QND Computer Science Day 15

Mark Schmidt

DOWNLOAD SWIFT PLAYGROUNDS

We'll need it today!



Swift Playgrounds

- Apple-made app
- Learn Swift
- 3 major modes

Playgrounds

- Very similar to our Replit environments!
- Write Swift code and run it
- Cannot receive input from the user

Lessons

- Interactive environments
- Guided coding
- Some of the best self-teaching materials
- Free!

Apps

- Develop actual iOS apps on iPad
- Release on the App Store!
 - No need for Xcode

iOS

- Operating System for iPhones, iPads
- iOS 17 launches tomorrow!



iOS Apps

- App Store launched in 2008 alongside the iPhone 3G
- Originally written in Objective-C using UIKit
- Apple released Swift in 2014 as a more modern alternative
- Added SwiftUI in 2019

SwiftUI

- UI = User Interface
- "Declarative"
- Simpler to write
- Works across iOS, tvOS, watchOS, macOS, and soon visionOS

SwiftUI

- Simple building blocks
- Common experience across all apps
 - No need to reinvent the wheel for each app
- Built-in accessibility

Let's Get Coding

- Button example
- Favorite Things