

PhoneGap

Andrew Lunny, Adobe

Me

@alunny

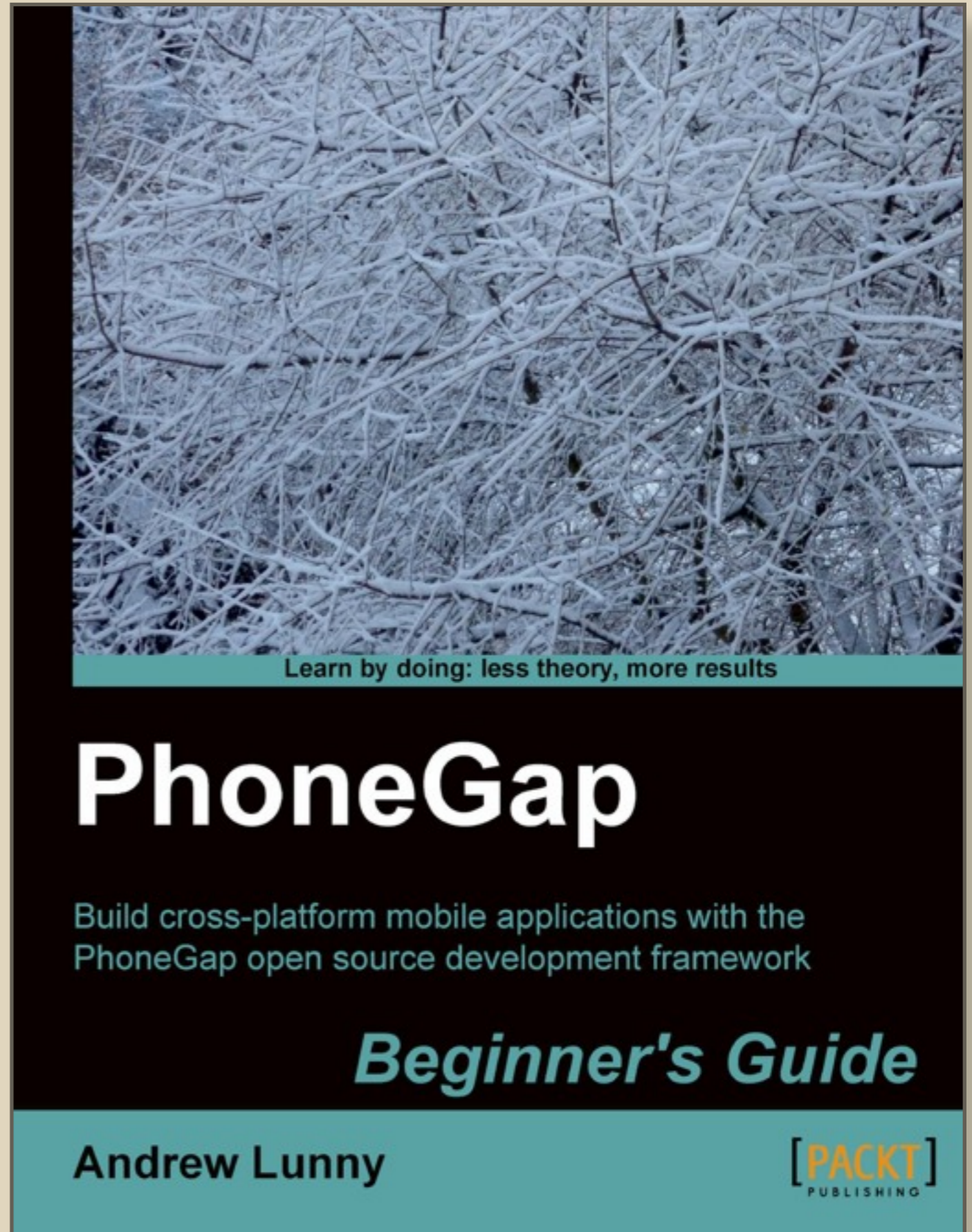
Computer Scientist

PhoneGap Build

Nitobi Software

