

Mobile Apps Development for Journalists

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Agenda

- Mobile Application Design
- Exploring more with XCode
- Discussion of View Controllers, Navigation Controllers, Tab Bar Controllers
- Image Views
- Retina vs non-Retina

Mobile Application Design

- No one way to design an app
- Trend is toward “flat” user interfaces from “skeuomorphic” user interfaces
- <http://arstechnica.com/apple/2013/09/death-to-textures-ios-6-and-ios-7-compared-in-pictures/>

Flat User Interfaces

- Use colors to differentiate, not textures or shadow
- Sometimes, buttons/touch areas aren't clear
- Easier to design and develop
- <http://www.pinterest.com/warmarc/flat-ui-design/>

Different Operating Systems

- Android - moving towards Material Design from Holo
- iOS - Flat Design
- Windows Phone - Very flat

Android App UI

- Gingerbread (Android 2.3) - <http://developer.android.com/about/versions/android-2.3-highlights.html>
- Honeycomb (Android 3.x) - <http://developer.android.com/about/versions/android-3.0-highlights.html>
- Ice Cream Sandwich (Android 4.x) - <http://developer.android.com/about/versions/android-4.0-highlights.html>
- Lollipop (Android 5.x) - <http://developer.android.com/about/versions/lollipop.html>
- Marshmallow (Android 6.x) - <https://developer.android.com/about/versions/marshmallow/index.html>
- Nougat (Android 7.x) - <https://developer.android.com/about/versions/nougat/index.html>

Android - Material Design

- Across Mobile and Web
- <https://developer.android.com/design/material/index.html>
- <https://material.google.com/>
- Video - <https://www.youtube.com/watch?v=p4gmvHyuZzw>

More about Android Design

- <https://developer.android.com/design/index.html>

iOS Design

- iOS Design Resources
- <https://developer.apple.com/design/>
- Design Videos - <https://developer.apple.com/videos/design/>
- Teehan+Lax iOS GUI Templates for Photoshop
- <http://www.teehanlax.com/tools/>

Windows Phone Design

- <https://developer.microsoft.com/en-us/windows/design>
- Video on the above page
- Use unique elements of Windows Phone and Windows 8/10, such as live tiles

Design inspiration

- <https://dribbble.com/>
- <http://inspired-ui.com/>

Design Resources

- MediaLoot - <http://medialoot.com/>
- Envato - <http://market.envato.com/>
- Google Fonts - <https://www.google.com/fonts>
- Adobe Color CC - <https://color.adobe.com>

Exploring More with XCode

- Let's build on what we did on Thursday
- We covered several of the user interface elements for one screen

Working with Multiple Screens

- Most iPhone apps will have more than one screen
- Use Storyboard to layout these screens
- Each screen is a View Controller

What is a View Controller?

- We have a view, which is the user interface - what gets displayed on the screen
- The View Controller does all of the work behind the scenes to make the view do something
- For instance, loading data in to fill a screen. Or responding to a button press

Moving between View Controllers

- How do we set up our app to move between view controllers?
- Navigation Controller - forwards, backwards, push
- Tab Bar Controller - tab bar at bottom
- Modal - Pop up
- Custom options - for instance slide out nav menu

Navigation Controller

- Very common UI component
- Provides Navigation Bar
- Provides Back Button
- Used for drill-down or for following steps

Tab Bar Controller

- Icon + Text
- Always at bottom of screen
- Could be customized
- Different areas of the app

Modal Pop up

- Great for showing a screen that needs to be interacted with now
- For instance, a login if a user wants to leave a comment, but isn't logged in
- No built-in user interface - you have to provide close button or way to dismiss

Segues

- Link View controllers with Segues
- Different types of segues
- Hold down Control and mouse button and drag
- We can also move between screens with code

Images

- UIImageView
- Also backgrounds for other views
- Need to be imported into project's Image Assets
- Using images directly from the web is actually a special case we'll discuss later in the semester

Retina

- What is Retina?
- iPhone 4 and above, iPad Mini 2 and above, iPad Retina and above
- Non-retina - iPhone 3GS and below, iPad, iPad 2, iPad mini
- 1x, 2x, 3x

UIImageView

- Scale To Fit
- Aspect Fit
- Aspect Fill
- Sizing, Distortion, etc.