



# Development for Mobile Devices Tools from Intel, Platform of Your Choice!

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CEE-SEC(R) 2013



# ***Optional: Download App Preview***

## **Android**

[bit.ly/1i8VEgl](https://bit.ly/1i8VEgl)

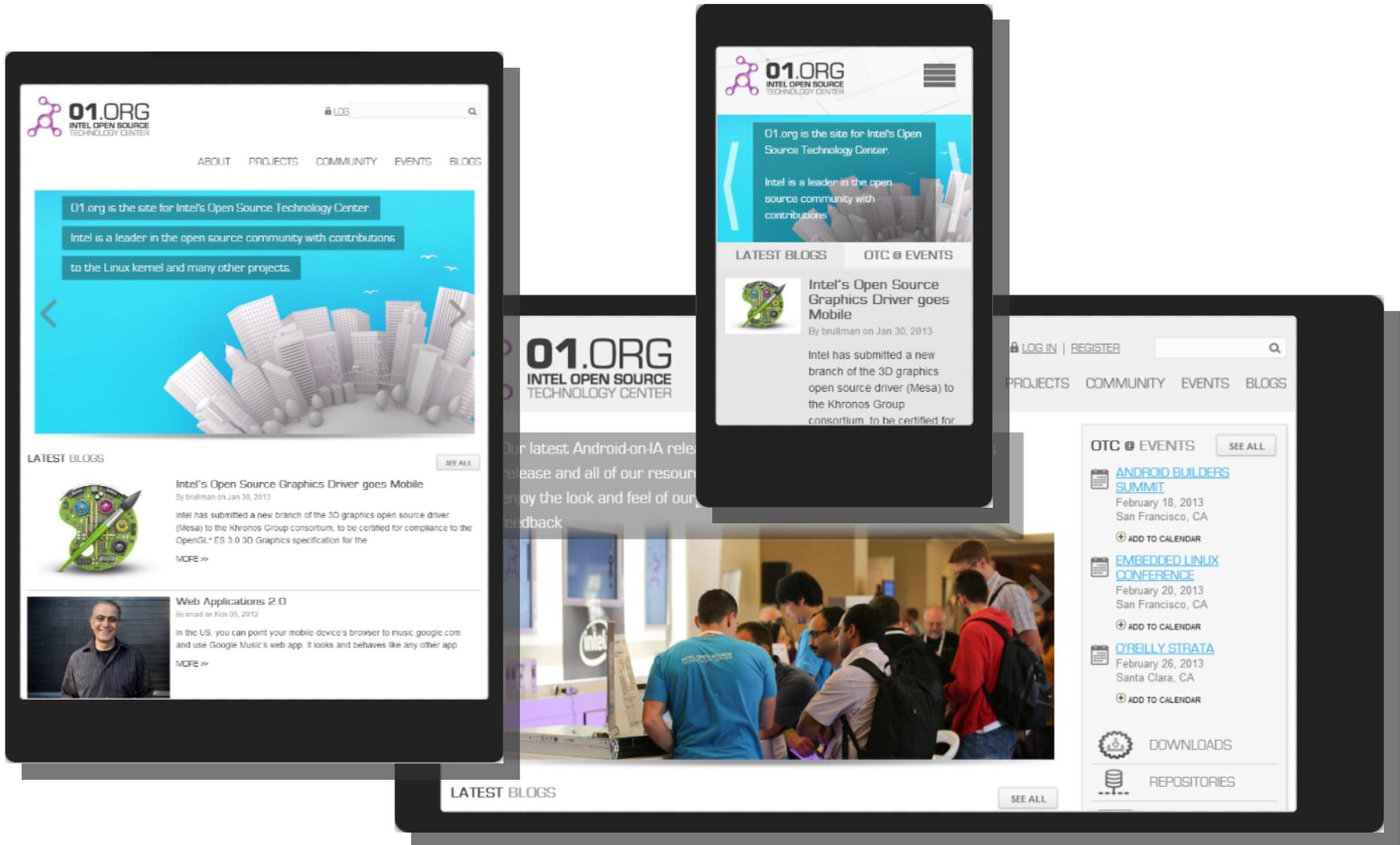


## **iOS**

[bit.ly/1a3W7Bk](https://bit.ly/1a3W7Bk)