Adobe Systems

Author



Me

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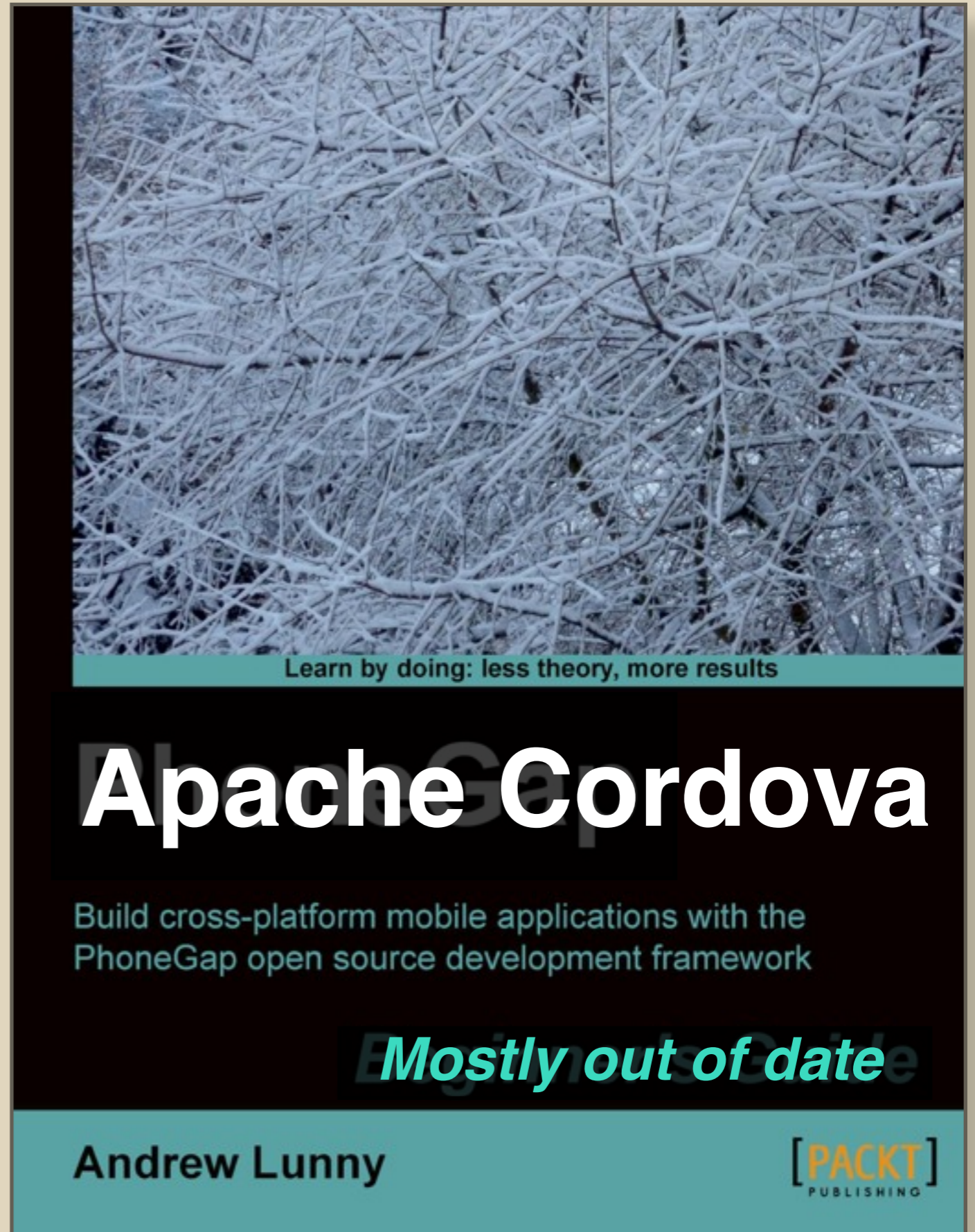
