Mobile Accessibility – The Status of Accessibility in Mobile devices

The Accessible Technology Webinar Series is sponsored by the Great Lakes ADA Center and the Pacific ADA Center, both members of the ADA National Network.

The Session is Scheduled to begin at 1:00 pm CT
We will be testing sound quality periodically

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Webinar Features

• Closed captioning – click CC icon (located in the Audio/Video Panel) or control-F8 (command-F8) and adjust your screen.

• Questions - Highlight “Great Lakes” in the participant list and “right click” on your mouse to send a private message. Type your message into the chat area that appears. The question will be viewed by all moderators. (Keyboard - F6, Arrow up or down to locate “Great Lakes” and select to send a message )

• Customize your view – You can change the size and location of any of the panels (Chat, etc.) by hovering your mouse over the icon at the right of each panel and select “Detach Panel”. Each panel can be repositioned and resized.

• Please do not use emoticons or hand-raising features during this session
iAccessibility

Speaker Paul Adam
@PaulJAdam on Twitter
Paul@PaulJAdam.com iMessage me too ;)
www.PaulJAdam.com

Vision

![Accessibility Settings](image)

- **VoiceOver**: Off
- **Zoom**: Off
- **Large Text**: Off
- **Invert Colors**: Off
- **Speak Selection**: On
- **Speak Auto-text**: Off

Automatically speak auto-corrections and auto-capitalizations.
Hearing

Learning, Physical, and Motor
**VoiceOver**

VoiceOver speaks items on the screen:
- Tap once to select an item
- Double-Tap to activate the selected item
- Swipe three fingers to scroll

**Speak Hints** ON

**Speaking Rate**

**Typing Feedback**

**Use Phonetics** ON

**Use Pitch Change** ON

**Use Compact Voice** OFF

**Braille**

**Rotor**

**Language Rotor**

**Navigate Images** Always

**Speak Notifications** OFF

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**Zoom**

Zoom magnifies the entire screen:
- Double-tap three fingers to zoom
- Drag three fingers to move around the screen
- Double-tap three fingers and drag to change zoom
Zoom works together with VoiceOver

Large Text

Hey it's Paul
What's
Group:
http://groups.google.com/group/techlunch/topics

- YouTube brings human-enabled closed captioning to live video for Google I/O [1 Update]
- in development...iPhone app Viswiz [1 Update]

Example of Large Text on iPad

Topic: YouTube

Invert Colors
High contrast capability. Can also be useful for nighttime reading.
Speak Selection

Speak Selection

Speak Selection

Speak AutoText

Automatically speak auto-corrections and auto-capitalizations. This works with VO off as well. You'll hear your auto-correct mistakes before you send them.
Hearing

Hearing - Continued
Guided Access

Guided Access

Guided Access

Guided Access keeps the iPhone in a single app, and allows you to control which features are available. To start Guided Access, triple-click the Home button in the app you want to use.

Set Passcode

Set the passcode used when Guided Access is enabled.

Enable Screen Sleep

The screen will dim after a period of inactivity. Pressing the Sleep/Wake button will put the screen to sleep immediately.

Setting Guided Access

Enter a passcode

Guided Access is enabled. Triple-click the Home button to set.
Setting Guided Access – Cont.

Physical and Motor
AssistiveTouch – Cont. 3

Apple recommends that all developers set this option for quick access to accessibility testing features.

Triple-click Home

- VoiceOver
- Invert Colors
- Zoom
- AssistiveTouch
Maps

Siri and Voice Control

iOS Voice Commands

Hold down home button for a few seconds until it beeps then say a command. Hold headset button for iPhone earbuds.