# Use of HTML/CSS/JS for UI and Program Logic



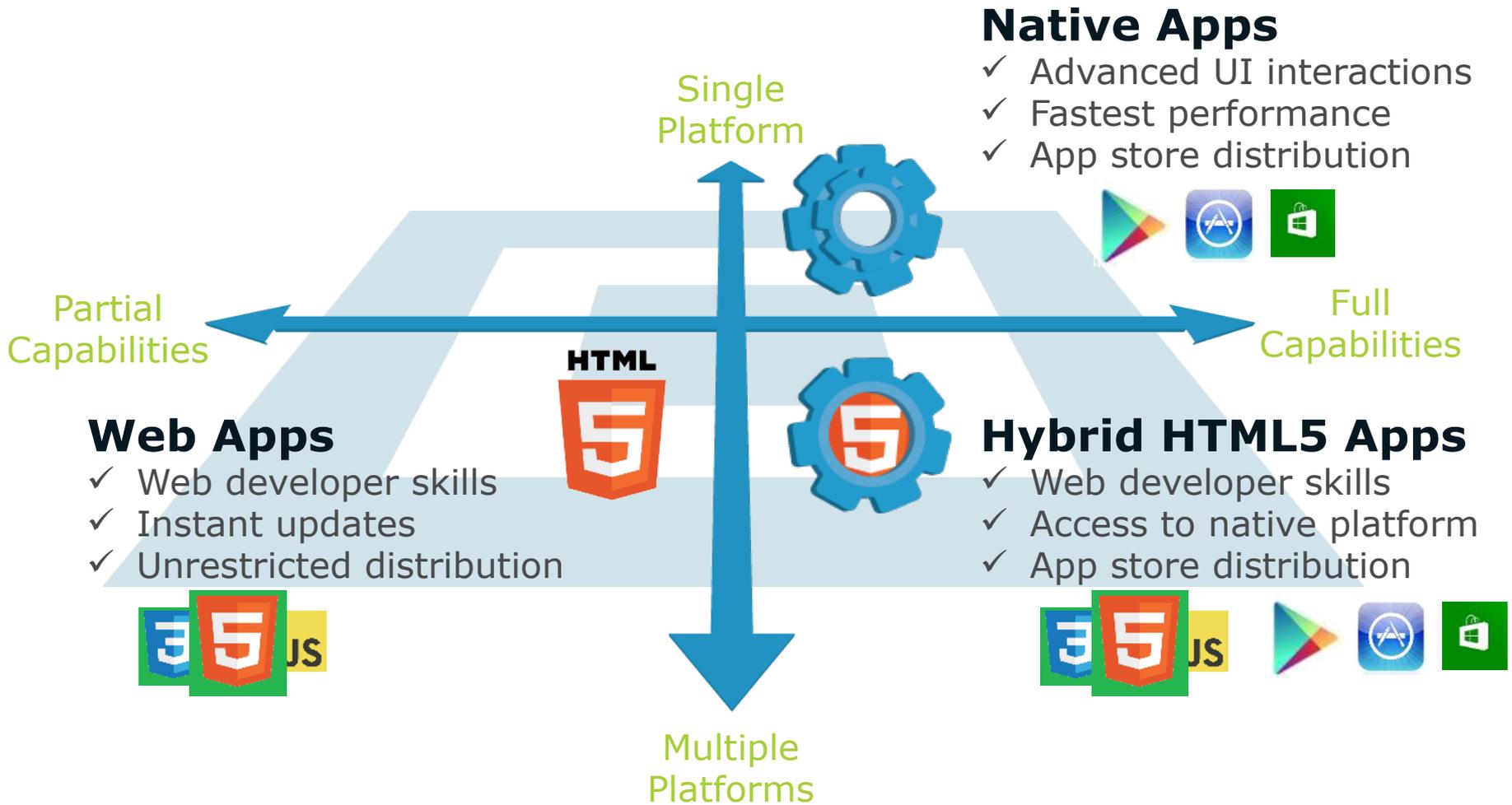
# Why Hybrid HTML5 Apps?

Hybrid Apps concept allows developers to build **compelling** apps utilizing their HTML5 skills...



...and these apps can be distributed in native app stores.

