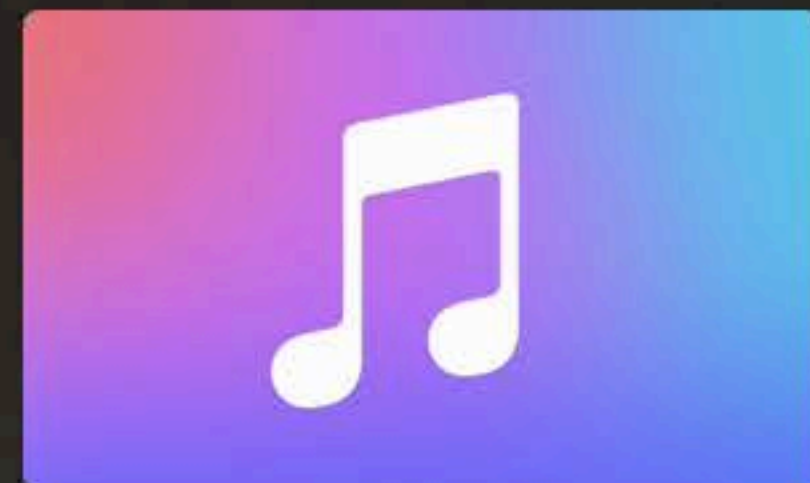
Mission

Wednesday 4:00PM

watchNow()



Foodo World



Remote

Remote

Intuitive gestures and buttons

Remote

Intuitive gestures and buttons

Use the focus model

Remote

Intuitive gestures and buttons

Use the focus model

Make focus obvious

Remote

Intuitive gestures and buttons

Use the focus model

Make focus obvious

Don't break connection

Designing for tvOS

Basics

Distance

Remote

Features

Apps

Designing for tvOS

Basics

Distance

Remote

Features

Apps

tvOS

Features

NEW

Appearance

Badging

Maps

ReplayKit

Long List Scrolling

HomeKit

Game Center Updates

Multi-Peer Connectivity

PhotoKit

Features

NEW

Appearance

Badging

Maps

ReplayKit

Long List Scrolling

HomeKit

Game Center Updates

Multi-Peer Connectivity

PhotoKit



General

- About >
- Screensaver Aerial >
- Appearance Light
- Sleep After 1 hour
- Accessibility >
- Restrictions Off >
- Privacy >
- SIRI
- Siri On
- Language English (United States)
- About Siri and Privacy >

General



About >

Screensaver Aerial >

Appearance Dark

Sleep After 1 hour

Accessibility >

Restrictions Off >

Privacy >

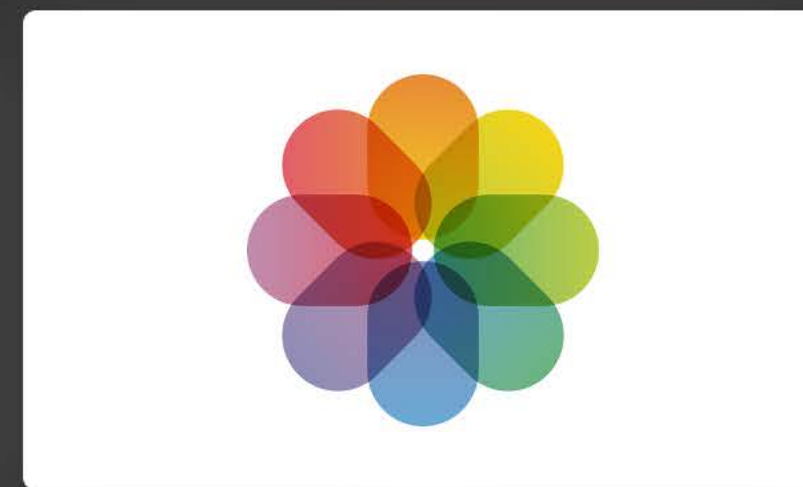
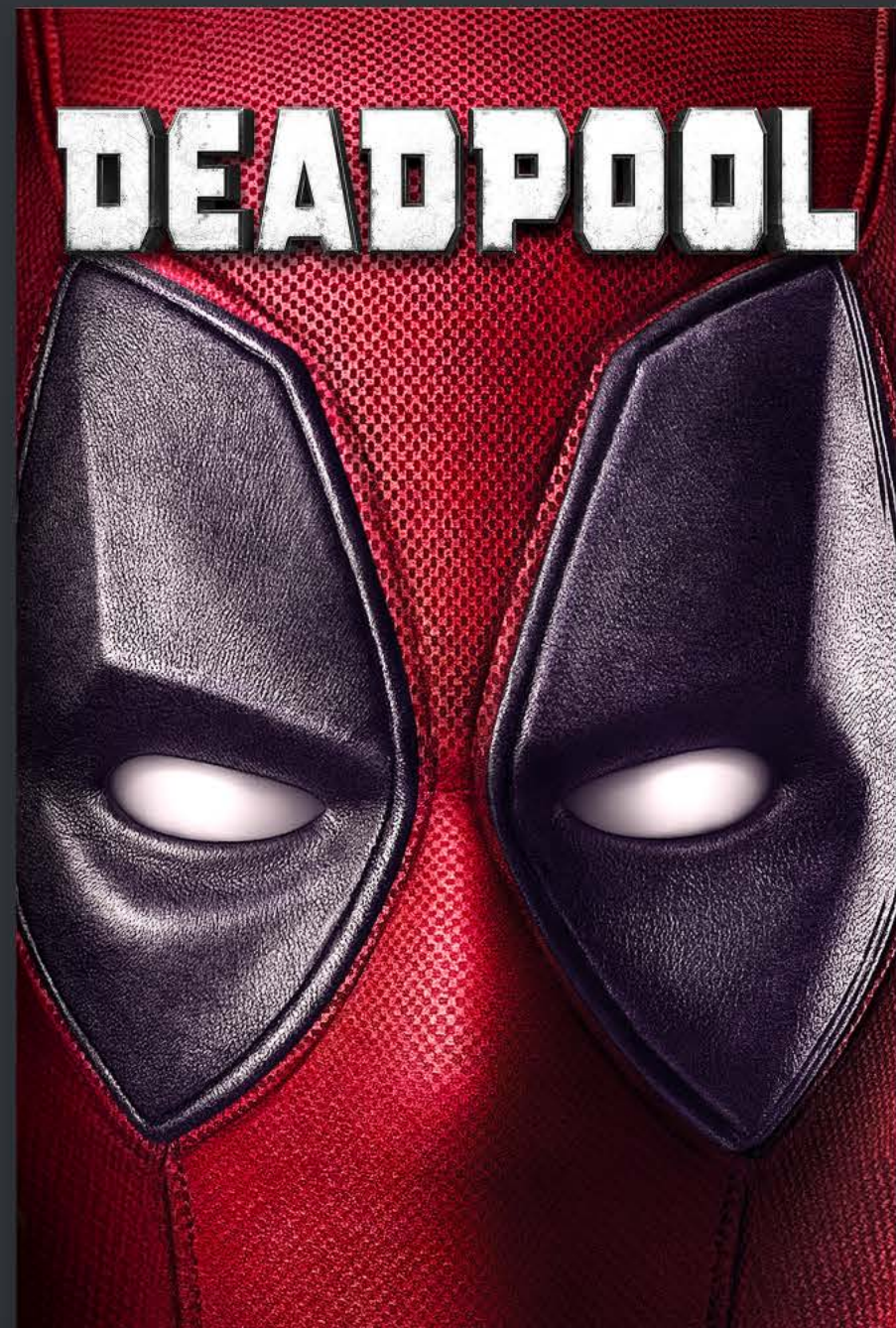
SIRI

Siri On

Language English (United States)

About Siri and Privacy >

Top Movies



Movies



Opt in!