Siri Resources

- Siri FAQ
- Blind user shown in Apple Siri Promo video.
Siri Commands

- Setup a meeting at 9 am tomorrow
- Wake me up tomorrow at 6 am
- Remind me to organize my calendar when I get home
- What is the date this Saturday?
- How many days till Christmas
- Set a timer for 2 minutes
- Email Jackie
- Tell Jackie
- Directions to home
- Where can I get a good burger
- What time is it in San Francisco?
- Will it rain tomorrow?
- Where am I?
- Note that I spent 12 dollars on lunch
- How are the markets doing?
- Who was the 5th president of the united states?
- How many dollars is 45 euros?
- What is the population of Washington dc?
- What is the price of gasoline in Austin, tx?
- Tell me a Joke
- Knock Knock
- What do you look like

Blind Photography

Number, size, and location of faces announced by VoiceOver. Panorama photos also tell a VoiceOver user to "Slow Down", and "Move Up/Down"
FaceTime

ZVRS App (Video Relay Services) Still waiting for Apple to advertise VoiceOver on TV. FaceTime only works over WiFi. For 3G video calls try Skype or Fring. Tango is recommended for Accessibility.

Cognitive Accessibility

We all have problems remembering things. These included apps are great for cognitive accessibility!

Reminders
- Medication Reminders
- Bus Stop Exit Location Reminder
- Homework Deadlines

Calendar
- Meetings
- Appointments

Notes
- These all sync between iPads, iPhones, and Macs via iCloud.
Item Chooser

Items selected in the item chooser also announce their screen location.

Label Elements
New iOS 6 Accessibility Features

- Tap labels to set focus on explicitly connected inputs. Ever try to tap a tiny little radio button in iOS 5? Very hard! Now you can just tap the label giving users a large tap target.
- Highlight Selection
- Guided Access for Students with Autism
- Home-click Speed
- Made for iPhone Hearing Aids
- Custom Vibration Patterns for All Notifications
- VoiceOver and Zoom Work Together! & AssistiveTouch
- Accessibility Actions - rotor setting that allows easy access to custom gestures like swipe right to delete.

Testing for Accessibility

Screen Curtain
To turn off the display while you use VoiceOver, triple-tap the screen with three fingers.
Keyboard Commands

- VoiceOver Keyboard Commands for iOS 4.1 and Later
- VoiceOver Commands / Keyboard Shortcuts
- Navigate using a Bluetooth Keyboard on your iOS Device

Gesture Commands

- Drag over the screen. Select and speak each item as you touch it.
- Tap. Speak the selected item.
- Two-finger tap. Stop speaking the current item.
- Flick right or left. Select the next or previous item.
- Double tap. Activate the selected item.
- Two-finger flick up. Read all accessible items from the top of the screen.
- Two-finger flick down. Read all accessible items from the current position.

- Enter text on the keyboard. Flick left or right to select the desired key, then double-tap to enter the character. Alternatively, you can drag your finger over the keyboard until the desired key is selected. Then, while holding the selected key with one finger, tap the screen with another finger to enter the character.
- Flick up or down to move the insertion point forward or backward in the text.
- Scroll a list or area of the screen. Flick up or down with three fingers.
- Adjust a slider. Flick up or down (with a single finger) to increase or decrease the setting.
- Unlock iPhone. Select the Unlock switch, then double-tap the screen.
Testing Resources

Bookmarklets
• Favelets for Checking Web Accessibility

Before & After (Good & Bad) Testing Playgrounds
• W3C's Before and After Demonstration
• Accessible University 2.0

Use a Checklist
• WCAG 2.0 Checklist

Mobile Safari Accessibility
Web Rotor

- Lists
- Landmarks
- Visited Links
- Non-Visited Links
- Buttons
- Text Fields
- Search Fields
- Images
- Static Text
- In-page Links
- Zoom
- Same Item
- Vertical Navigation

Navigate Images

VoiceOver Web Rotor Video Demonstration

- Always
- With descriptions
- Never
Reader

Curiosity Rover Touches 1st Martian Rock, Makes Longest Drive Yet

NASA's Mars rover Curiosity reached out and touched a Martian rock with its huge robotic arm for the first time, then took off on its longest Red Planet drive to date.