# Hybrid HTML5 App Advantage



# Web vs. Hybrid vs. HTML5 Applications

	Today		Tomorrow
	Web App <i>limited sensor input</i>	Hybrid App <i>full sensor input</i>	HTML5 App <i>full device access</i>
Runs w/o network	Yes	Yes	Yes
Flexible Layout	Yes	Yes	Yes
Device APIs	Limited	<b>Mostly</b>	Complete
Distribution	URL	Native Binary	URL/Binary
Cross Platform	Yes	<b>Yes &amp; No</b>	Yes
Runs in Web Browser	Yes	No	No
Runs in Web Runtime	No	Yes	Yes

The HTML5 standard is evolving to include device APIs

# Intel® XDK – Tools for Hybrid HTML5 App Development

**Develop**

**Debug and Test**

**Deploy**

**HTML5 Editor**

**Device Emulator**

**JS Debugger**

**Cloud-Based Packaging Tool**

**App Designer Layout**

**On-Device App Tester**

**On-Device App Debugger**

**Cordova Build "Hybrid Apps"**

Apple\* AppStore  
Google\* Play\*  
Windows\* Market

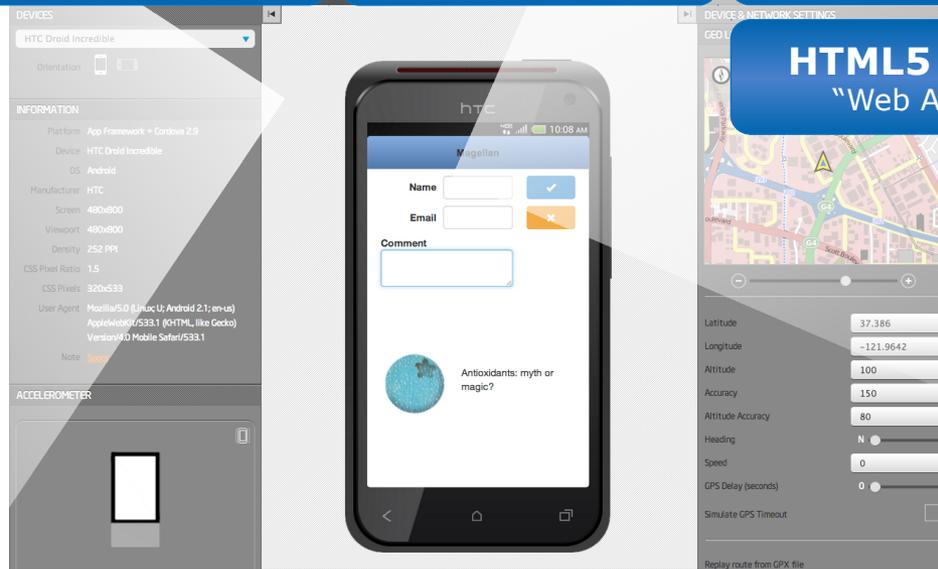
**App Starter Quick Layout**

**HTML5 Build "Web Apps"**

Chrome\* Store  
Facebook\*  
Your Website

**App Framework Optimized JS libs**

**App Game I/F Optimized Canvas**



**Build cross-platform HTML5 hybrid applications.**

\*HTML5 logo is the property of World Wide Web Consortium (W3C)

