COMP 2160

Mobile App Development I
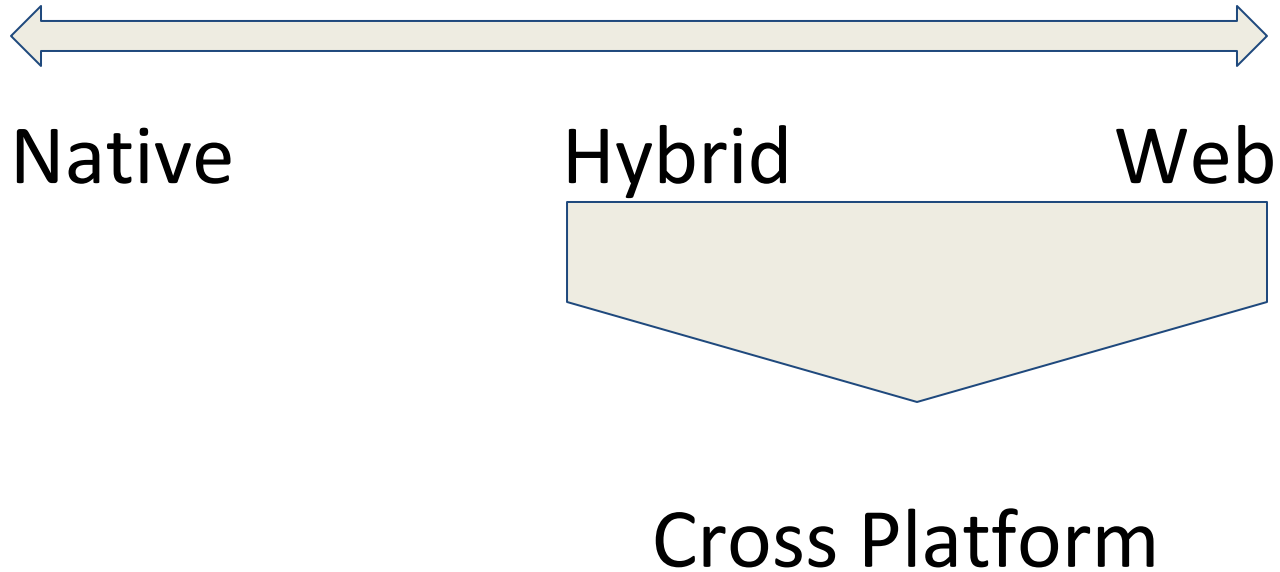
MODULE 1:
Introduction to Android App Development

Module 1

1. Different ways to develop mobile apps

2. Mobile phones and network technologies

3. Android OS

4. Android versions and features

5. Introduction to Android App development

Different ways to develop apps

Web vs Native

Native   Hybrid   Web

Cross Platform

Different ways to develop apps
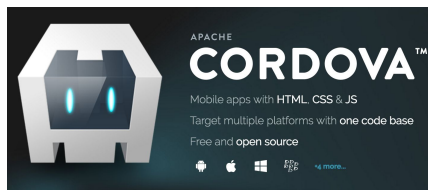
Native approach

- Uses native development platform and programming languages from the OS creator/maintainer to build the app.

- Android
    - Native app development platform - Android studio
    - Programming language - Java.

- iOS
    - Native app development platform - Xcode
    - Programming languages - Objective C and Swift.

Different ways to develop apps

Cross-platform approach

- Uses one development platform and programming language to produce different versions of the same app that targets different operating systems.

- Cross-platform tools:

    - Cordova https://cordova.apache.org/

    - Appcelerator http://www.appcelerator.com/

    - Coronalabs https://coronalabs.com/

Different ways to develop apps

Hybrid approach

- Combination of web technologies (i.e.HTML, CSS, and JavaScript).

- Hosted inside a native application that utilizes a mobile platform's WebView.

- Enables access to device capabilities (accelerometer, camera, contacts, etc.).

- Can include native UI elements where necessary

- Can better implement *responsive* principles

Reference: http://developer.telerik.com/featured/what-is-a-hybrid-mobile-app/
Image Reference: www.liquidcanyon.com

Different ways to develop apps

Activity 2

When should a developer choose a Native app development approach?

What are some good reasons to develop a mobile friendly web application?

When do you think a hybrid approach is a good idea?

Tomorrow! (Friday Sept. 8th 5:30 to 6:30 in OM 2621)