Curiosity spent the past several days investigating a strange pyramid-shaped stone named "Jake Matijevic," testing out some of the gear at the end of its 7-foot-long (2.1 meters) arm. These tools

Readability

"Green Zone" And "Mother," Review: The New Yorker

The fact that "Green Zone" begins with a bombing raid should come as no surprise given that the director is Paul Greengrass. He made two of the "Bourne" films and "United 93," and his attitude to the average viewer remains that of a skilled sniper toward a littered target. You don't so much watch a Greengrass film as cling on tight and pray. The source of the title is the area from which the Coalition Provisional Authority tried to govern Iraq after the war, in 2003, and our hero is Chief Warrant Officer Roy Miller (Matt Damon). Roy, as he is known, is a pararescue jumper, tough when required, and so immensely bored that, on entering the hotel room of a bland, unaccompanied American reporter named Laurie Deyne (Amy Ryan), he engages her in a constructive discussion of journalistic sources and then--as if still locally believing this--he leaves. No shock, no ace, no combat veterans. All he wants is truth. Miller finds a notebook, in the suit of this lieutenant, that tells the story of war's aspect of mass destruction, with hindsight, we realize that he might have had more success looking for live enemies, but then you go.

As one round after another resolves as empty, Miller resolves his doubts to some officer, who doesn't want to know. As for Clark (Paula Marshall), an intelligence agent for the Pentagon (you'd never guess he was the bad guy, would you?), he treats any disloyalty as unpatriotic. The only one who listens to Miller is Martin Brown (Brendan Gleeson), a fearless CIA agent who actually has a grasp of the region--we, in the
Languages

- VoiceOver works in over 30 languages
- **Automatic Language Detection**
- **Languages with JAWS and MAGic on the Internet**
- **VoiceOver Automatic Language Detection Demonstration**
- **Learn a Foreign Language**
- You too can pass Spanish class!
- **Proofreading**
- VoiceOver also great for proofreading important emails or presentations, hint, hint

Accessible Websites and Web View Apps

- **Accessible Websites and Web View Apps**
- Respect the Rotor!
- Label Your Forms! Use Fieldsets and Legends
- **Caption and Tag Your Tables with Row & Column Headers**
- HTML5 Input Types Are Your Friends
- **Control CSS3 Speech Verbosity**
- WAI-ARIA is WAY Cool!
- FOCUS on Focus Management! Avoid tabindex=1+, learn the power of tabindex=0 and -1.
- Form Validation FTW!
- Mobilize and Optimize for Small Screens
Simple Mobile & Screen Magnification
Usability & Accessibility Enhancements

Place Label Above Input
By placing the label directly above the input you improve the experience for mobile and screen magnification users. When focus is in the input the label will no longer be cut off like in the below example of the Gmail sign up form where the label is placed to the left but cut off when viewed on an iPhone.

Position Formatting Instructions Below Input with CSS
- Using CSS you can enclose formatting instructions in a span tag and position them directly under the input so they are still visible when zoomed in.
- Hiding Labels Using CSS

You may want to visually hide some labels where the input might be obvious to most sighted users. We can use CSS positioning to do this. The code for this comes from the WebAIM article, CSS in Action: Invisible Content Just for Screen Reader Users.
HTML5 Forms & jQuery Validation

Comparison of Input Types and Displayed Keyboard on the iPhone

The text input is now displayed like this:

Text Input:

More text input types

1 2 3
4 5 6
7 8 9
* 0
Date Type Display

iPhone Keyboard Comparison with Pattern Attribute

Zip Code 5 Digits

Zip Code 5 Digits
HTML5 Validation

- Accessible Client-side Form Validation with HTML5 Does not work on iOS
- Different Input Types with the Required Attribute in Action on Mac OS X Lion

Enhancing Forms with ARIA

```
aria-required="true"
```

The easiest enhancement is to add the aria-required="true" attribute to all required fields in your form.
VoiceOver Caption Panel on OS X Lion

Below is a screenshot of the VoiceOver Caption Panel on OS X Lion which provides an excellent way to visualize ARIA/screen reader output if you’re deaf or hard of hearing or don’t want to annoy others in the room with your computer speaking everything out loud. I think it would be cool if iOS could do this as well!