Accessibility

Accessibility

Voice Over

Zoom

Bold Text

Increase Contrast

Reduce Motion

Audio Descriptions

Siri and Dictation

Touch Surface Sensitivity

Remote App for Switch Control

Accessibility Shortcut

Accessibility

Voice Over

Audio Descriptions

Zoom

Siri and Dictation

Bold Text

Touch Surface Sensitivity

Increase Contrast

Remote App for Switch Control

Reduce Motion

Accessibility Shortcut

Accessibility User Interface by Appointment Lab

UI Design Lab A

Wednesday 9:00AM

Accessible Technology and Inclusive Design

Buena Vista Park

Wednesday 6:15PM

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Apps

Designing for tvOS

Basics

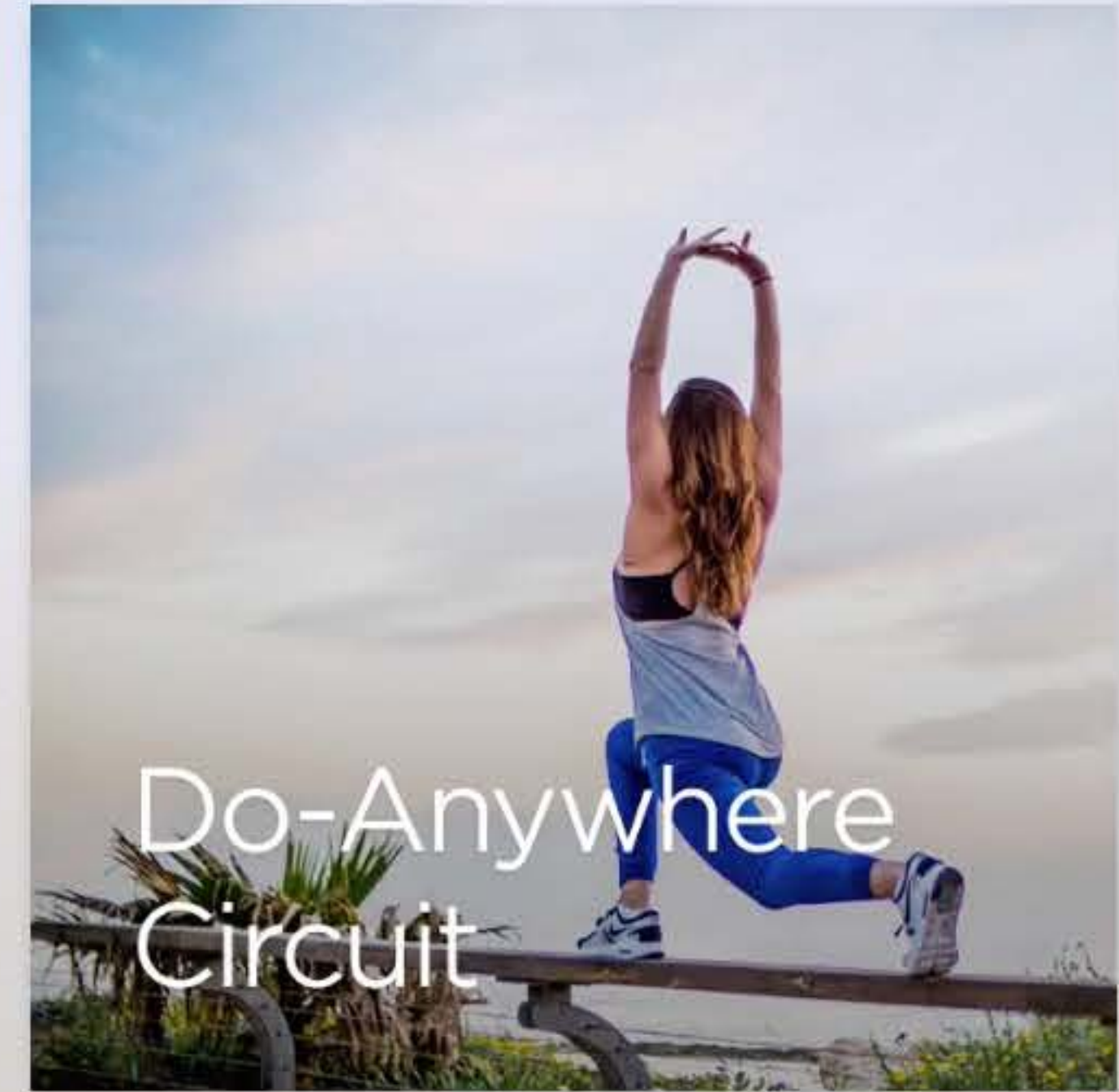
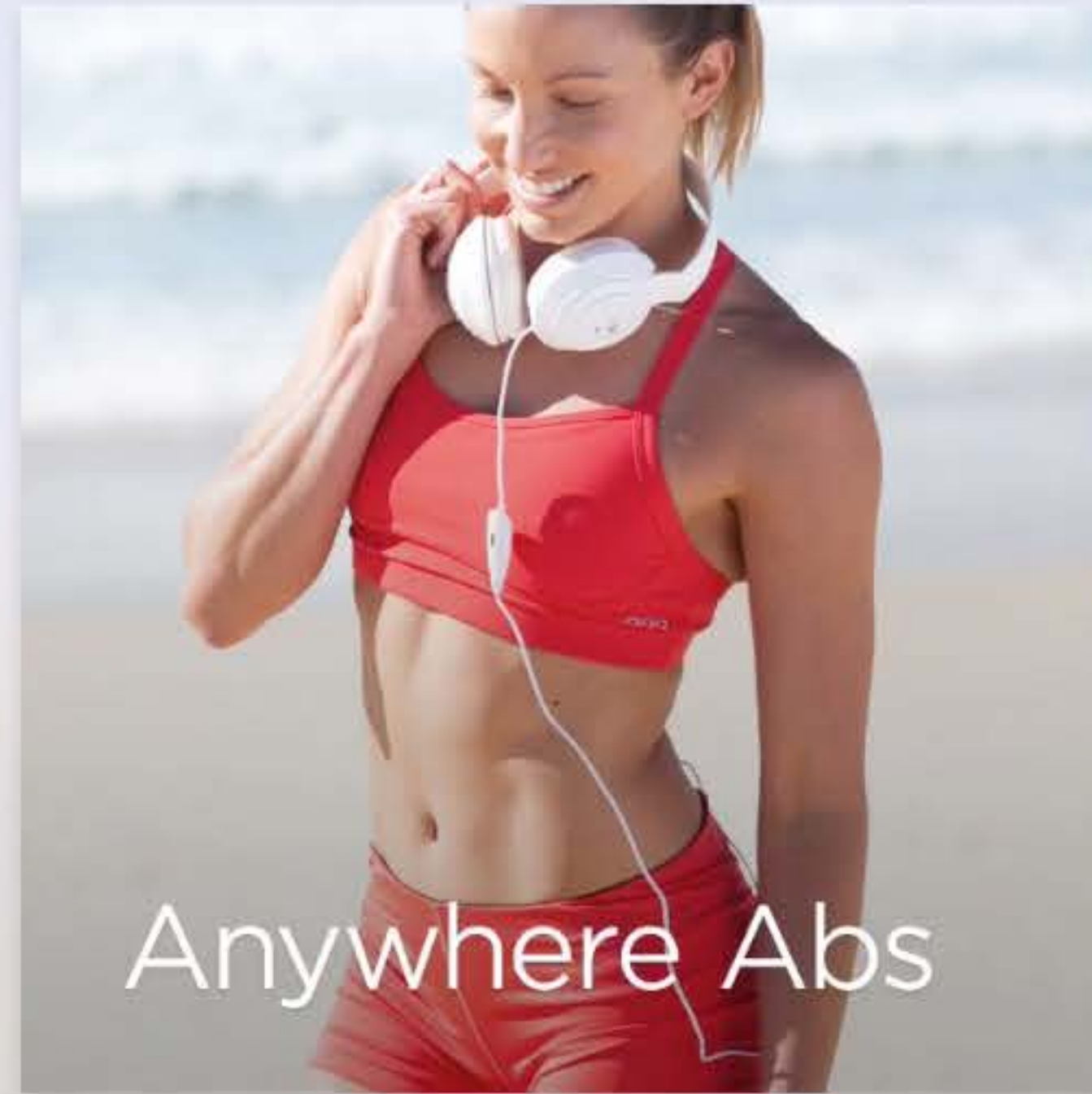
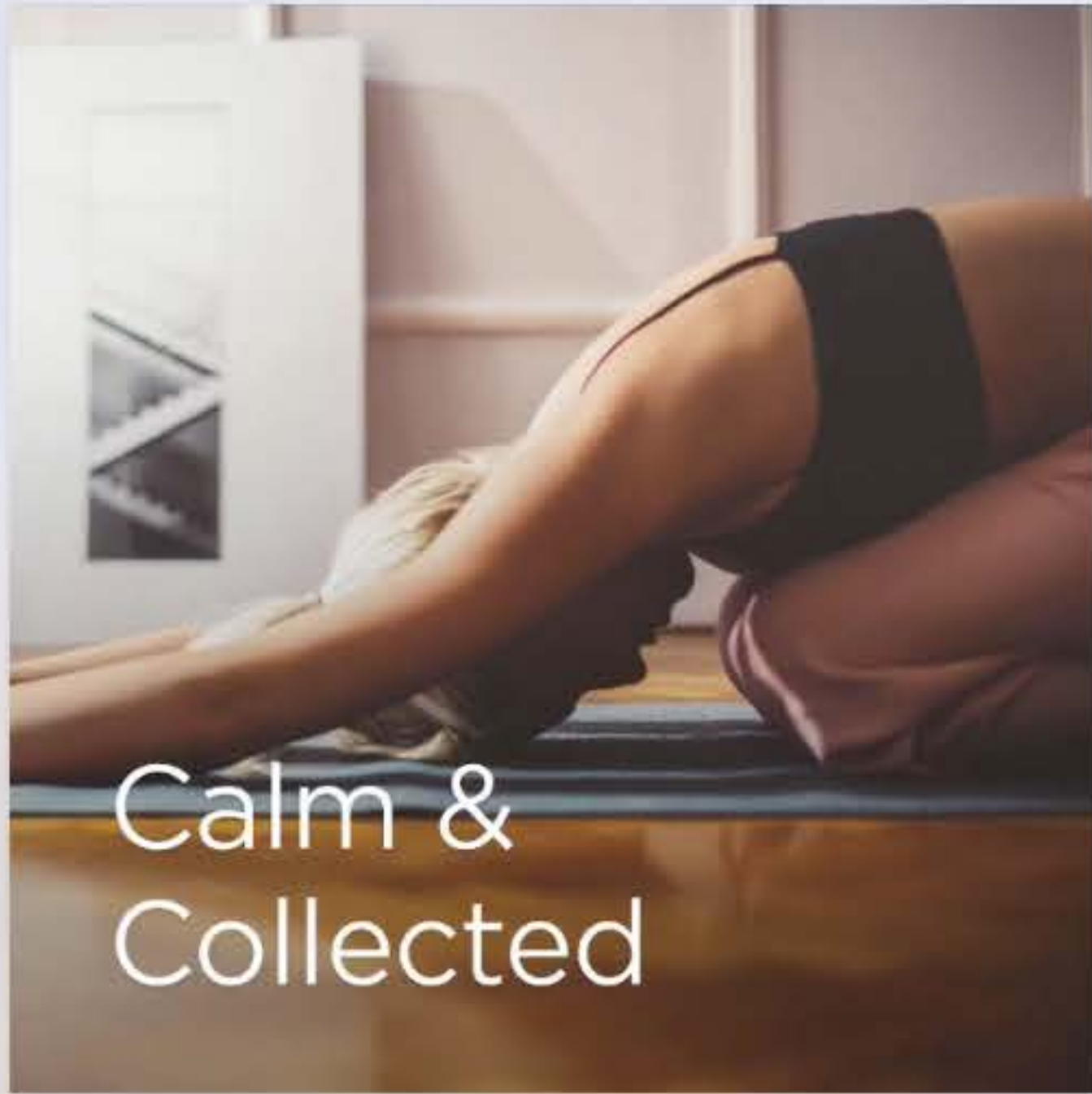
Distance

