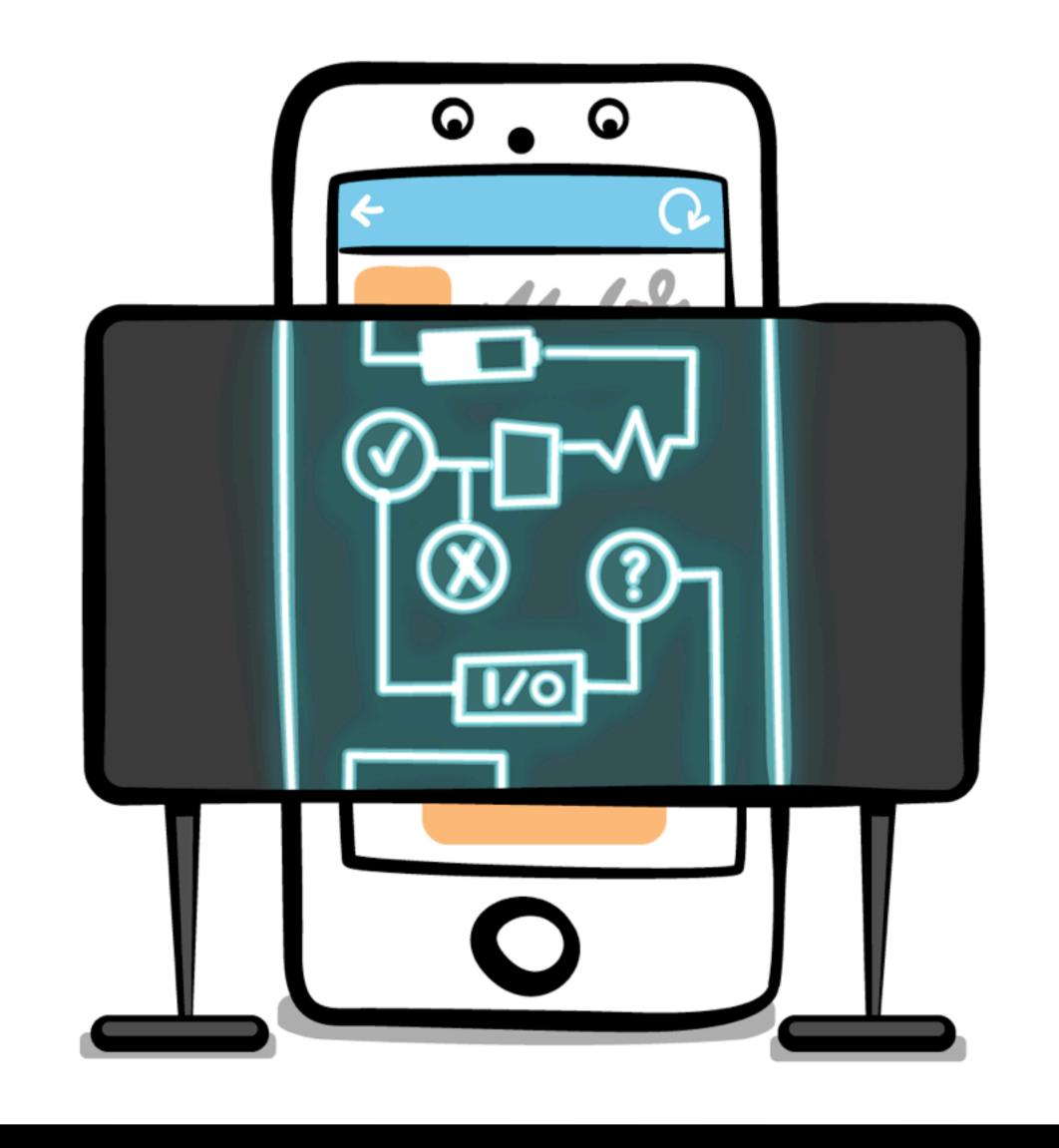
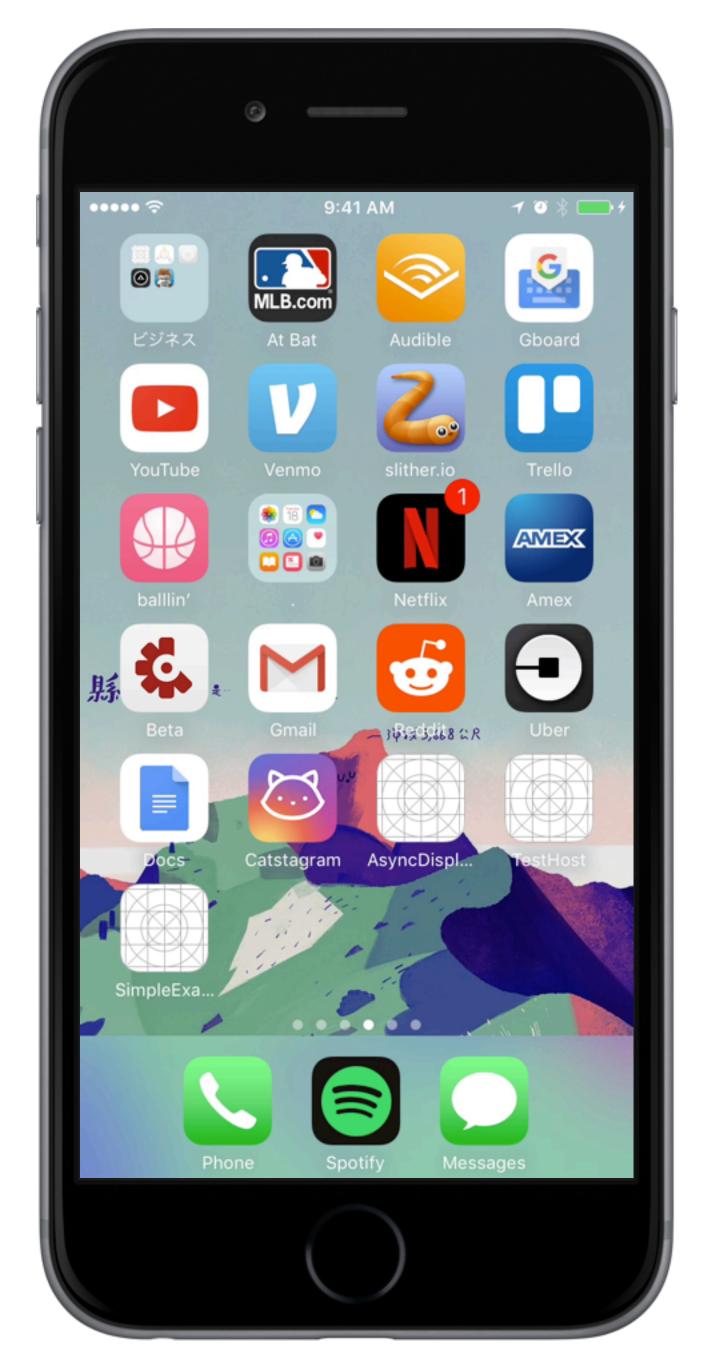
PRACTICAL INSTRUMENTS



PART 4: OPTIMIZING LAUNCH





USER EXPECTATIONS

- Apps should be fast!
 - Amazon page loads contributed significantly to revenue

- Users will abandon apps after 2 crashes
- Users expect 2s launches (Apple expects 0.4s)



COLD VS. WARM STARTS

Cold Launches:

- When the app hasn't been launched in long time
- When the device has been rebooted
- **Warm Launches:**
 - Some dylibs an app needs still reside in the device's disk cache

WHAT'S GOING ON?

- ** Before main()
 - Dylib Loading
 - Rebase/Binding
 - Obj-C Setup
 - Initializers



DEMO PART 1



WHAT'S GOING ON?

- After main()
 - UIApplicationMain()
 - application(_:willFinishLaunchingWithOptions:)
 - applicationDidFinishLaunching(_:)

The system thinks you're done launching when the first CATransaction is committed.

DEMO PART 2



CHALLENGE TIME!