Aria-describedby

Don’t worry about having the HTML5 required attribute and the aria-required="true" attribute and causing repetition. All the screen readers I’ve tested only speak required once. Here aria-required is your fallback for browsers who do not support HTML5 like Internet Explorer. This way screen readers which support ARIA will speak the ARIA attribute when used with IE and ignore the HTML5 attribute.

Password *

Use 6-20 characters, at least 1 uppercase letter and 1 number.
Aria Label

**aria-label**
- Only works in iOS if there is not a connected label. Otherwise, label overrides aria-label.

**jQuery Validation**
- [Accessible Client-side Form Validation with HTML5, WAI-ARIA, & the jQuery Validation Plugin](#)

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WAI-ARIA

- Roles
  - Widget Roles
    - Sliders
    - Buttons
  - Landmarks
  - Navigation Roles
  - States & Properties
    - aria-labelledby
    - aria-required="true"
- Live Regions
- Introduction to WAI ARIA
- Safari HTML Reference - Supported Accessibility Roles
- Table describing mapping of WAI-ARIA roles to accessibility APIs.
Web Rotor Navigating by Aria Landmarks

Mobile Web Apps

jQuery Mobile
jQuery Resources

- Docs and Demos
- Form Element Gallery

Sites That Behave Like Apps

- Configuring Web Applications - Safari Web Content Guide

Audio and Video

- HTML5rocks Audio + Video
- Safari HTML5 Audio and Video Guide
- Everything you need to know about HTML5 video and audio
YouTube App

Selecting Subtitles
Flicking Down with Two Fingers

by flicking down with two fingers so let’s take a look at that

Native App Accessibility

“supporting accessibility does not impact your ability to innovate and create beautiful iPhone applications”

Apple Docs

- [Accessibility Programming Guide for iOS](#)
- [UIAccessibility Protocol Reference](#)
- [UIAccessibilityElement Class Reference](#)
- [UIAccessibilityContainer Protocol Reference](#)
- [UIAccessibilityFocus Protocol Reference](#)
- [UIAccessibilityAction Protocol Reference](#)
The UI Accessibility programming interface defines the following attributes:

- **Label**. A short, localized word or phrase that succinctly describes the control or view, but does not identify the element’s type. Examples are “Add” or “Play.”
- **Traits**. A combination of one or more individual traits, each of which describes a single aspect of an element’s state, behavior, or usage. For example, an element that behaves like a keyboard key and that is currently selected can be characterized by the combination of the Keyboard Key and Selected traits.
- **Hint**. A brief, localized phrase that describes the results of an action on an element. Examples are “Adds a title” or “Opens the shopping list.”
- **Frame**. The frame of the element in screen coordinates, which is given by the CGRect structure that specifies an element’s screen location and size.
- **Value**. The current value of an element, when the value is not represented by the label. For example, the label for a slider might be “Speed,” but its current value might be “50%.”

```swift
- (BOOL)isAccessibilityElement
- (NSString *)accessibilityLabel
- (UIAccessibilityTraits)accessibilityTraits
- (CGRect)accessibilityFrame
- (NSString *)accessibilityHint
- (NSString *)accessibilityValue
```
Make an image view accessible

- `UIImageView *view = [[UIImageView alloc] initWithFrame:image];` view.accessibilityLabel = @"Apple Logo";

@property BOOL isAccessibilityElement
■ Return YES to make VoiceOver see this element ■ Default is YES for UIKit controls
@property(copy) NSString *accessibilityLabel
■ A textual representation of the element

Best Practices

Use short, concise labels
■ Good: “Add city”
■ Bad: “Adds a city to the list of cities”