Remote

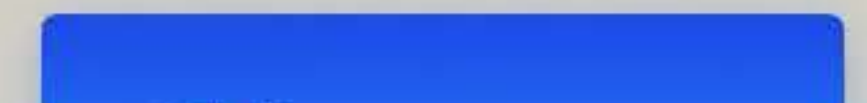
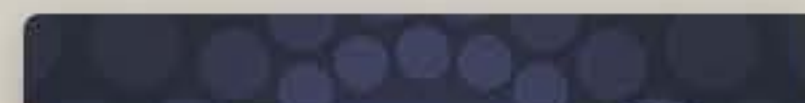
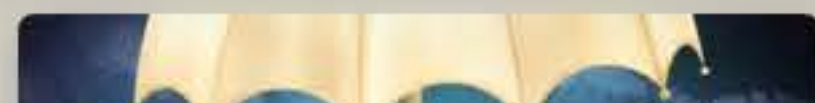
Features

Apps

Editor's Choice



Zova





WORKOUT OF THE DAY

Quick Abs

Sometimes, life is frantic and there's no time to think about what to have for dinner, let alone whether you can attend yoga class. Make exercise a more manageable priority in

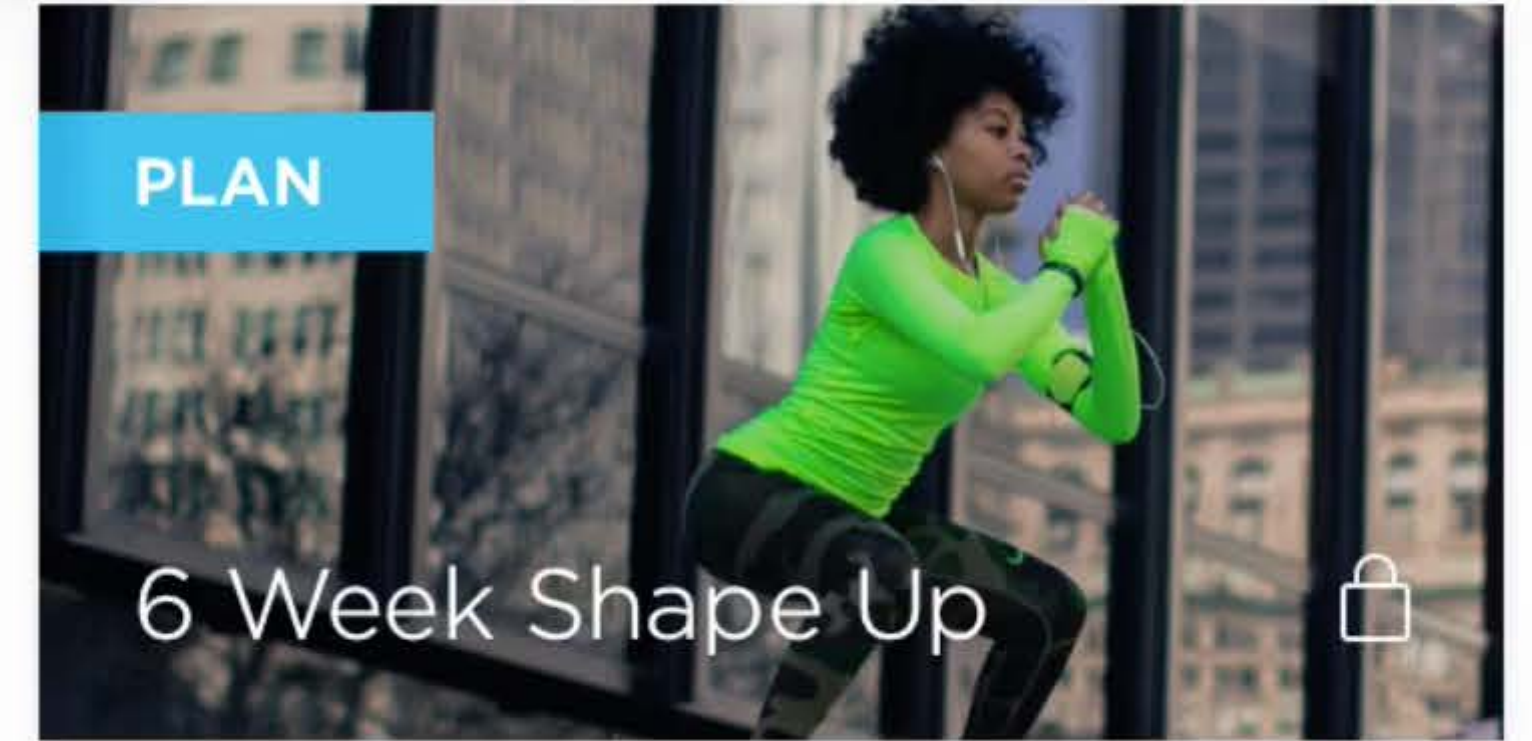
Free



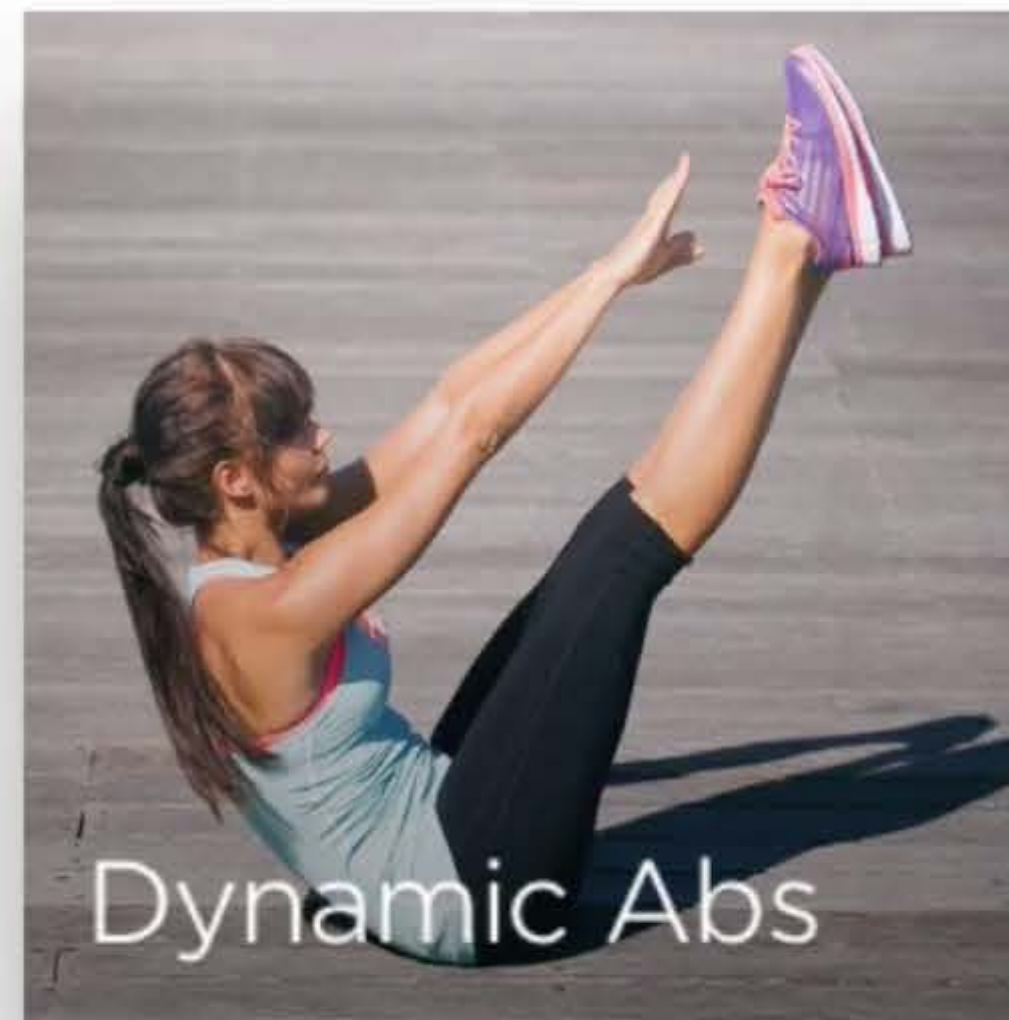
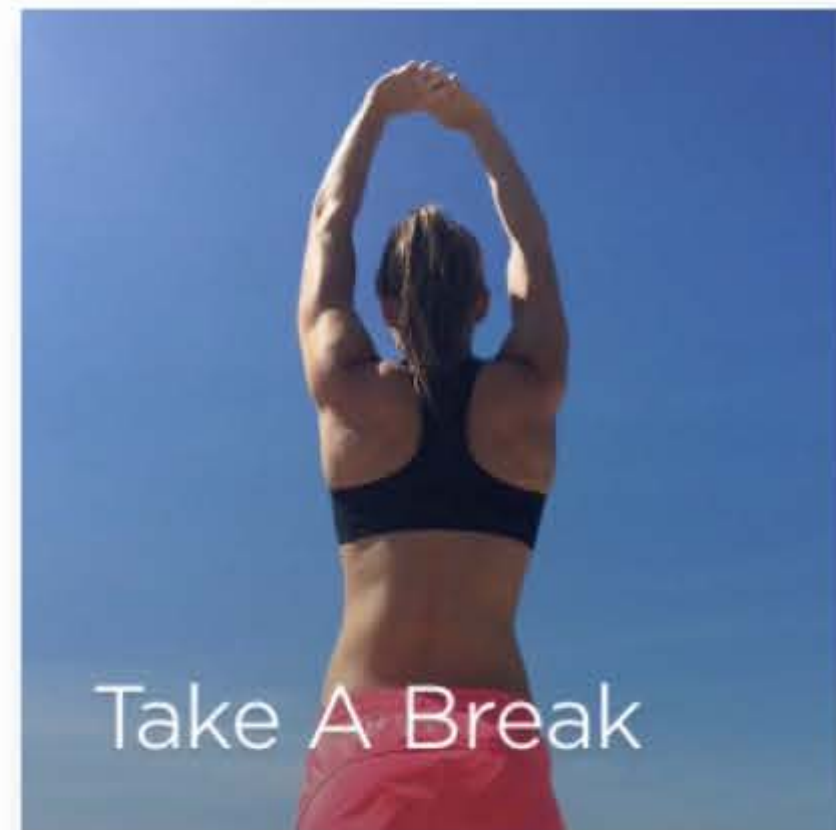
Featured