# Layout and Design

# Develop: Mobile App Design Tools

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RWD Layout

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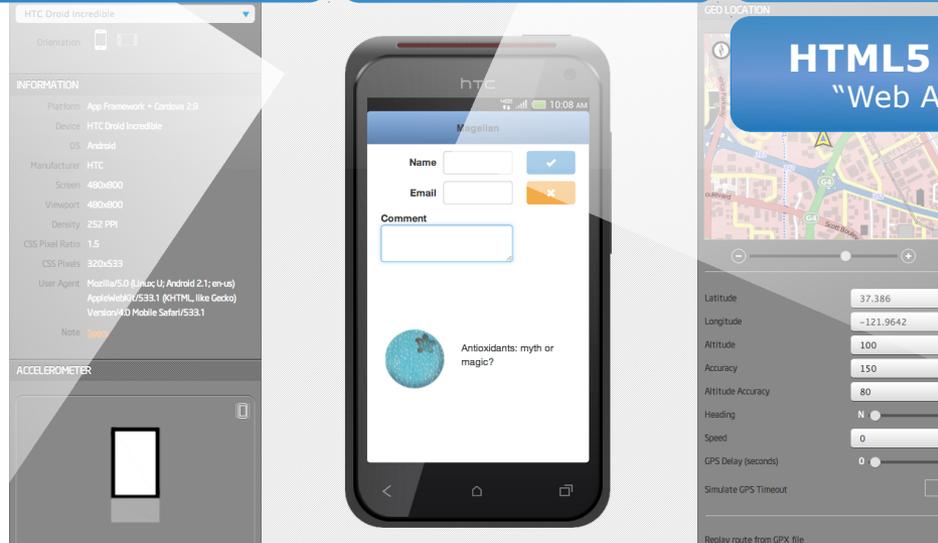
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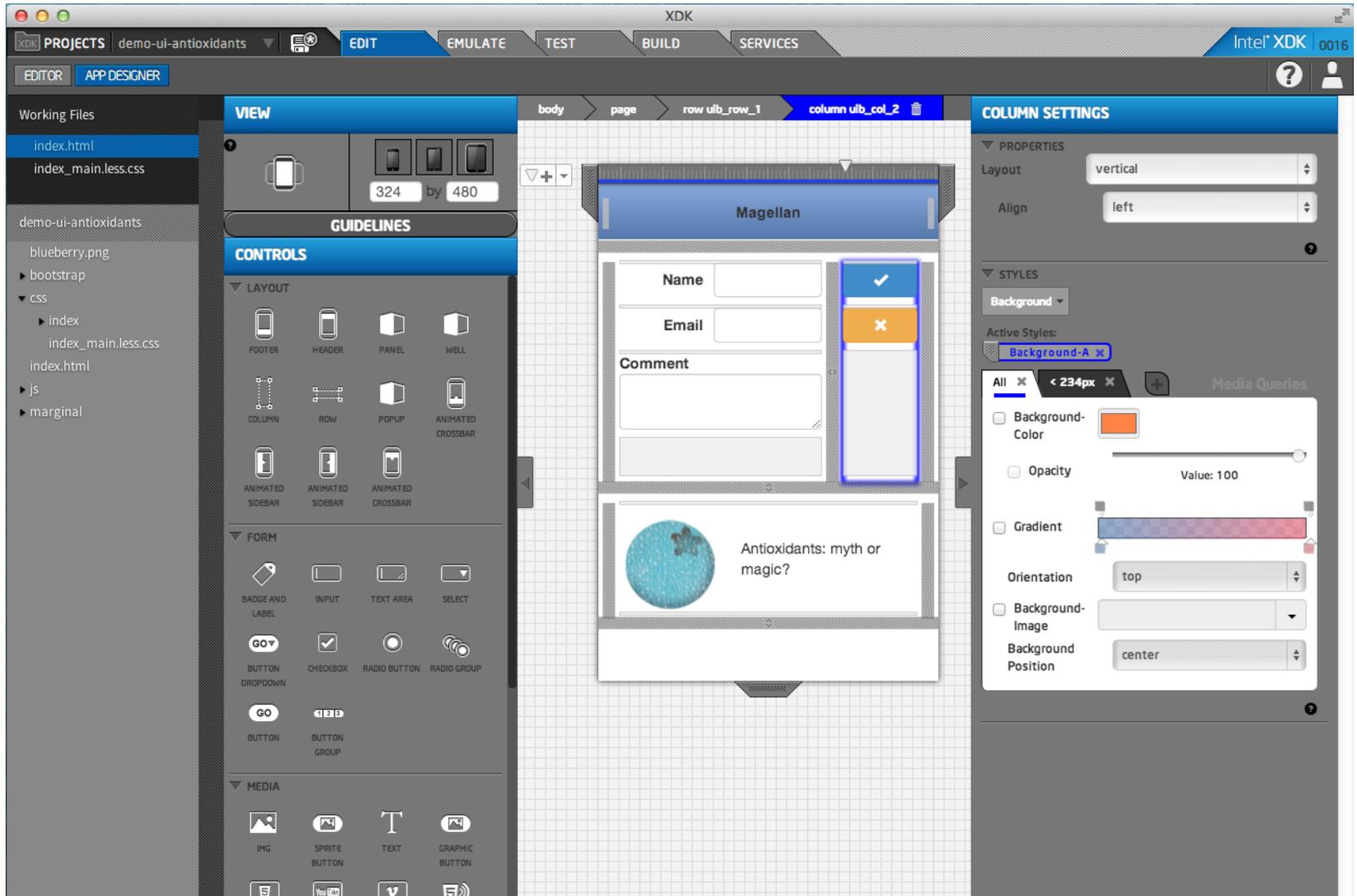
**App Framework**  
Optimized JS libs

**App Game I/F**  
Optimized Canvas



Build cross-platform HTML5 hybrid applications.