Don’t include the type information in the label
■ Good: “Remove city”
■ Bad: “Remove city button”
@property(copy) NSString *accessibilityHint
■ Optional
■ Provides more information to aid VoiceOver users
@property UIAccessibilityTraits accessibilityTraits
■ Defines behavior
■ Bitmask of integers

Enhance the Accessibility of Table Views
Testing with Accessibility Inspector in the iOS Simulator

Using Accessibility Inspector to Test Your Application

Grouping Accessibility Children

• @property BOOL shouldGroupAccessibilityChildren
• Group items together to control the order VoiceOver visits elements

• UIAccessibilityTraits UIAccessibilityTraitHeader
  ■ New trait in order to mark elements as a header

Check if Assistive Technology Running?

• Useful API for Accessibility Apps
  BOOL UIAccessibilityIsVoiceOverRunning()
  ■ Is VoiceOver on?
  - (void)accessibilityElementDidBecomeFocused
  ■ Did VoiceOver focus move to an element?
  UIAccessibilityAnnouncementNotification
  ■ Tell VoiceOver to speak something

  • /*
  Assistive Technology

  Use UIAccessibilityIsVoiceOverRunning() to determine if VoiceOver is running.
  Listen for UIAccessibilityVoiceOverStatusChanged to know when VoiceOver starts or stops.
  */

  UIKIT_EXTERN BOOL UIAccessibilityIsVoiceOverRunning() NS_AVAILABLE_IOS(4_0);
  UIKIT_EXTERN NSString *const UIAccessibilityVoiceOverStatusChanged NS_AVAILABLE_IOS(4_0);

  • // Returns whether system audio is mixed down from stereo to mono.
  UIKIT_EXTERN BOOL UIAccessibilityIsMonoAudioEnabled() NS_AVAILABLE_IOS(5_0);
  UIKIT_EXTERN NSString *const UIAccessibilityMonoAudioStatusDidChangeNotification
  NS_AVAILABLE_IOS(5_0);

  • // Returns whether the system preference for closed captioning is enabled.
  UIKIT_EXTERN BOOL UIAccessibilityIsClosedCaptioningEnabled() NS_AVAILABLE_IOS(5_0);
  UIKIT_EXTERN NSString *const UIAccessibilityClosedCaptioningStatusDidChangeNotification
  NS_AVAILABLE_IOS(5_0);

  • // Returns whether the system preference for invert colors is enabled.
  UIKIT_EXTERN BOOL UIAccessibilityIsInvertColorsEnabled() NS_AVAILABLE_IOS(6_0);
  UIKIT_EXTERN NSString *const UIAccessibilityInvertColorsStatusDidChangeNotification
  NS_AVAILABLE_IOS(6_0);

  • // Returns whether the app is running under Guided Access mode.
  UIKIT_EXTERN BOOL UIAccessibilityIsGuidedAccessEnabled() NS_AVAILABLE_IOS(6_0);
  UIKIT_EXTERN NSString *const UIAccessibilityGuidedAccessStatusDidChangeNotification
  NS_AVAILABLE_IOS(6_0);
Accessibility Notifications

- Tell VoiceOver something happened
  - When a few items change, VoiceOver should “update”
    
    UIAccessibilityPostNotification(
    UIAccessibilityLayoutChangedNotification, nil);

- When the screen changes, VoiceOver should “reset”
  
    UIAccessibilityPostNotification(
    UIAccessibilityScreenChangedNotification, nil);

State

- Informs whether the receiving view should be considered modal by accessibility. If YES, then elements outside this view will be ignored. Only elements inside this view will be exposed.
  
  default == NO

  /*
  @property(nonatomic) BOOL accessibilityViewIsModal
  NS_AVAILABLE_IOS(5_0);
  */

- @property BOOL accessibilityElementsHidden
  ■ Tells VoiceOver to ignore all elements contained within