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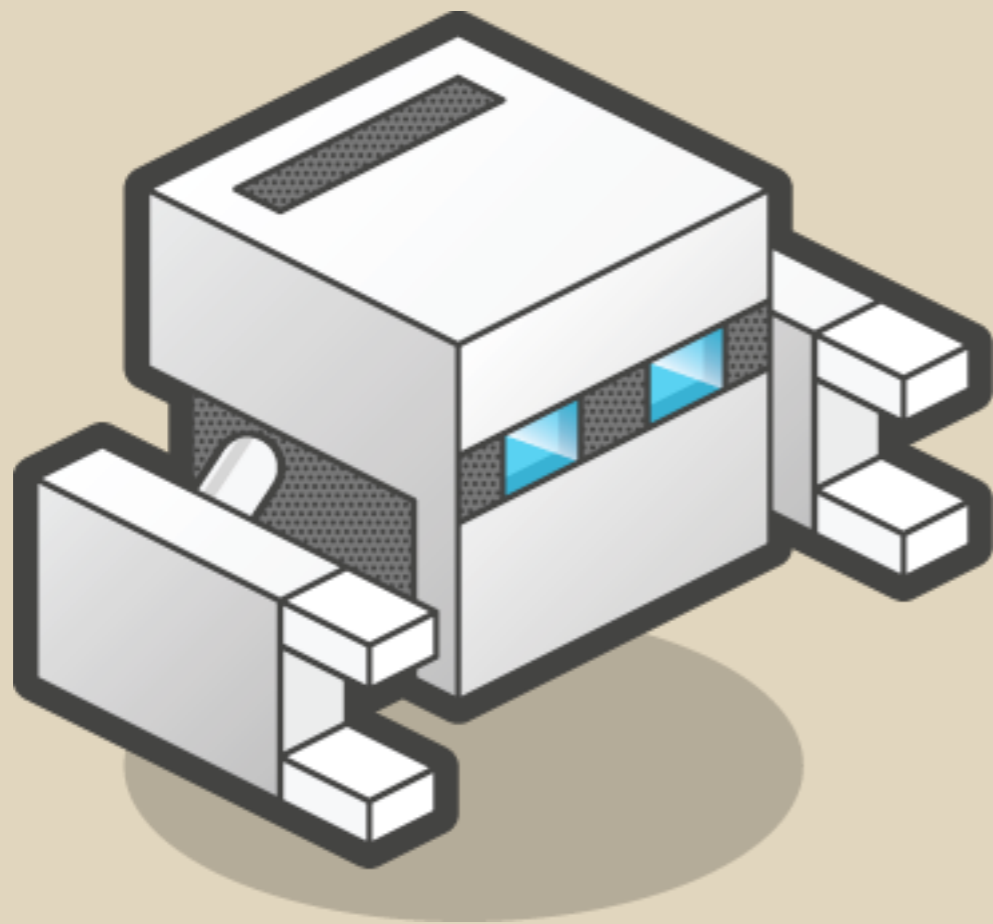
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PhoneGap Build