# Demo: Mobile App Design Tools



# Test and Debug

# Test: Emulate and On-Device Debug

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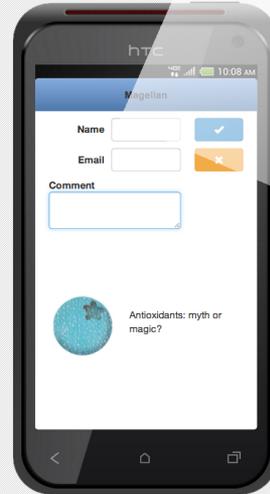
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Build cross-platform HTML5 hybrid applications.

# Demo: Emulate and On-Device Debug

The screenshot displays the Intel XDK interface for emulating and debugging an application. The main window shows an emulated HTC Droid Incredible device with the following details:

- DEVICES:** HTC Droid Incredible
- Orientation:** Portrait
- INFORMATION:**
  - Platform: App Framework + Cordova 2.9
  - Device: HTC Droid Incredible
  - OS: Android
  - Manufacturer: HTC
  - Screen: 480x800
  - Viewport: 480x800
  - Density: 252 PPI
  - CSS Pixel Ratio: 1.5
  - CSS Pixels: 320x533
  - User Agent: Mozilla/5.0 (Linux; U; Android 2.1; en-us) AppleWebKit/533.1 (KHTML, like Gecko) Version/4.0 Mobile Safari/533.1
  - Note: Specs
- ACCELEROMETER:** Visualized as a vertical bar with a scale.

The emulated device screen shows a form titled "Magellan" with the following fields and controls:

- Name:** Input field with a blue checkmark button.
- Email:** Input field with an orange 'X' button.
- Comment:** Text area.
- Image:** A globe icon.
- Text:** "Antioxidants: myth or magic?"

The right sidebar shows the "DEVICE & NETWORK SETTINGS" panel, including a "GEO LOCATION" section with a map and the following data:

- Latitude: 37.386
- Longitude: -121.9642
- Altitude: 100
- Accuracy: 150
- Altitude Accuracy: 80
- Heading: N
- Speed: 0
- GPS Delay (seconds): 0
- Simulate GPS Timeout:
- Replay route from GPX file:

# Remote Download of Notifiers Test App

Scan this

<http://intel.ly/H7qM4o>

Fingers crossed,  
hoping the network  
doesn't overload!!