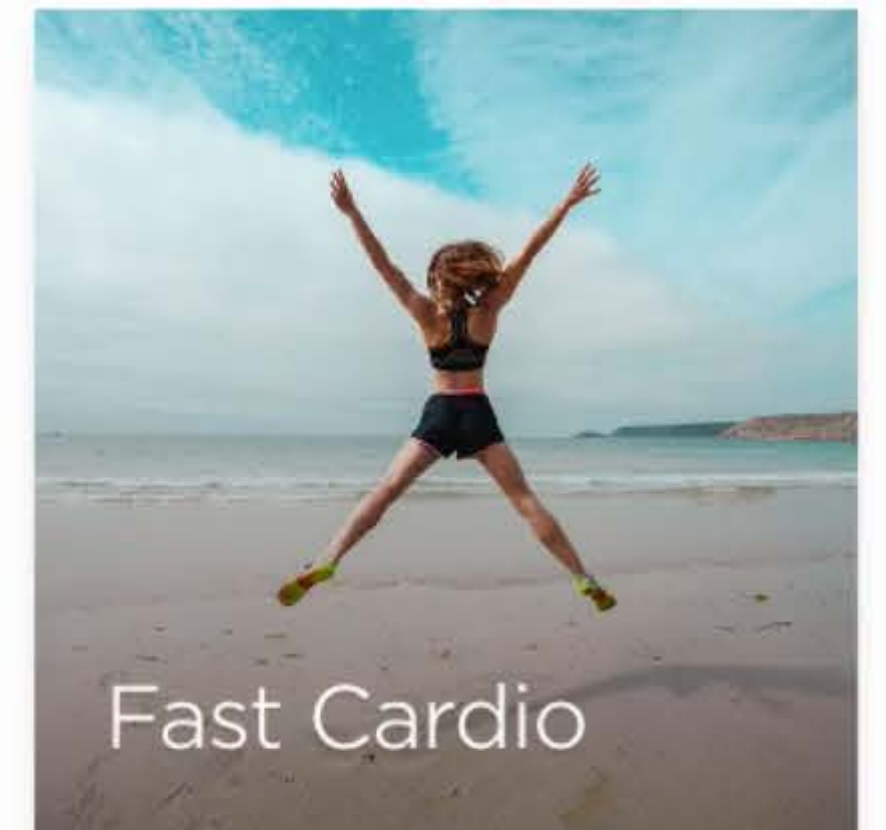
Featured



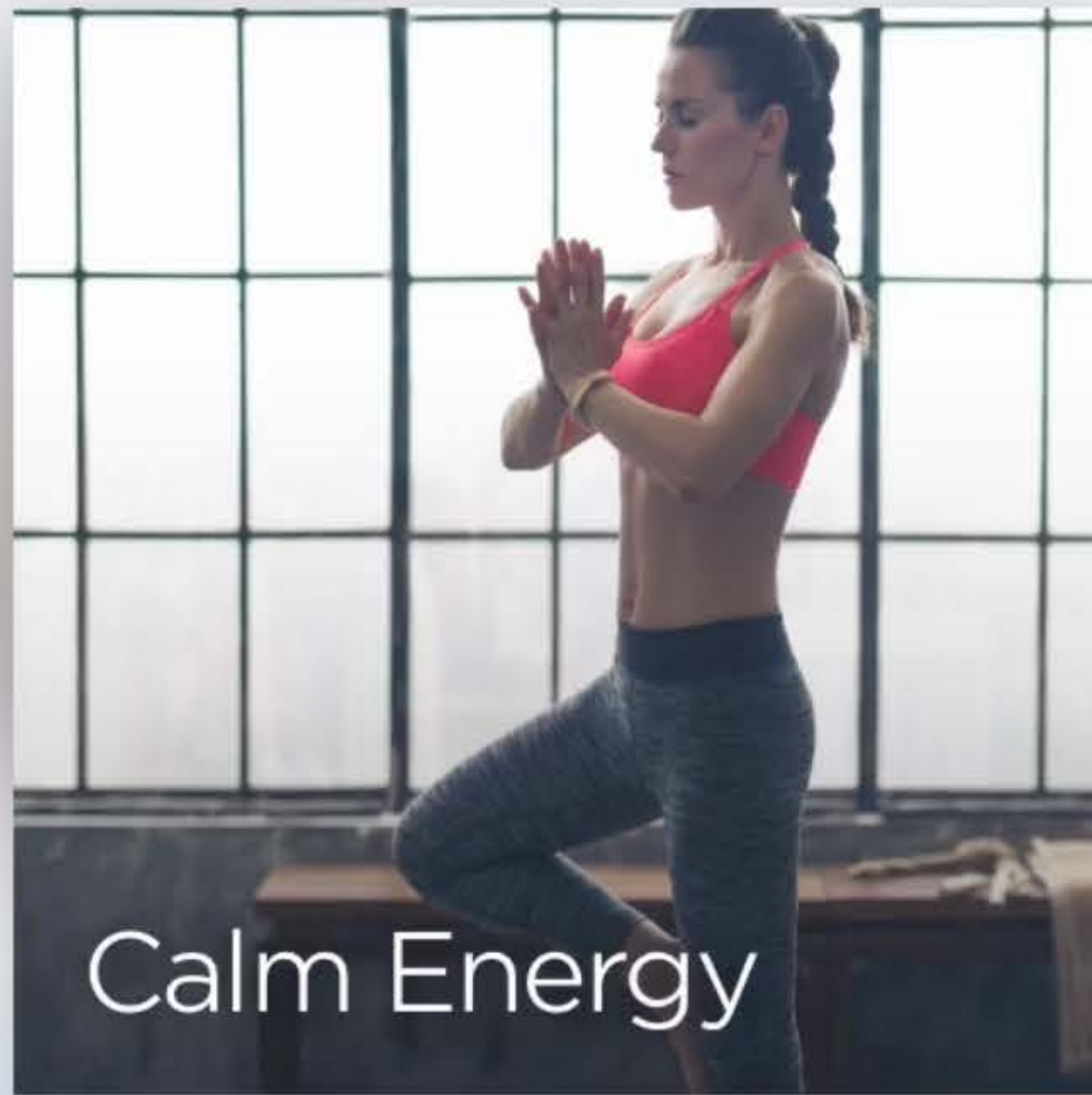
Recommended



7 mins 48 kcal



Editors Choice



10 mins 37 Cals

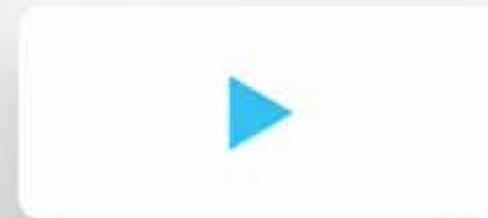
Designed to leave you feeling grounded and centered in your body. Relax your body and take the time to sink into each pose.

