

XCODE / IOS OVERVIEW

Lecture 01

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TOPICS

- The Tools - xCode and friends
- Model View Controller (MVC) Architecture

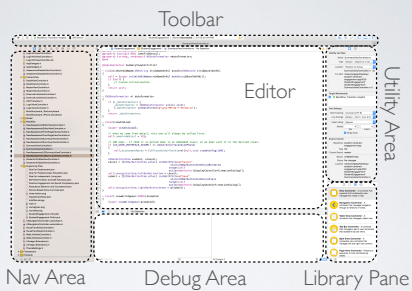
XCODE

- The IDE:
 - xCode is Apple's IDE for iOS and Mac development.
 - Available as a free download on the Apple Mac Store.
 - Requires an Apple Mac computer to run!

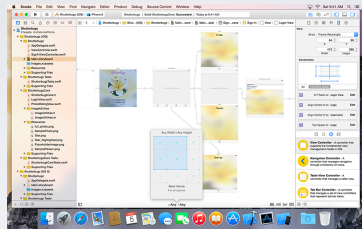


XCODE FEATURES

- Integration with git (kind of lame)
- Autocompletion / syntax highlighting / code folding
- Fully integrated debugger
- Interface Builder to ease UI implementation.
- Support for deploying apps to AppStore



INTERFACE BUILDER



<https://developer.apple.com/xcode/interface-builder/>

CREATING USER INTERFACES

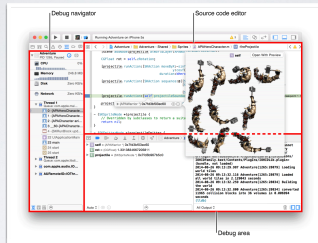
- We have two options on iOS:
 - Use "nib" files to instantiate UI:
 - *.storyboard: Storyboards contains multiple screens as well as the segues between them.
 - *.xib: Contain a single screen layout.
 - Programmatically create user interface.



WHICH APPROACH IS BEST?

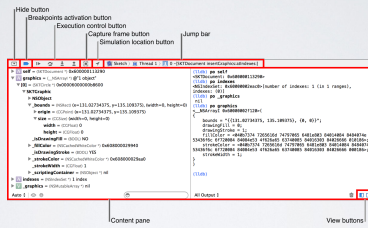
- Storyboards are easiest to work with but...
- When multiple developers edit the same storyboard simultaneously, merging those changes can be problematic.
- Many shops use *.xib's and avoid *.storyboards.
- Highly custom user interfaces may avoid using nib instantiated user-interfaces altogether! (Games, etc.)

XCODE DEBUGGER



https://developer.apple.com/library/ios/documentation/Tools/Conceptual/Xcode_Overview/DebugYourApp.html

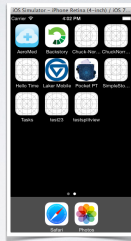
XCODE DEBUGGER



<https://developer.apple.com/library/ios/documentation/Tools/Conceptual/Xcode/Conceptual/DebugYourApp/DebugYourApp.html>

THE IOS EMULATOR

- Allows you to execute app on your computer.
- Can't emulate all device features (e.g. camera, bluetooth, accelerometer)
- Always test on a real device prior to launch!



APPS / FORM FACTORS

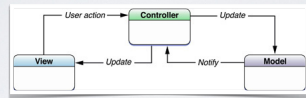
- iPhone/iPod Touch Only
- iPad Only
- Universal: same binary supports iPhone, iPod Touch and iPad.



design pattern = solution to a problem in a context

Source: <http://developer.apple.com/library/ios/#documentation/Cocoa/Conceptual/CocoaFundamentals/CocoaDesignPatterns/CocoaDesignPatterns.html>

MODEL VIEW CONTROLLER



READING ASSIGNMENT

- Chapter 6, 8-9:
Fundamentals (Neuburg)



BUILDING / RUNNING OUR FIRST IOS APP



DEMO!!