# Package and Build

# Deploy: Package and Build

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Debug and Test

Deploy

HTML5 Editor

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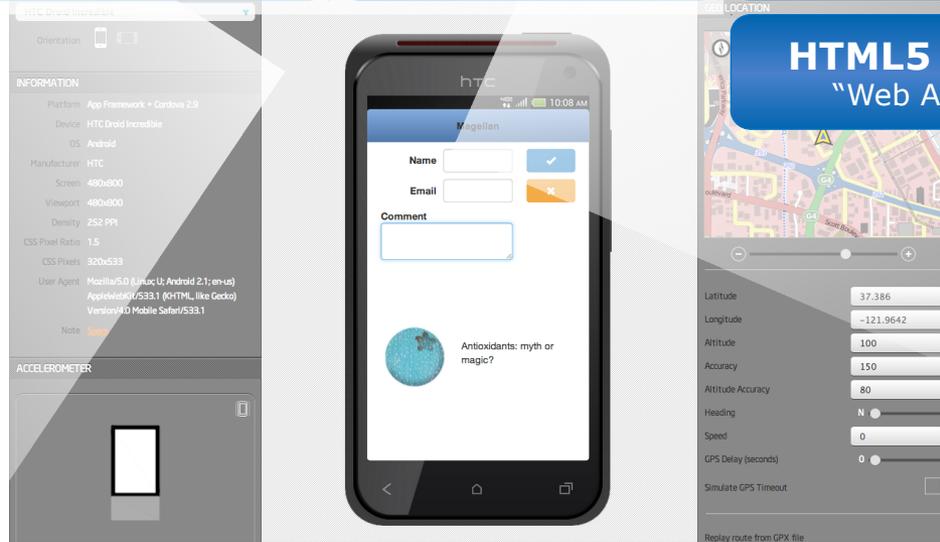
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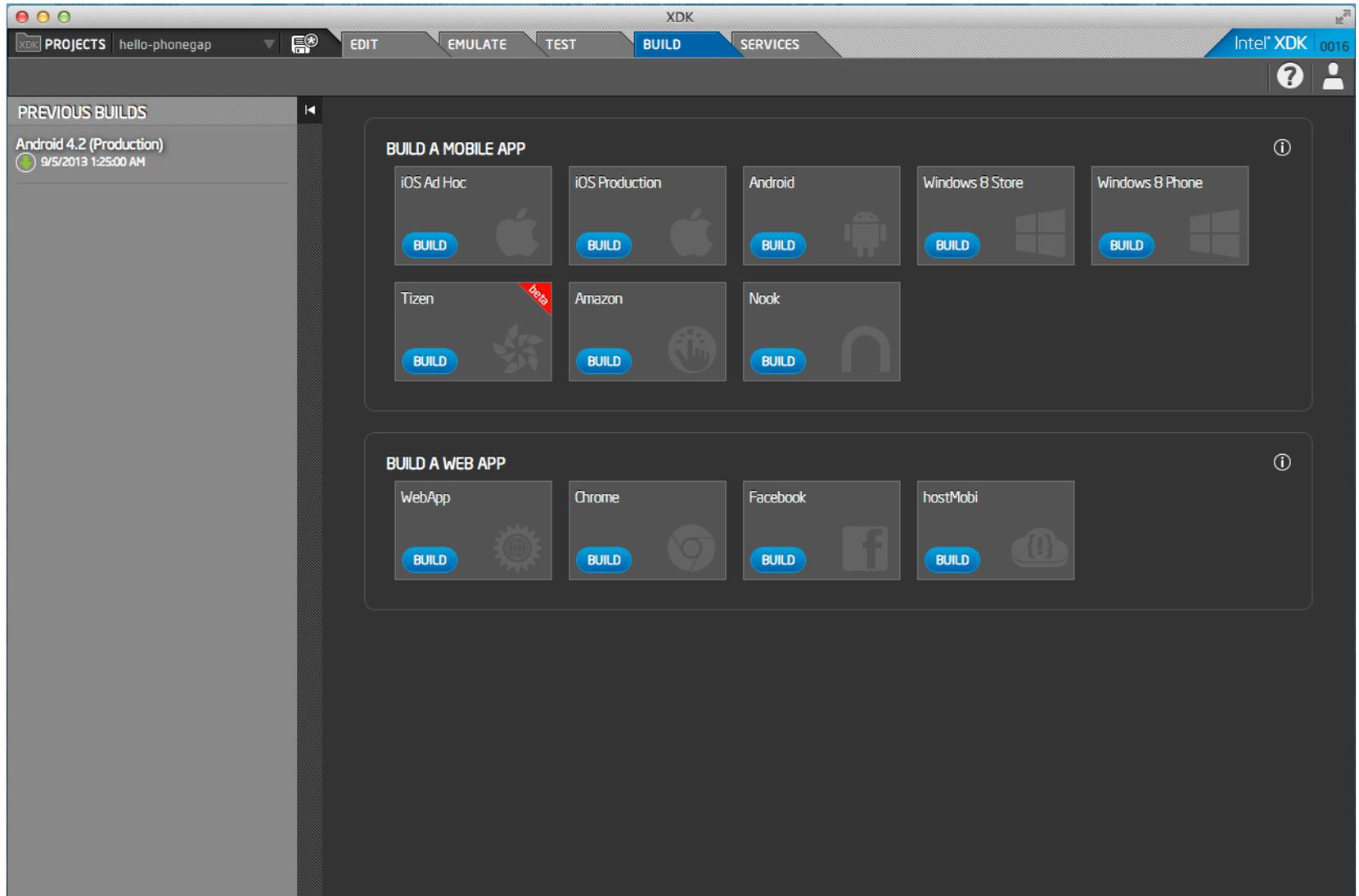
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# Demo: Package and Build



# Alternate Build Service Offerings

	Intel® XDK†	Adobe* PhoneGap* Build*	Other Options (typical)
iOS*	X	X	X
Android*	X	X	X
Windows* 8	X		
Blackberry*		X	
Tizen*	X		
Amazon* Kindle*	X		
Barnes & Nobile* Nook*	X		
FireFox* OS			
Chrome* OS	X		
Web App	X		
Facebook*	X		
WebOS*		X	
Bada*		X	