EQUIPMENT

Exercise Mat

FOCUS

Full Body



13 Exercises



Extended Childs Pose



Downward Dog



Warrior 2 • Left



Downward Dog



Warrior 2 • Right

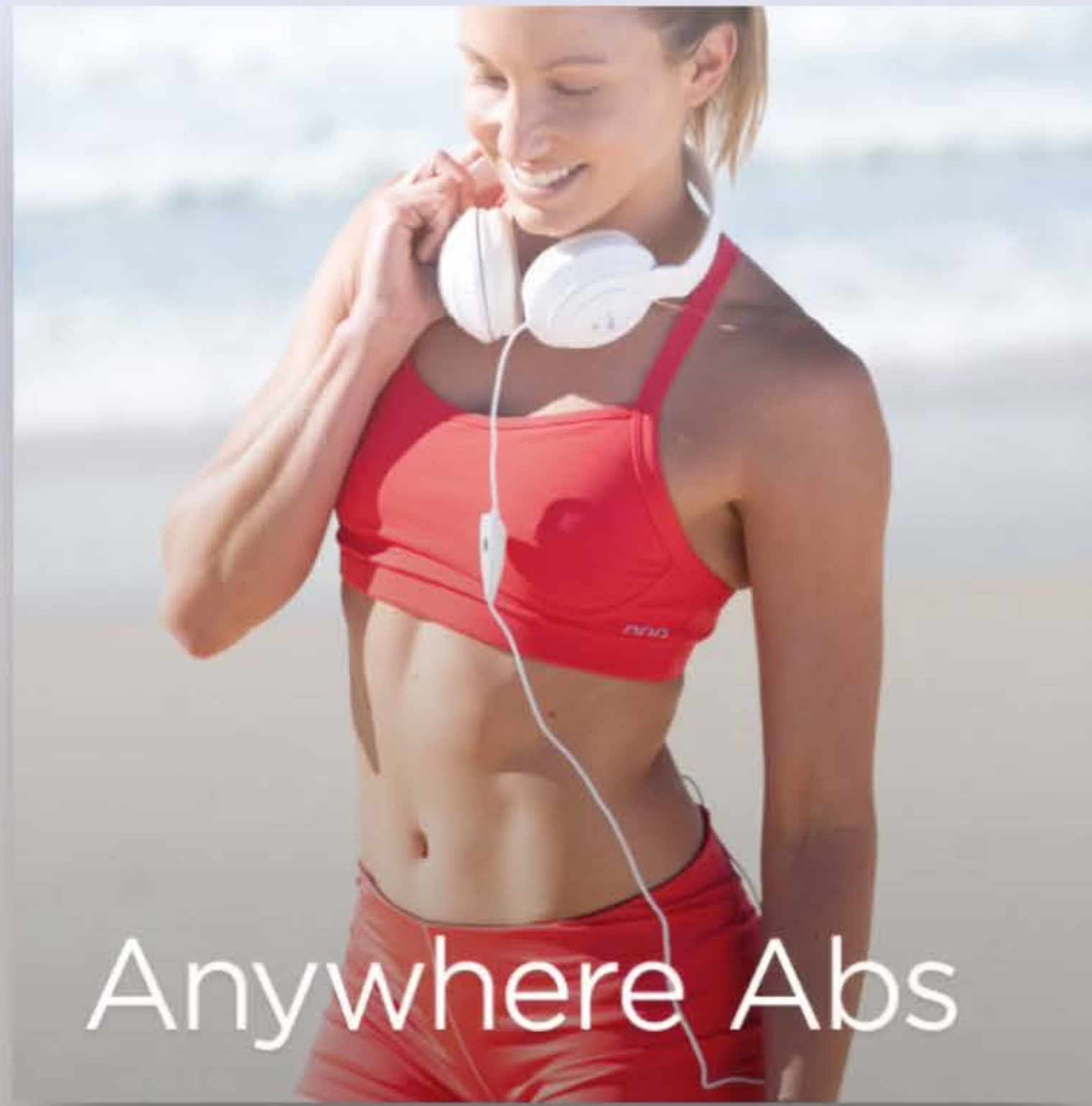
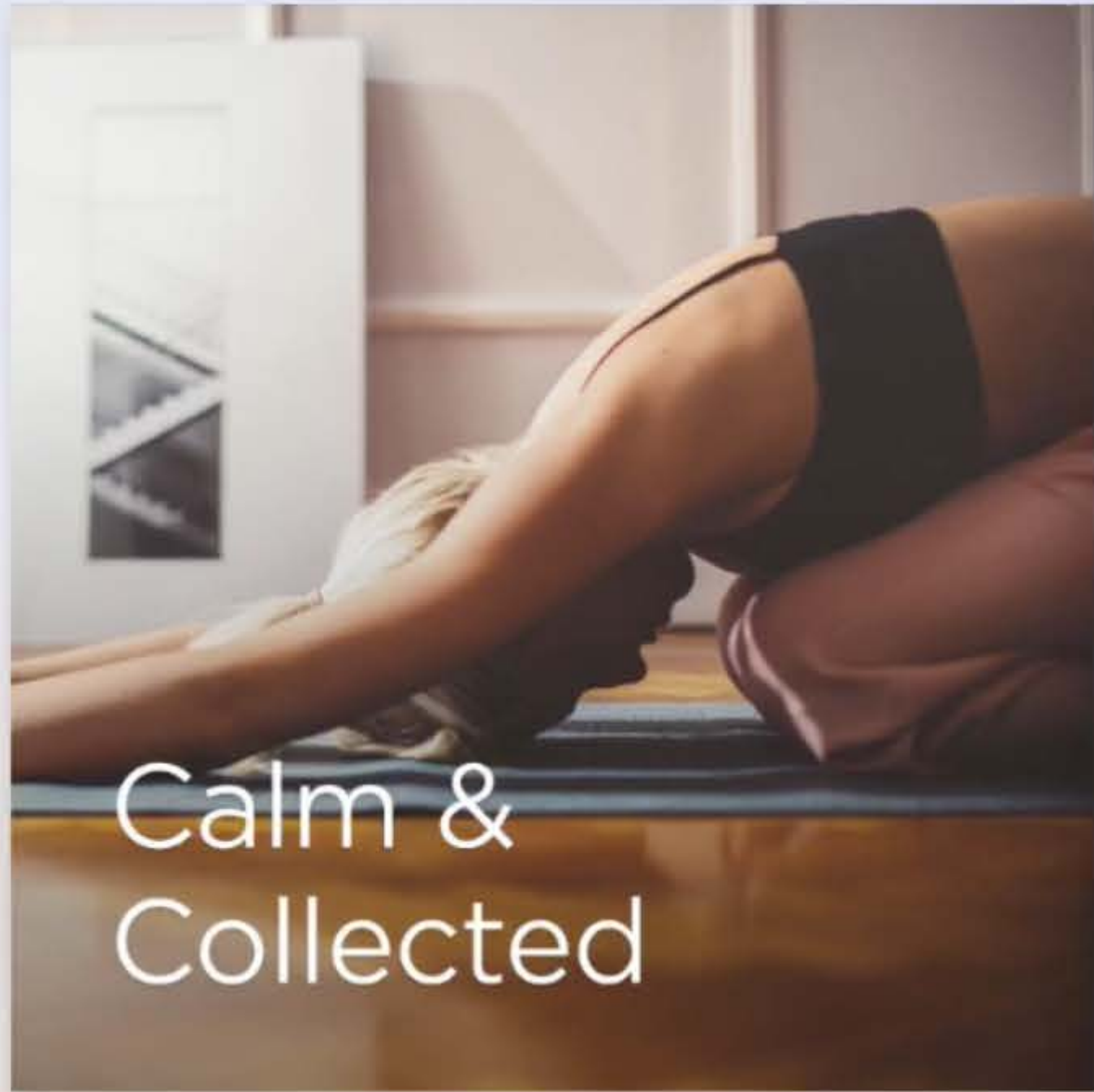


Garland Pose

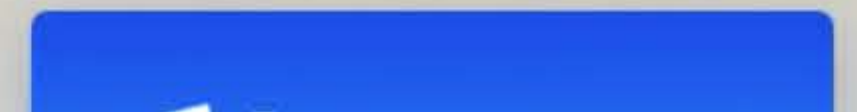