build.phonegap.com



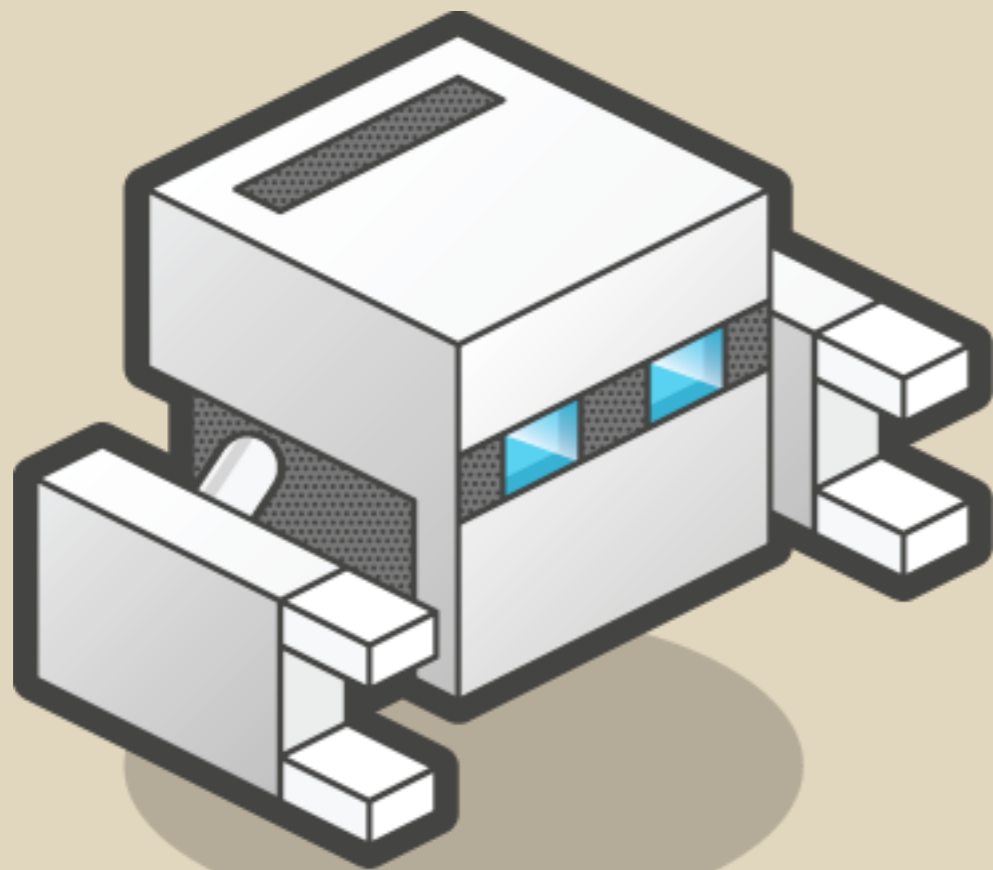
Six Platforms

No SDKs

No Problem

PhoneGap Build

build.phonegap.com



Six Platforms

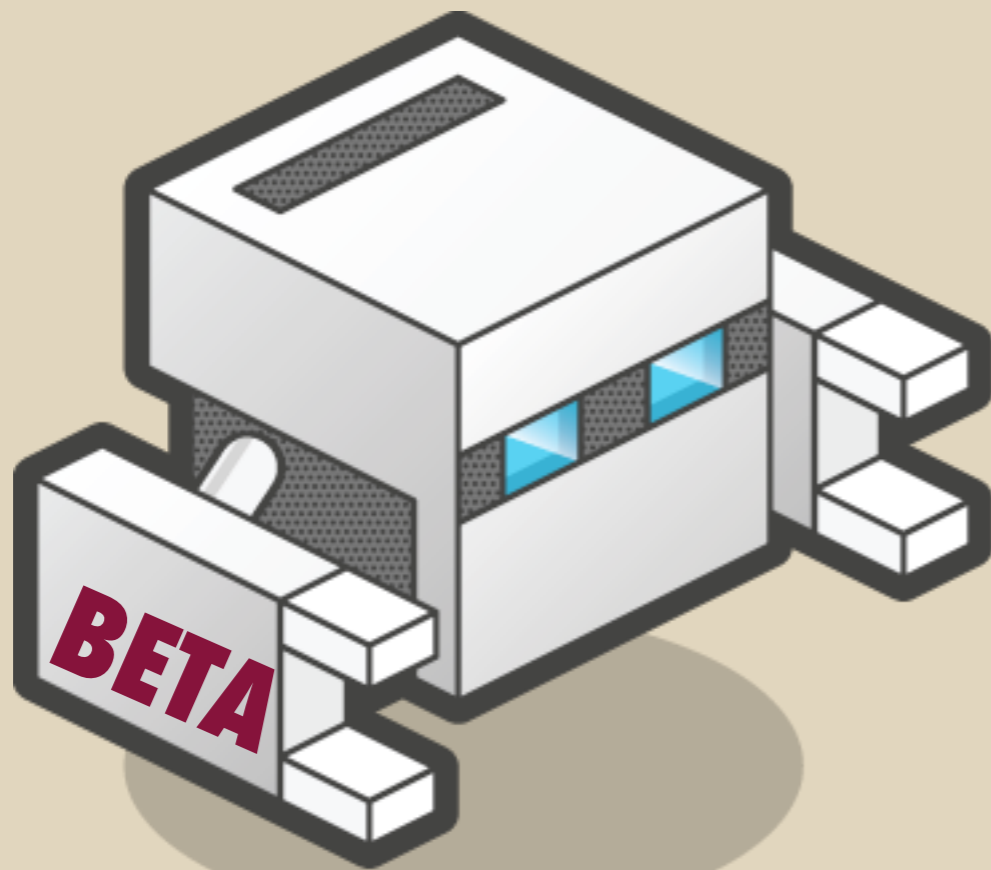
No SDKs

No Problem

(there are still many problems)

PhoneGap Build

build.phonegap.com



Six Platforms

No SDKs

No Problem

(there are still many problems)

What is PhoneGap?

cross-platform

native

mobile apps

using HTML5

cross-platform

native

mobile apps

using HTML5

cross-platform

native

mobile apps

using HTML5

cross-platform

native

- ▶ Objective-C

- ▶ Java

- ▶ Android flavor

- ▶ BlackBerry flavor

- ▶ C#

mobile apps

using HTML5

cross-platform

native

mobile apps

using *HTML5*

Huh?

(native) **webview**

(hybrid) **bridge**

(web) **JS APIs**

(native) webview
part of the SDK

this is good
reduces app size
eases dev
fits all terms

this is bad

mixed HTML5

mixed performance

annoying bugs

framework code

mostly native

developer code

mostly web

caveat

extra capabilities
through plugins
usually require
native + js

(hybrid) bridge
provided by PG

important
string passing
(has limitations)

the name

PhoneGap

-> Callback

-> Cordova

-> PhoneGap

Confusion!

Apache Cordova

cordova.io

distributed at

phonegap.com

High-Level Goals

vs reality

the web is a first