- @property CGPoint accessibilityActivationPoint
  ■ The point where VoiceOver will simulate a touch event
    - (BOOL)accessibilityPerformEscape
  ■ Allows VoiceOver to cancel or exit a modal state
iOS 6 new stuff

• New VoiceOver API
  - (BOOL)accessibilityPerformMagicTap
    ■ Control what happens when user does two-finger double-tap
• /*
  Implement accessibilityPerformMagicTap on an element, or the
  application, in order to provide a context-sensitive action.
  For example, a music player can implement this to start and stop
  playback, or a recording app could start and stop recording.
  Return YES to indicate that the action was handled.
  default == NO
*/
  - (BOOL)accessibilityPerformMagicTap NS_AVAILABLE_IOS(6_0);

Move VoiceOver focus

• Use the element as the argument when posting
  UIAccessibilityLayoutChangedNotification or
  UIAccessibilityScreenChangeNotification
  UIButton *moveToButton = ...
  UIAccessibilityPostNotification(
    UIAccessibilityScreenChangedNotification,
    moveToButton);
Read the header files!

```swift
#import <UIKit/UIAccessibilityAdditions.h>
#import <UIKit/UIAccessibilityConstants.h>
#import <UIKit/UIAccessibilityElement.h>
#import <UIKit/UIAccessibilityIdentification.h>
#import <UIKit/UIAccessibilityZoom.h>
```

UIAccessibility

- UIAccessibility is implemented on all standard UIKit views and controls so that assistive applications can present them to users with disabilities.

Custom items in a user interface should override aspects of UIAccessibility to supply details where the default value is incomplete.

For example, a UIImageView subclass may need to override accessibilityLabel, but it does not need to override accessibilityFrame.

A completely custom subclass of UIView might need to override all of the UIAccessibility methods except accessibilityFrame.

```swift
@interface NSObject (UIAccessibility)
```
# Accessibility Traits

Traits are combined in a mask to help assistive applications understand the meaning and intended use of a particular accessibility element.

UIKit applies appropriate traits to all standard controls, however the following traits may be used in conjunction with custom controls.

When setting accessibility traits, combine custom traits with [super accessibilityTraits]. An incorrect combination of custom traits will cause accessibility clients to incorrectly interpret the element.

Use common sense when combining traits.

```c
typedef uint64_t UIAccessibilityTraits

// Used when the element has no traits.
UIKIT_EXTERN UIAccessibilityTraits UIAccessibilityTraitNone;

// Used when the element should be treated as a button.
UIKIT_EXTERN UIAccessibilityTraits UIAccessibilityTraitButton;

// Used when the element should be treated as a link.
UIKIT_EXTERN UIAccessibilityTraits UIAccessibilityTraitLink;

// Used when an element acts as a header for a content section (e.g. the title of a navigation bar).
UIKIT_EXTERN UIAccessibilityTraits UIAccessibilityTraitHeader
NS_AVAILABLE_IOS(6_0);

// Used when the text field element should also be treated as a search field.
UIKIT_EXTERN UIAccessibilityTraits UIAccessibilityTraitSearchField;

// Used when the element should be treated as an image. Can be combined with button or link, for example.
UIKIT_EXTERN UIAccessibilityTraits UIAccessibilityTraitImage;
```
Direct Interaction

Using direct interaction
@implementation PianoView
‐ (id)initWithFrame:(CGRect)frame {
  ...
  KeyView *aKey = [KeyView new];
  aKey.isAccessibilityElement = YES;
  aKey.accessibilityLabel = @"A";
  ....
  -(UIAccessibilityTraits)accessibilityTraits {
    return UIAccessibilityTraitAllowsDirectInteraction;
  }
  -(BOOL)isAccessibilityElement {
    return YES;
  }
}

