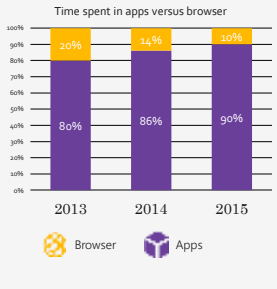
Cross Platform Mobile Apps With Visual Studio And Ionic

Justin James
7-1-2016

Mobile represents the single largest technology innovation of all time

- 10X Faster than the PC boom
- 2X Faster than the Internet boom
- 3X Faster than the social networking explosion

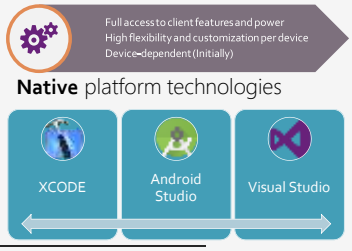
Apps dominate the mobile web



Source: Flurry Analytics

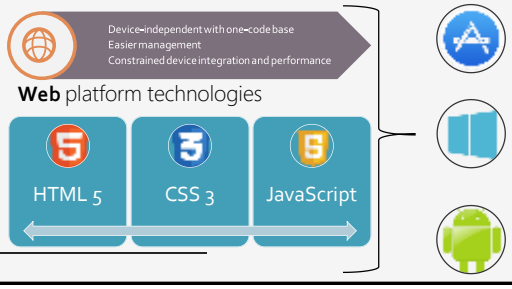
I wanted to build a mobile app too!

Traditional Development Strategy



ionic

Hybrid Development Strategy



The biggest mistake we've made as a company is betting on HTML 5 over native

Mark Zukerberg
September, 2012
via venturebeat.com

It's not 2007 anymore

Year	Device	Processor	Ram
2007	iPhone 1	620 MHz	128 MB

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2007	iPhone 1	620 MHz	128 MB
2010	iPhone 4	1 GHZ	512 MB

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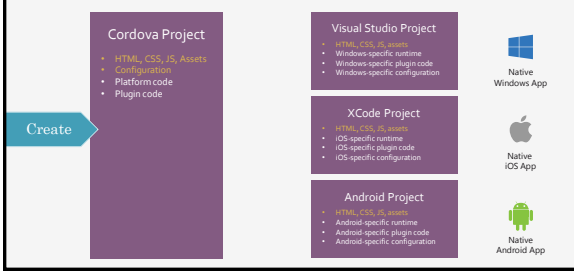
Apache Cordova

Open source framework middleware that bundles your html, javascript, and css into a mobile application that has access to the device

How does Cordova work?



Xamarin vs Cordova

Xamarin

- Existing XAML and C# Skills
- Shared business logic / UI for each platform
- Full Device Access

Cordova

- Existing HTML/CSS/JS Skills
- Single UI and Logic across platforms
- Limited Device Access

Android Setup

- Windows/Linux/OSx
- Java SDK 8
- Android SDK
- Android Studio
- Google Chrome
- Google Developers Account
- Visual Studio Android Emulator

iOS Setup

- OSx Only
- Xcode
- Xcode Command Line Tools
- iOS Simulator
- Safari
- Apple Developers Accounts

Visual Studio Tools for Apache Cordova

- Installs Platform Dependencies
- iOS, Android, and Windows development entirely in Visual Studio
- Easily add native device capabilities
- Powerful features such as templates, debugger, emulators, device deployment, etc.

Cross-platform with Visual Studio

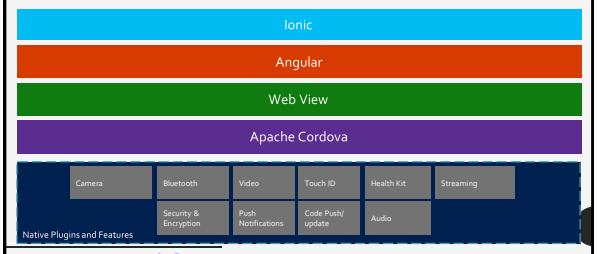
taco.visualstudio.com

Demo

Six Reasons For Ionic Framework

1. Missing Cordova UI Framework
2. Built On Top of Angular
3. Performance Obsessed
4. Zero Code Redundancy
5. Native APIs
6. Offline Support

Ionic Runtime Architecture



What Can You Build With Ionic?

If you can make a great web page you can make a great app!

Sworkit

- Fitness App
- Downloaded over 3 million times
- Featured multiple times in both the Apple and Google Stores
- Appeared on Shark Tank and got 1.5 million in funding
- http://sworkit.com/

Chef Steps

- Gives you have the knowledge, tools, and inspiration to cook more great food, more often.
- Teaches you to cook like a real chef at home, so you can just relax and enjoy it.

Ionic Components

Tabs	Menus
Cards	List
Headers	Footers
Forms	Buttons
Popups	Spinners
Modals	Slidebox
Gestures	Keyboard Customizations

Ionic Installation

Node JS

- http://nodejs.org
- x86 version, suggested

Git

- https://git-scm.com/

Global Npm Packages

- cordova
- ionic
- gulp
- bower

Ionic App Creation

Create New Project
- ionic start myApp [blank/tabs/sideMenu]

Test In Web Browser
- ionic serve --lab

Add Mobile Platform
- ionic platform add [android/ios]

Test On Device / Emulator
- ionic [run/emulate] [android/ios]

Ionic Pack Extension

- Built by Mads Kristensen
- Html Intellisense and Validation
- Javascript Intellisense
- Code Snippets
- http://tinyurl.com/ionicpack

Ionic Tooling

- Icon and Splash Screen Sizing
- Ionic View (for v1)
- Creator
- Marketplace
- Ionic Platform

Demo

Ionic Resources

- Web Site – ionicframework.com
- Docs - ionicframework.com/docs
- Meetups – blog.ionic.io/ionic-worldwide
- Slack - ionicworldwide.herokuapp.com
- Forums - forum.ionicframework.com
- Cordova Plugins - ngcordova.com

Ionic Blogs

- digitaldrummerj.me/categoryview/#ionic
- mcgivery.com/100-ionic-framework-resources/
- joshmorony.com/category/ionic-tutorials
- raymondcamden.com
- thepolyglotdeveloper.com

taco.visualstudio.com

ionicframework.com

Time to Go

Create Your

Mobile App

http://digitaldrummerj.me/speaking

THANK YOU