class development
platform

reality:

APIs mostly there

UI still a question

the purpose of
PhoneGap is to
cease to exist

reality:
mobile browsers
move slowly

APIs

docs.phonegap.com

basics

- ▶ events
- ▶ device
- ▶ connection
- ▶ notification

events

```
$.on( 'deviceready',  
      function () {  
        // comment  
        startApp()  
      } )
```

events

```
$.on('resume',  
    function () {  
        // comment  
        backToWork()  
    })
```

device

```
var platform =  
    device.platform,  
    cdv =  
    device.cordova;  
  
alert(cdv + ' ' + platform);
```

connection

```
var c =  
navigator.network.connection.  
type;  
  
if (c == Connection.NONE) {  
    doOfflineStuff();  
}
```

notification

```
navigator.notification.alert(  
    'You are the winner!',  
    alertDismissed,  
    'Game Over',  
    'Done'  
);
```

sensors

- ▶ accelerometer
- ▶ geolocation
- ▶ compass

geolocation

```
navigator.geolocation.  
getCurrentPosition(  
    onSuccess,  
    onError,  
    { enableHighAccuracy:  
      true }  
);
```


accelerometer

```
navigator.accelerometer.  
getCurrentAcceleration(  
    onSuccess,  
    onError  
);
```

compass

```
navigator.compass.  
getCurrentHeading(  
    onSuccess,  
    onError,  
    { filter: 5 }  
);
```