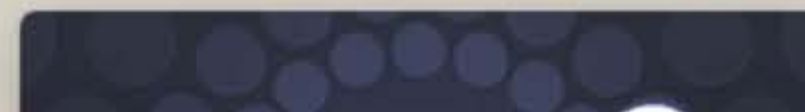
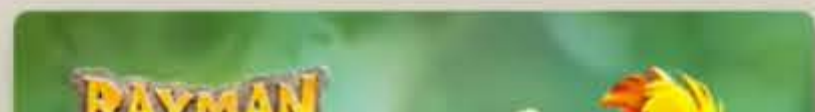
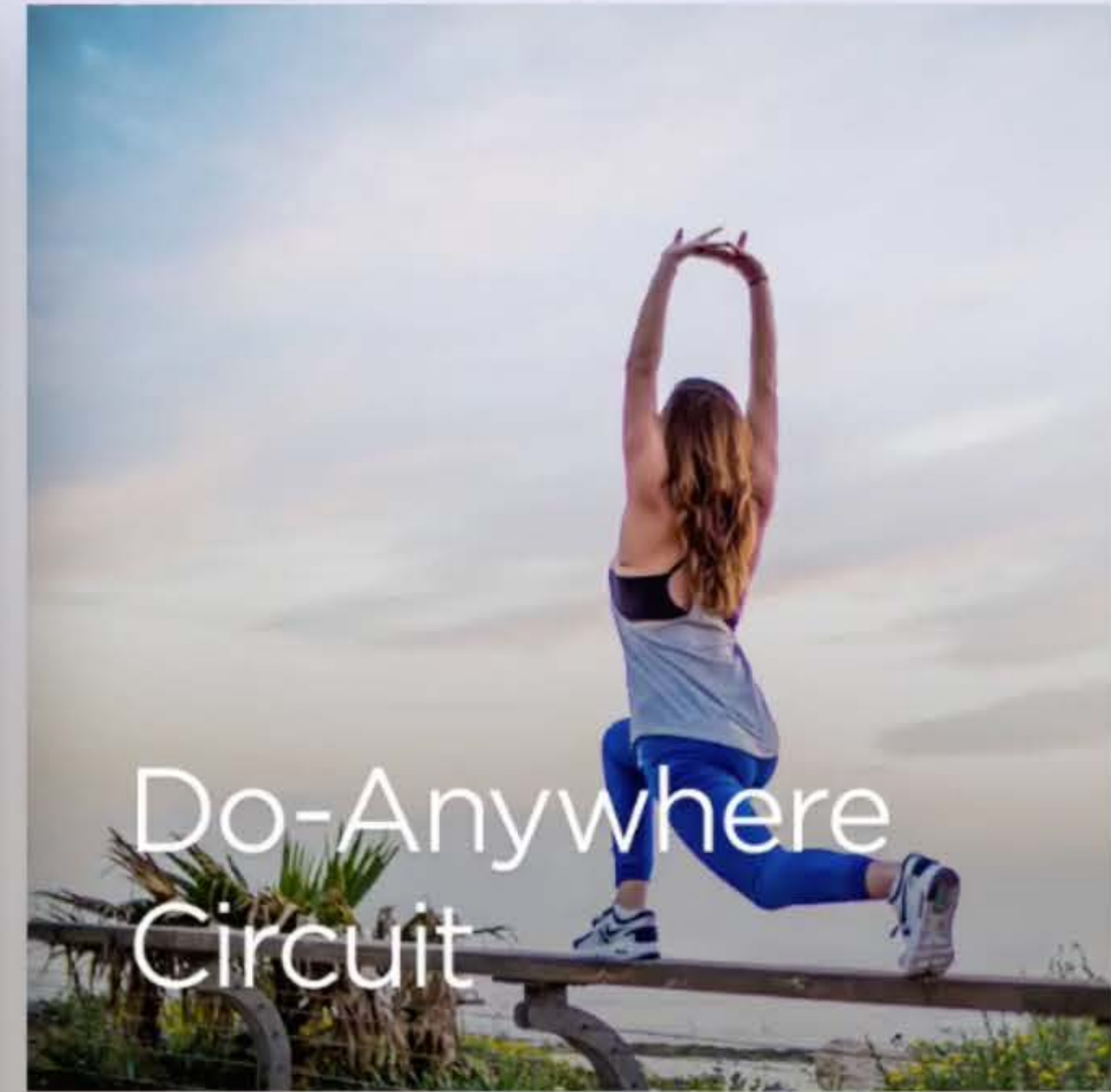


T

Editor's Choice



Anywhere Abs

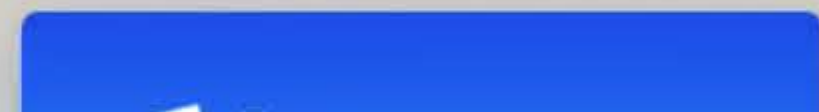
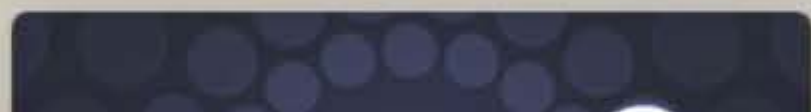




REUTERS TV



Reuters TV





YOUR NEWS IS READY.

