

Phonegap 101

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Hi, I am Dimitrios, I work as a senior developer and today I would like to introduce you to PhoneGap.

What it is

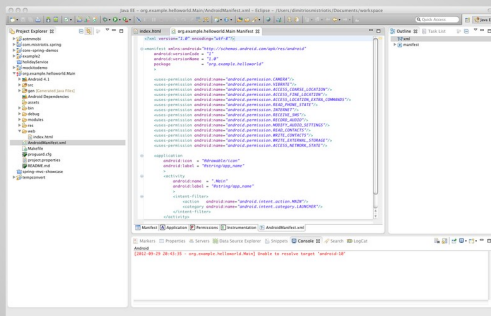


First of all what it is : Quoting¹: "PhoneGap is an open source framework for quickly building cross-platform mobile apps using HTML5, Javascript and CSS."

Basically mobile phone's functionality is exposed as Javascript objects, similar to "window" object of traditional DOM.

Developer is essentially writing A one-page JavaScript applications, using well known web technologies, having access to the native environment of the phone (exposed as JavaScript objects from PhoneGap).

How it works



As an example, this is a screenshot of a typical "Hello world²" for Android running within eclipse. You can see that it is "just" a html page, surrounded by the necessary artefacts of an android application, such as the manifest file.

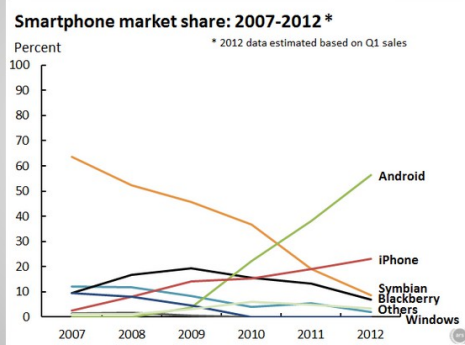
Similar setup can easily be done for an iPhone, a Blackberry or others. What would remain the "same" for all those, would be the web implementation.

If Eclipse is available and open on presentation's computer, show it's window instead.
It might be better to see it "live" here.

1 <http://phonegap.com/about>

2 Downloaded from: <https://github.com/pmueller/phonegap-android-helloworld>

Why Phonegap 1/3: Current state of mobile marketshare

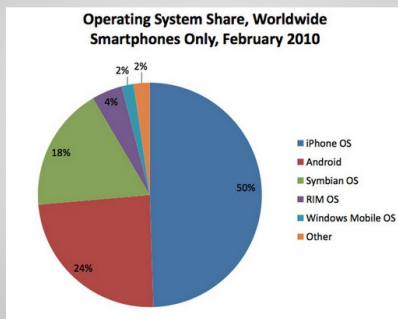


A question that usually pops-up, is "Why would someone want to do this".

There are many reasons, which can be discussed later, with the most important one being **portability**.

This is important because it is not possible to accurately predict the future of the mobile landscape. Please look at this diagram from an article in Ars Technica³ of the smartphone market-share for the last five years.

Why Phonegap 2/3: World in 2010



Suppose a time machine took us back to 2010, just two years before and reflect on the status-quo back then.

Suppose a company wants to introduce a mobile application and is not certain on choosing platform. The gut feeling back then, would probably be "iPhone first". It would seem rational with a 50% market share and knowing that people using Androids did not buy many applications. Symbian is almost an unknown word and blackberries are used only by business people for emails. If the same choice had to be done today, the answer might have been different.


Why Phonegap 3/3: Future Uncertainty - 2013



Suppose that a choice needs to be made today, having also to consider tablets. Probably "native Android". Again that would be as easily proven wrong.

Why: We currently have at least two new platforms entering the mobile space. The first one, FirefoxOS, using JavaScript (making a PhoneGap application native for this platform). The other one is Windows Mobile, which although might not ever displace current top two, will probably get up to something like a double digit market-share.

Based on the above, it is safe to assume that a write-once/deploy-everywhere approach, with something as PhoneGap, would be a safe choice.

<p>Case Study 1/2</p>  <p>Album of the month</p> <p>Github: https://github.com/dimitrismistriotis/aotm-mobi</p> <p>Play store: https://play.google.com/store/apps/details?id=net.albumofthemonth.mobi</p>	<p>In order to familiarize with the framework, a small application was build with it.</p> <p>I operate a site named "Album of the month"⁴, which is a very small music suggestion service. Since there is a Facebook application for that, I also decided to write it as a mobile application.</p> <p>It's code is open source: you can get it from github⁵, or you can go and install it straight from play store⁶.</p>
<p>Case Study 2/2</p> <ul style="list-style-type: none"> • Ease of development and quirks. • Server changes for mobile. • PhoneGap tools and ecosystem. • One-page JavaScript Application. 	<p>There were many benefits from this exercise, such as understanding the framework and it's quirks, a gradual expose to native application development, exposure to the tool-chain (if able to, show the chrome extension), such as the Chrome developer extension, Ripple⁷.</p> <p>Finally, application's server had to be tweaked and changed, in order to communicate with a remote client: as an example, communication had to be done asynchronously and the content has to be consumed as JSON/RSS instead of HTML.</p>
<p>QnA</p>	<p>The rest of the talk is dedicated for QnA.</p> <p>Not being sure exactly what should be covered, it might be better to have a larger QnA session.</p>



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⁴ <http://www.albumofthemonth.net/>

⁵ <https://github.com/dimitrismistriotis/aotm-mobi/>

⁶ <https://play.google.com/store/search?q=net.albumofthemonth.mobi>

⁷ <http://emulate.phonegap.com/>