data

- ▶ **media**
- ▶ **file**
- ▶ **camera**
- ▶ **contacts**

media

```
var song = new Media(  
    'http://site.com/  
audio.mp3' );  
  
song.play();
```

file: read/write

```
// not fit for slide  
// see docs.phonegap.com
```

file: transfer

```
new FileTransfer.upload(  
  '/some/file/uri',  
  http://site.com/upload,  
  onSuccess,  
  onError,  
  options);
```

camera: legacy

```
navigator.camera.getPicture(  
    onSuccess,  
    onFailure,  
    { quality: 50,  
      destinationType:  
        Camera.DestinationType.  
        FILE_URI  
    }  
);
```

capture

```
navigator.device.capture.  
captureVideo(  
  onSuccess,  
  onError,  
  { limit: 2 }  
);
```


contacts

```
var opt = new  
ContactFindOptions();  
opt.filter = "Bob";
```

```
navigator.contacts.find(  
  ["displayName", "name"],  
  onSuccess, onError,  
  opt);
```

PhoneGap 2.0

2.0: super high-level

- ▶ cordova-js
- ▶ new platforms
- ▶ embeddable
- ▶ CLI tooling

cordova-js
consistent js
well-tested
builds by itself!

new platforms

windows phone 7

bada

soon: firefox,

tizen

embeddable
cordova-webview
part of your app

CLI tooling

no more Xcode!

create

build

debug

Plugins

what we want

- ▶ **cross-platform**
- ▶ **the same JS**
- ▶ **consistent native API**
- ▶ **declarative installation**
- ▶ **documentation**

what we have

The screenshot shows the GitHub interface for the repository 'phonegap / phonegap-plugins'. At the top, there's a search bar and navigation links like 'Explore', 'Gist', 'Blog', and 'Help'. The repository name is 'phonegap / phonegap-plugins', noted as 'forked from purplecabbage/phonegap-plugins'. It has 1,959 stars and 758 forks. The 'Code' tab is selected, showing a description: 'Plugins for use with PhoneGap. — Read more'. Below this are options to clone the repository: 'Clone in Mac', 'ZIP', 'HTTP', 'SSH', and 'Git Read-Only' with the URL 'https://github.com/phonegap/phonegap-plugins.git'. There are also buttons for 'Read+Write access', 'branch: master', 'Files', 'Commits', 'Branches 2', 'Tags 1', and 'Downloads'. A recent commit is shown: 'Merge pull request #676 from ronaldwerd/master' by 'devgeeks' 17 hours ago, with commit hash '647c8fe3c8'. Below the commit is a table of files in the repository.

name	age	message	history
Android	3 days ago	update android statusbar to use Notification.Builder and to be compat... [maxogden]	
BlackBerry	a month ago	"undefined" and undefined is different man!!! [chaoszcat]	
Palm	a year ago	Strip debug info from plugin binary [bni]	
Qt	10 months ago	- Added PowerManagement plugin for Qt port of PhoneGap [Viras-]	
WindowsPhone	22 days ago	Merge pull request #608 from photokandyStudios/WindowsPhone-ChildBrowser [Viras-]	
iOS	8 days ago	Merge pull request #667 from AndiDog/master [devgeeks]	
iPhone	17 hours ago	Torch plug-in now works with Cordova [=]	



How do I make an in-app purchase?

It's not cross-platform, I use a plugin

Okay, how do I get the plugin?

Just clone the entire 'phonegap-plugins' repo and drag the one class file into your xcode project

Did you just tell me to go fuck myself?

I believe I did, Bob.

work on the way

plugininstall

cordova-plugin-spec

github.com/alunny

consistent API

as of 2.0

(hopefully)

docs.phonegap.com

Criticisms

laggy

poor performance

best practives
use touchstart
avoid jQuery
make small apps

clunky

developer exp.

too many releases

we know!

CLI tools in 2.0

fixing releases

build.phonegap.com

inconsistent documentation

improving

docs.phonegap.com

cordova.io

no more callback!

Thanks!

@alunny