Mobile App Development

Overview of Mobile Development

Mobile Development

- Native
  - Andriod: Java or Kotlin
  - iOS: Objective-C or Swift
- Cross-platform
  - React Native: JavaScript
  - Flutter: Dart

Native vs Cross-Platform

	Native	Cross-Platform
Time to market	Slow	Fast
Features	Full	Limited
Performance	More	Less
Cost	More	Less

React Native vs Flutter

- Popularity

React Native vs Flutter

	React Native	Flutter
Language	JavaScript	Dart
UI	Native UI and iOS components	Custom widget
Dev API	Core + 3rd party libs	Core
Dev option	More versatile	More streamlined
Performance	Slower	Faster

Source

Roadmap to learn Flutter

https://roadmap.sh/flutter

Getting Started with Flutter (Windows)

- Install VSCode
  - Install Dart and Flutter extensions
- Install Flutter SDK
  - Manual Installation
- Install Android Studio
  - Setup additional Android SDK components.
  - Try running emulator. Verify with `flutter emulators` command.

Getting Started with Flutter (Windows)

- Set up a physical device
  - Turn on Developer Options and USB Debugging on your Android device.
  - Connect your device via USB.
  - Try running `flutter devices` to see if your device is recognized.
- Verify your installation
  - Run `flutter doctor` in your terminal to check for any missing dependencies.
- Create a new Flutter project
- Run the app using `flutter run`

Getting Started with Flutter (macOS)

- Install VSCode
  - Install Dart and Flutter extensions
- Install Flutter SDK
- Install XCode
- I kind of forgot the rest... :D