QND Computer Science Day 8

Mr. Schmidt

Agenda

- Behind the Scenes

- Swift Playgrounds

- Making an app!

Behind The Scenes

- Replit did a bad thing

- We're winging it

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 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 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

- Views
- Text
- Buttons
- View Modifiers
- Numbers