Drag & Drop

Using announcements
#define Post UIAccessibilityPostNotification
‐ (void)continueTracking:(id)touch {
  if (isNearEdge(touch))
    Post(UIAccessibilityAnnouncementNotification,
      @"Nearing %@ border",
      borderLabel(touch));
  if (isOnEmptySpace(touch))
    Post(UIAccessibilityAnnouncementNotification,
      @"On empty space. Lift finger to cancel");
  if (isOnDifferentIcon(touch))
    Post(UIAccessibilityAnnouncementNotification,
      @"On top of Artists. Lift finger to replace");
}
Apple's Accessibility Videos & Tutorials

- Apple Developer Center Videos
- WWDC2012
  - Accessibility for iOS - Raising the Bar
  - View in iTunes
  - Presentation Slides
- Improving Accessibility in Books
  - View in iTunes
  - Presentation Slides
- WWDC2011
  - Combining Web Accessibility and Automation on iOS
  - View in iTunes
  - Presentation Slides
  - iOS Accessibility - Making great accessible apps
  - View in iTunes
  - Presentation Slides
- WWDC2010
  - Accessibility on iPhone OS
  - View in iTunes
  - Presentation Slides
- Stanford Fall 2010
  - Safari Development Resources
  - Improving Accessibility in Web Applications
Resources

**Developing Apps for iOS**
Accessibility On iOS Make an app for everyone
[View In iTunes](#)

**Accessibility Inspirational Video**
Developers in Action - Making a difference. One app at a time.
Per Busch
Ariadne GPS app
Speech Language Pathology

**Apple Accessibility Developer Mailing List**
[Accessibility-dev](#)

Email Apple at accessibility@apple.com

App Wins

- [VisionSim](#)
- [LookTel Money Reader](#)
- [EyeNote](#)
- [oMoby](#)
- [Red Laser](#)
- [VizWiz](#)
- iPhone / iPad Apps for Magnification and Vision Support
• Closed captions and audio descriptions that the user can turn on or off as needed.
• Open subtitles and descriptions that are available to everyone watching or listening.
• Closed subtitles for adding multiple language tracks to video files.
• Accessible PDFs.
Video Resources

• Creating Accessible iTunes U Content Videos in iTunes
• Creating Accessible iTunes U Content PDF
• Example Video with Closed Captions and Closed Descriptions

iBooks
Creating ePubs

Embracing iOS UI Paradigms

iOS users are accustomed to the app-

- Creating ePub files with Pages
  A table of contents is automatically generated, which allows readers to jump quickly to any chapter title, heading, or subheading in the book. Review your document to be certain that appropriate paragraph styles are applied to all chapters, titles, headings, and subheadings in your document.

  Then open the Document inspector and click TOC (table of contents). Select all of the paragraph styles that you want to appear in the TOC, and then click Update.

  Reformat any images, shapes, or other objects in your document to make them inline objects.
  - How to make your own epub books for iBooks

Adding Alt Text to iBook ePubs

- Making Image in ePub Documents for the iPad Accessible
- Export to ePub from Pages for Mac.
- Expand with Stuffit Expander.
- Find .xhtml files.
- Edit with Dreamweaver.
- Add Alt text.
- Convert back to ePub with Calibre.
Apple TV

"Apple TV with VoiceOver is amazing! I have never had independent access to so many movies and television programs. Thank you, apple"

http://twitter.com/#!/TaiBlas/status/9809514329022464

Apple TV (2nd generation): Apple Continues to Set the Accessibility Standard
Caption your iTunes Content

http://www.youtube.com/watch?feature=player_embedded&v=zd4_nHPYPNw

• Searching for Closed Captioned Content in iTunes U
• Search Tech-Ease 4 All in iTunes for some CC content.
• VoiceOver in action on Apple TV 2nd gen and activating captions.

Questions?

Speaker Paul Adam
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Paul@PaulJAdam.com iMessage me too ;)
www.PaulJAdam.com
Thank you for participating!

NEXT SESSION IS MARCH 21, 2013
ACCESSIBILITY TESTING IN ENTERPRISES BIG AND SMALL

This session was recorded and will be archived in two days at
http://www.ada-audio.org/Webinar/AccessibleTechnology/

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