



Building 'Native' Apps using HTML5

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We're America's Finest News Source

Founded in 1988 in Madison, WI

Now based in Chicago

Two publications

The Onion (5M unique visits this month, 25M page views)

A.V. Club (3M unique visits, 3M more page views than Onion)



Targeting new platforms

Stuff keeps changing

Mobile & Apps are growing like crazy

Need to develop both products for Onion & AV

Currently have 4 full time engineers, 3 designers

Need to target many platforms quickly

iOS, Android, Kindle, Nook, Google TV, etc

Previously outsourced app development

We're going to stick to web tech, what we know

Wait & see what happens.

Let others make mistakes we can learn from



Issues with Outsourcing

Do it yourself

Our iPhone & Android apps did well, but...

Slow turn around time on issues

Android Fragmentation causes us a lot of headaches

Mobile & app traffic was growing, but we couldn't keep up

Conclusion: Too important to outsource

Build it ourselves

Let's use the skills we have: HTML, JS, CSS

Use a thin native wrapper that contains a browser control

Still a lot of new tech to learn

Prototyped an iPad app in 4-5 weeks

Learned a bunch of new cool tech:

Application Cache

Web SQL Database

Javascript touch events

CSS Transforms

Architecture very similar to a standard website

Not as snappy as we'd like

Memory problems & frequent crashes

Swiping felt choppy

Ad loading was causing problems

Took two minutes to process articles

Optimizations

Keep as few images in the DOM at time

Do NOT use the Web SQL database, JSON in local storage is much faster

Use 3D CSS animations to take advantage of hardware acceleration

Preload everything you can, including ads



The Onion iPad App

Show & Tell

DEMO TIME!



Platform Invasion

One single HTML5 app to target Android & iPhone and possibly Mobile

Need to brush up on Native Development

Need to wire in platform specific Notification, learn about subscription possibilities

Did it once. We'll keep doing it this way.

We're doubling down on HTML5 as the base of each of our apps

Hired an iOS & Android Developer to help build the native wrappers

Download the iPad App

<http://onion.com/onionipad>

Check it out in Chrome or Safari

<http://www.theonion.com/tablet/>

Follow us on Twitter @theonion & @mikewnuk



Helpful Resources

Some stuff that can get you started

Phone Gap

<http://phonegap.com> (we ultimately didn't use it, but you may find it useful)

Zepto.js

<http://zeptojs.com> (used jquery instead, but may use this webkit only framework later)

Making an HTML5 App Fast

<http://mir.aculo.us/2010/06/04/making-an-ipad-html5-app-making-it-really-fast/>