How much time do you have?

10
MINUTES

15
MINUTES

30
MINUTES

SETTINGS



REUTERS | NOW



Swipe up for playlist



Mexico under pressure to stop migrant surge

2:01 WORLD



YOUR NEWS IS READY.

How much time do you have?

10
MINUTES

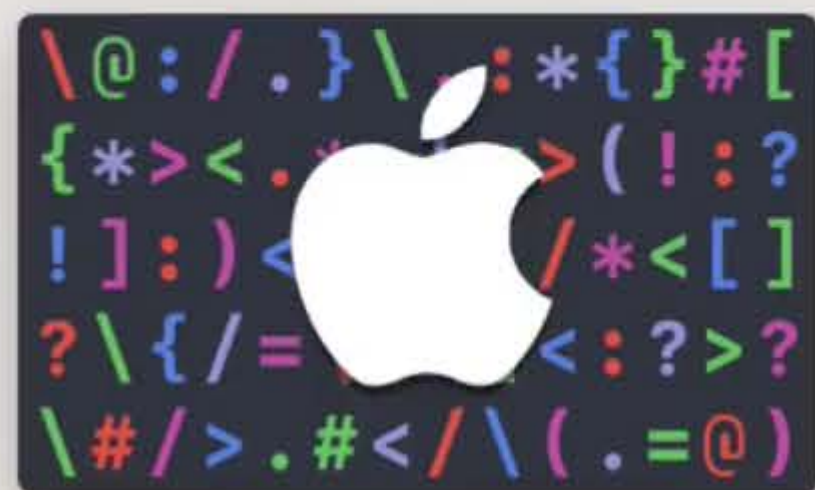
15
MINUTES

30
MINUTES

SETTINGS



REUTERS TV



Reuters TV



CHAMELEON RUN



Noodlecake Studios Inc
Games 4+

Editors' Choice

Chameleon Run is a unique, fast and challenging autorunner with a colorful twist. Jump, switch and run through expertly crafted levels that will have you running back for more.

Your goal is to switch your color to match the... [MORE](#)