†Build support as of October, 2013



# Related Tools

# Intel® HTML5 App Porter Tool - BETA

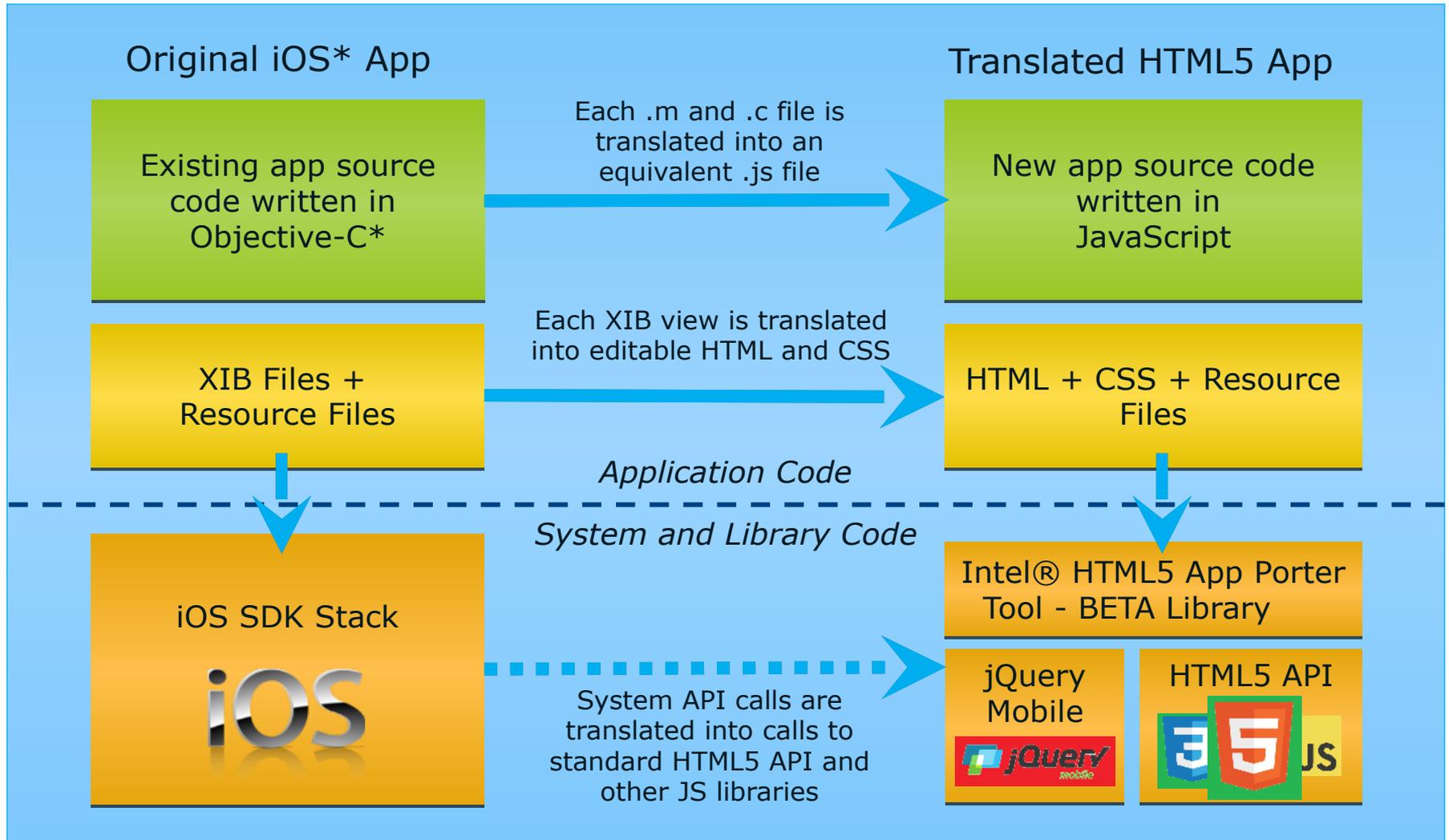


**You Have  
Deployed an iOS\*  
App...**

**...but you want to broaden your market reach...**

**...translate your application from Objective C to  
HTML5**

# iOS\* to HTML5 Translation Process



# Additional Sources of Information

[software.intel.com/html5](http://software.intel.com/html5)

[html5dev-software.intel.com](http://html5dev-software.intel.com)

[serge.lunev@intel.com](mailto:serge.lunev@intel.com)



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