iOS Tutorial

Human-Computer-Interaction and Psychology

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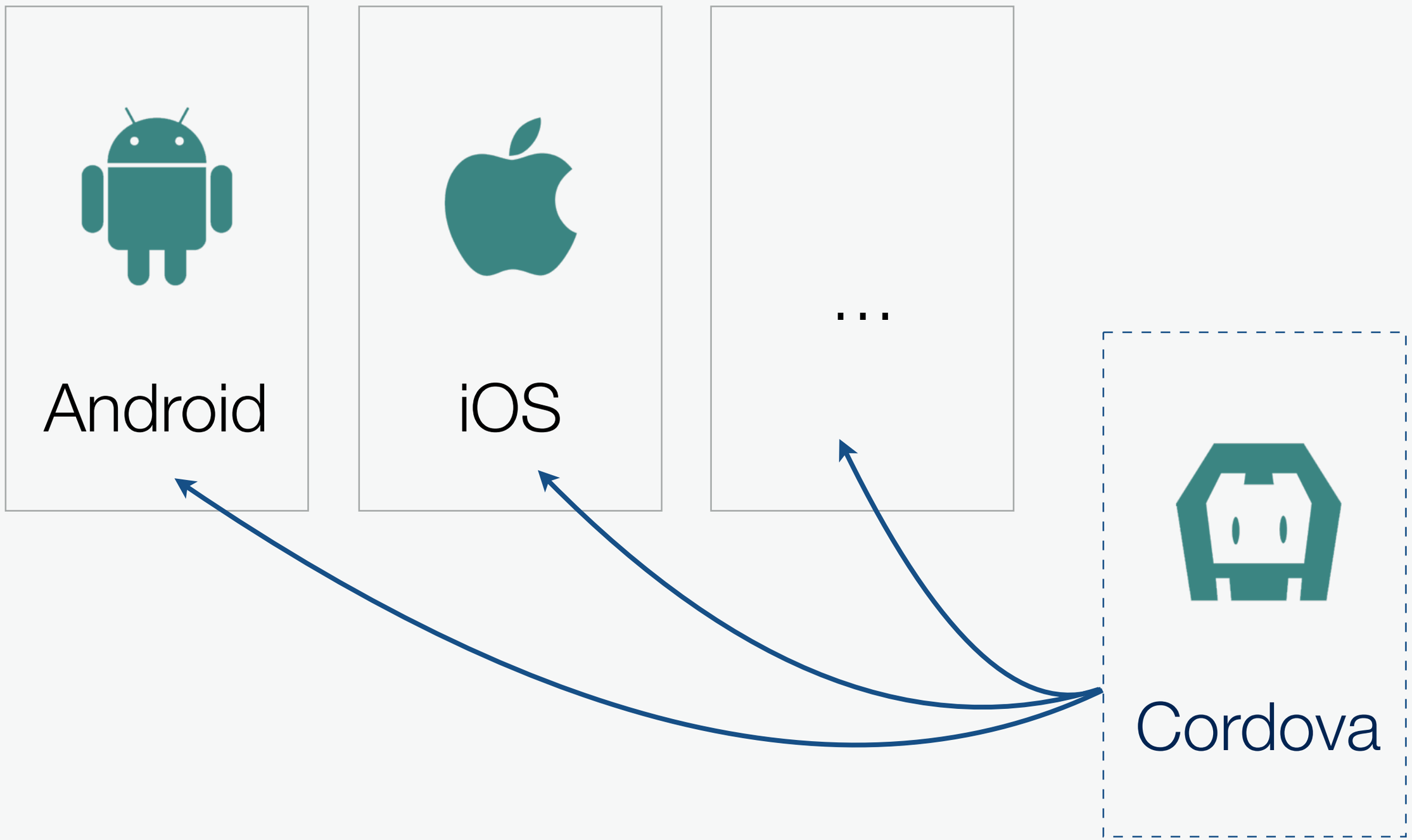
Mobile App Development

Android

iOS

...

Mobile App Development



iOS Fundamentals

- Languages: Swift or Objective-C
- Platforms: Mac OS X, (Linux)
- IDE: Xcode 7 (Mac users only)

- Create high quality native apps
- UIKit as an UI framework
- Swift is very easy to learn
- Tones of documentation and tutorials

Android Fundamentals

- Language: Java
- Platform: Android
- IDE: Android Studio 2.0
- Google has less restrictions as to what kinds of apps make it to their store

Cordova Fundamentals

- Language: HTML, CSS, JavaScript (jQuery, Angular etc)
- Platforms: all
- IDE: your favorite code editor (syntax highlighting)
- Ionic as the UI Framework (look and feel of a native app)
- Target multiple platforms (Android, iOS, Windows, Blackberry, Fire OS, …) with one code base

Assignment A2

Cordova Project Folder

(+compiled iOS or Android app)

Android Studio Project

Xcode Project

+ Readme.md

Moodle Upload

Android Submission

Functionality and design of your Android app will be evaluated with the following device (simulator):

Nexus 5X

Android 5.1 Lollipop

5.2” 1080x1920 420dpi

API-Level: 22

ABI: x86

(Android Studio 2)

Moodle Upload: *Android Project + Readme.md*

iOS Submission

Functionality and design of your iOS app will be evaluated with the following device (simulator):

iPhone 6S

iOS 9

4.7” 1334x750 420dpi

(Xcode 7)

Moodle Upload: *Xcode Project + Readme.md*

iOS Prerequisites

- ✓ Device with Mac OS X
- ✓ Xcode 7 is installed
- ✓ ~~Signed up for the Apple Developer Program~~

Xcode 7

- Development environment for Mac OS X and iOS apps
- Available for free in the App Store
- Programming Languages: Swift and Objective-C

iOS Interface Builder

iOS Simulator

Swift Basics

```
let myConstant = 10
```
… Constant

```
var myVariable = 40.5
```
… Variable

```
myVariable = 80.9
```

Swift Basics

```
let myConstant = 10

var myVariable = 40.5

myVariable = 80.9

print("Price: " + String(myVariable))
```

Swift Basics

```swift
let myConstant = 10

var myVariable = 40.5

myVariable = 80.9

print("Price: " + String(myVariable))

print("Price: \(myVariable)")
```

Swift Basics

```
let myConstant = 10

var myVariable = 40.5

myVariable = 80.9

print("Price: " + String(myVariable))

print("Price: \(myVariable)")

let explicitDoubleConstant: Double = 10
```

Swift Basics

```swift
let myConstant = 10

var myVariable = 40.5

myVariable = 80.9

print("Price: " + String(myVariable))

print("Price: \(myVariable)")

let explicitDoubleConstant: Double = 10

var fruits = ["Apple", "Banana", "Orange", "Mango"]
```

Swift Control Flows

- if/else, switch statements
- for and while loops
- functions

```
func greet(name: String, day: String) -> String {
    return "Hello \(name), today is \(day)."
}

greet("Anna", day: "Tuesday")
```

Getting started