Preview



Open

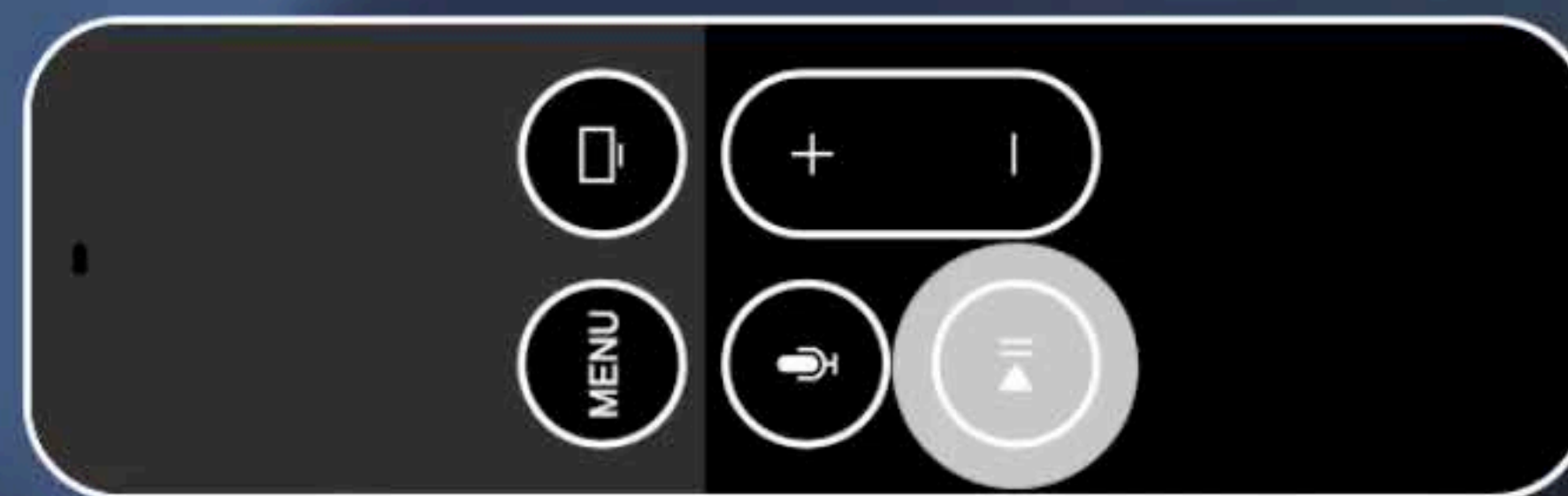


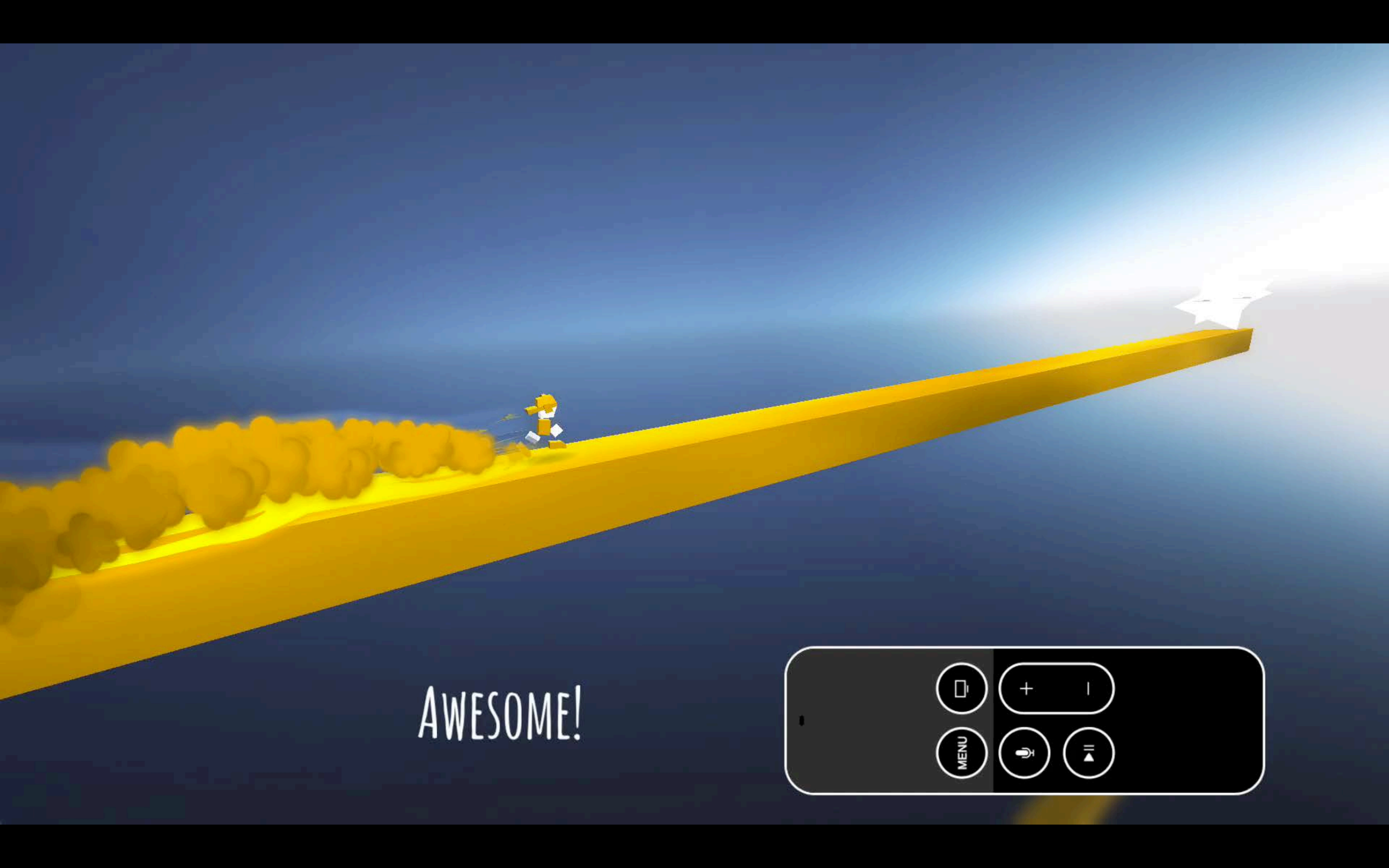
Game Controller Optional

Screenshots



TOUCH WITH YOUR **RIGHT**
THUMB TO JUMP.





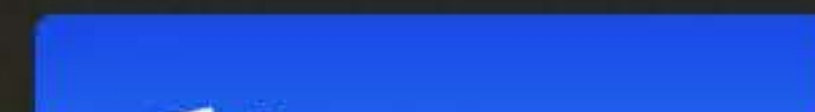
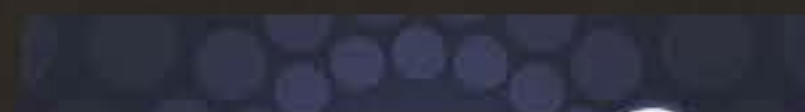
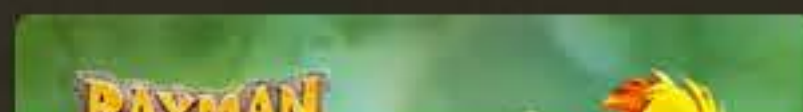
AWESOME!



CHAMELEON RUN



Chameleon Run

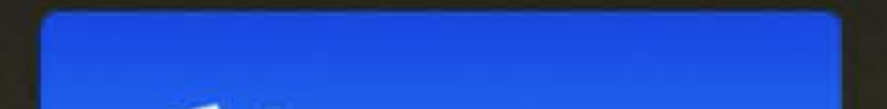
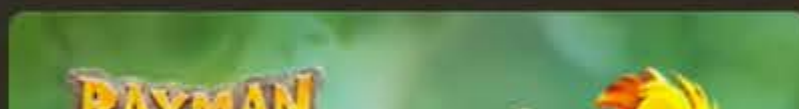


LATE

SHIFT



Late Shift







JOEL BAZMAN

Selfless

Selfish



LATE SHIFT



The Auction



The Getaway

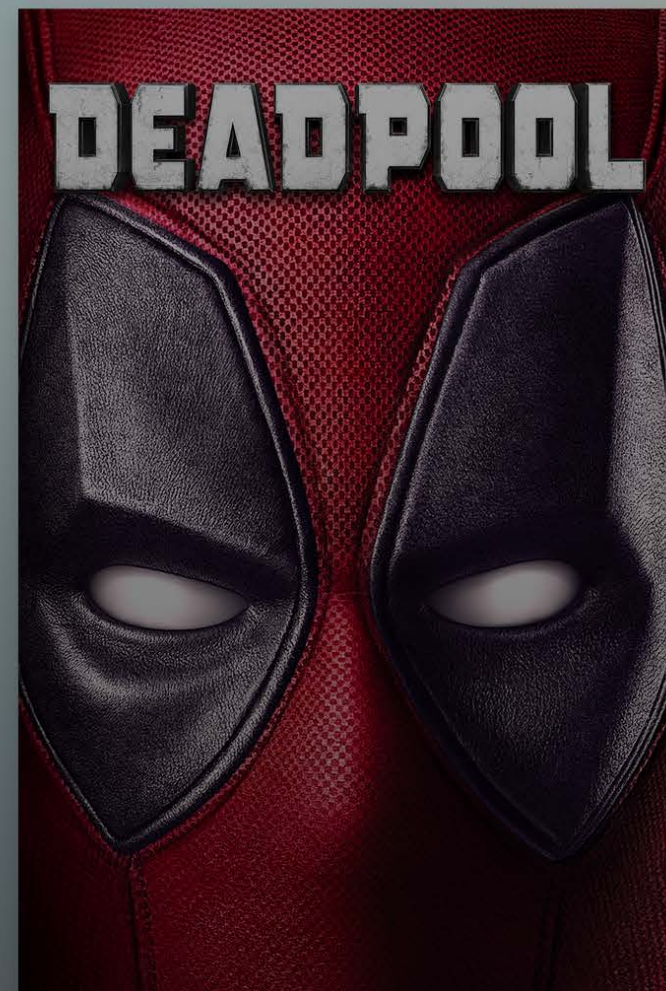
Matt and the crew manage to escape from the auction house but their getaway ends earlier than expected.



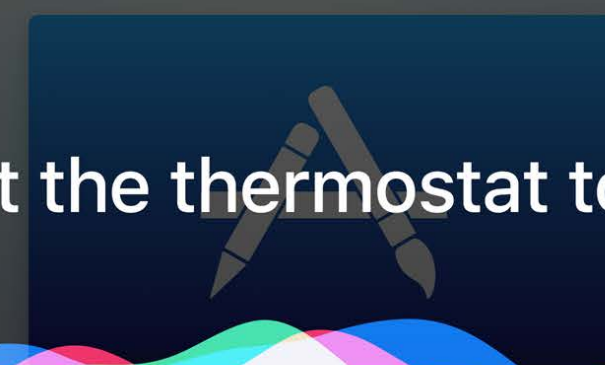




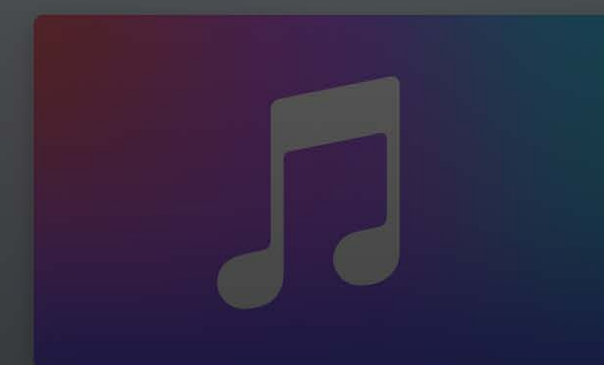
Top Movies



Movies



"Set the thermostat to 72"





Design for TV

More Information

<https://developer.apple.com/wwdc16/802>

Related Sessions

Typography and Fonts	Presidio	Wednesday 9:00AM
Mastering UIKit on tvOS	Presidio	Wednesday 10:00AM
Developing tvOS Apps Using TVMLKit: Part 1	Mission	Wednesday 1:40PM
Focus Interaction on tvOS	Mission	Wednesday 4:00PM
Controlling Game Input for Apple TV	Mission	Wednesday 5:00PM
Developing tvOS Apps Using TVMLKit: Part 2	Mission	Thursday 4:00PM
Iterative UI Design	Presidio	Friday 10:00AM
AVKit on tvOS	Presidio	Friday 11:00AM

Labs

User Interface Design Lab	UI Design Lab	Daily 9:00AM
Accessibility Lab	UI Design Lab	Wednesday 9:00AM
tvOS Graphics and Games Lab	Graphics, Games and Media Lab	Wednesday 12:00pm
TVMLKit Lab	Graphics, Games and Media Lab	Wednesday 3:00PM
tvOS Lab	Frameworks Lab	Wednesday 2:00PM
tvOS Lab	Frameworks Lab	Thursday 9:00PM
Game Controllers Lab	Graphics, Games and Media	Thursday 9:00AM
Text and Fonts Lab	Frameworks Lab	Thursday 2:00PM
TVMLKit Lab	Graphics, Games and Media Lab	Friday 9:00AM



W

W

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