Designing for tvOS

Session 802

Lauren Strehlow User Experience Evangelist
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
Keep main content away from edges
Designing for tvOS

Basics
Distance
Remote
Features
Apps
10 Feet
Consider your layout
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 velit...
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.

<table>
<thead>
<tr>
<th>Three-Column</th>
<th>Four-Column</th>
<th>Five-Column</th>
<th>Six-Column</th>
<th>Seven-Column</th>
<th>Eight-Column</th>
<th>Nine-Column</th>
</tr>
</thead>
</table>

**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 title and the content.
Can you see this?
Can you see this?
Can you see this?
Can you see this?
San Francisco
Typography and Fonts

Text  |  Character  |  Glyph  |  Feature
---|---|---|---
Font  |  Style  |  Typeface  |  Typography

Presidio  |  Wednesday 9:00AM
Keep it simple.
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
Tap
FIGHT TO THE FINISH!
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()
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...
Focus Interaction on tvOS

Mission

Wednesday 4:00PM
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

Appearance
Badging
Maps
ReplayKit
Long List Scrolling

HomeKit
Game Center Updates
Multi-Peer Connectivity
PhotoKit
Features

Appearance
Badging
Maps
ReplayKit
Long List Scrolling

HomeKit
Game Center Updates
Multi-Peer Connectivity
PhotoKit

NEW
Opt in!
Accessibility
# Accessibility

<table>
<thead>
<tr>
<th>Voice Over</th>
<th>Audio Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoom</td>
<td>Siri and Dictation</td>
</tr>
<tr>
<td>Bold Text</td>
<td>Touch Surface Sensitivity</td>
</tr>
<tr>
<td>Increase Contrast</td>
<td>Remote App for Switch Control</td>
</tr>
<tr>
<td>Reduce Motion</td>
<td>Accessibility Shortcut</td>
</tr>
</tbody>
</table>
## Accessibility

<table>
<thead>
<tr>
<th>Feature</th>
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</tr>
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<tbody>
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</tbody>
</table>

**Accessibility User Interface by Appointment Lab**

UI Design Lab A  
**Wednesday 9:00AM**

**Accessible Technology and Inclusive Design**

Buena Vista Park  
**Wednesday 6:15PM**
Designing for tvOS

Basics
Distance
Remote
Features
Apps
Designing for tvOS

Basics
Distance
Remote
Features
Apps
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

PLAN

PLAN
Calm Energy

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  

[Images of yoga poses]
YOUR NEWS IS READY.
How much time do you have?

10 MINUTES

15 MINUTES

30 MINUTES

SETTINGS
YOUR NEWS IS READY.
How much time do you have?

10 MINUTES
15 MINUTES
30 MINUTES
SETTINGS
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

Noodlecake Studios Inc
Games 4+
Editors' Choice

Preview
Open
Game Controller Optional

Screenshots
Touch with your right thumb to jump.
Awesome!
Chameleon Run
The Getaway

Matt and the crew manage to escape from the auction house but their getaway ends earlier than expected.
Design for TV
More Information

https://developer.apple.com/wwdc16/802
<table>
<thead>
<tr>
<th>Session</th>
<th>Location</th>
<th>Date/Time</th>
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</thead>
<tbody>
<tr>
<td>Typography and Fonts</td>
<td>Presidio</td>
<td>Wednesday 9:00AM</td>
</tr>
<tr>
<td>Mastering UIKit on tvOS</td>
<td>Presidio</td>
<td>Wednesday 10:00AM</td>
</tr>
<tr>
<td>Developing tvOS Apps Using TVMLKit: Part 1</td>
<td>Mission</td>
<td>Wednesday 1:40PM</td>
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<tr>
<td>Focus Interaction on tvOS</td>
<td>Mission</td>
<td>Wednesday 4:00PM</td>
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<tr>
<td>Controlling Game Input for Apple TV</td>
<td>Mission</td>
<td>Wednesday 5:00PM</td>
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<tr>
<td>Developing tvOS Apps Using TVMLKit: Part 2</td>
<td>Mission</td>
<td>Thursday 4:00PM</td>
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<td>Iterative UI Design</td>
<td>Presidio</td>
<td>Friday 10:00AM</td>
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<tr>
<td>AVKit on tvOS</td>
<td>Presidio</td>
<td>Friday 11:00AM</td>
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<tr>
<td>Lab Name</td>
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<td>Time</td>
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<tr>
<td>User Interface Design Lab</td>
<td>UI Design Lab</td>
<td>Daily 9:00AM</td>
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<tr>
<td>Accessibility Lab</td>
<td>UI Design Lab</td>
<td>Wednesday 9:00AM</td>
</tr>
<tr>
<td>tvOS Graphics and Games Lab</td>
<td>Graphics, Games and Media Lab</td>
<td>Wednesday 12:00pm</td>
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<tr>
<td>TVMLKit Lab</td>
<td>Graphics, Games and Media Lab</td>
<td>Wednesday 3:00PM</td>
</tr>
<tr>
<td>tvOS Lab</td>
<td>Frameworks Lab</td>
<td>Wednesday 2:00PM</td>
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<tr>
<td>tvOS Lab</td>
<td>Frameworks Lab</td>
<td>Thursday 9:00PM</td>
</tr>
<tr>
<td>Game Controllers Lab</td>
<td>Graphics, Games and Media</td>
<td>Thursday 9:00AM</td>
</tr>
<tr>
<td>Text and Fonts Lab</td>
<td>Frameworks Lab</td>
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