

Building Native Apps with HTML, CSS, and JavaScript

Jonathan Stark

Staggering Growth

Everything is Up

- Average daily useage
- Mobile media usage
- Smartphone ownership
- 3G/4G subscribers
- % of smartphones vs dumfones

5 Billion Subscriptions

up from 4.6B in 2009 and 726M in 2000

Fragmentation

Platform Fragmention

- iOS
- Android (Froyo, Gingerbread, Honeycomb)
- BlackBerry
- Windows Phone 7
- webOS
- (Symbian, MeeGo, bada, etc...)

Device Fragmentation

- 68 Android handsets in the US alone
- 100+ tablets announced at CES
- Screen sizes range from postage stamp to big screen TV
- Screen resolution has become an issue

Et tu, Apple?

- iPhone 2G
- iPhone 3G
- iPhone 3GS
- iPhone 4
- iPod Touch 1st gen
- iPod Touch 2nd gen
- iPod Touch 3rd gen
- iPod Touch 4th gen
- iPad 1
- iPad 2

Et tu, Apple?

- Camera or not?
- Multitasking or not?
- 3G or not?
- GPS or not?
- Gyro or not?
- Screen size
- Pixel density
- Storage capacity
- Memory limit
- Processor speed

Hybrid Apps

CSS3 Transforms, Transitions, & Animations

demo

jQuery Touch

jQTouch


- Open source
- Created by @DavidKaneda
- jQuery plugin
- For small webkit devices

demo

PhoneGap

PhoneGap

- Open source
- Created by @Nitobi
- Native app wrapper
- Multiple platforms

	 iPhone / iPhone 3G	 iPhone 3GS and newer		 OS 4.6-7	 OS 5.x	 OS 6.0+			
ACCELEROMETER	✓	✓	✓	✗	✓	✓	✓	✓	✓
CAMERA	✓	✓	✓	✗	✓	✓	✗	✗	✓
COMPASS	✗	✓	✓	✗	✗	✗	✗	✗	✗
CONTACTS	✓	✓	△	✗	✓	✓	✗	✓	✓
FILE	✗	✗	✓	✗	✓	✓	△	✗	✗
GEO LOCATION	✓	✓	✓	✓	✓	✓	✓	✓	✓
MEDIA (AUDIO RECORDING)	△	△	✓	✗	✗	✗	✗	△	✗
NOTIFICATION (SOUND)	✓	✓	✓	✓	✓	✓	✓	✓	✗
NOTIFICATION (VIBRATION)	✓	✓	✓	✓	✓	✓	✗	✓	✓
STORAGE	✓	✓	△	✗	△	✓	✓	✗	✗

<http://www.phonegap.com/features>

WEINRE

WEINRE

- Open source
- Created by @pmuellr
- Remote debugger
- WEb INspecto REmote
- You owe Pat a beer

demo

Conclusion

"If you can build your app with HTML, CSS, and JavaScript, then you probably should."

- Jonathan Stark

Questions?

- jonathanstark.com/books
- jonathanstark.com/contact
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