

The story behind PF2014

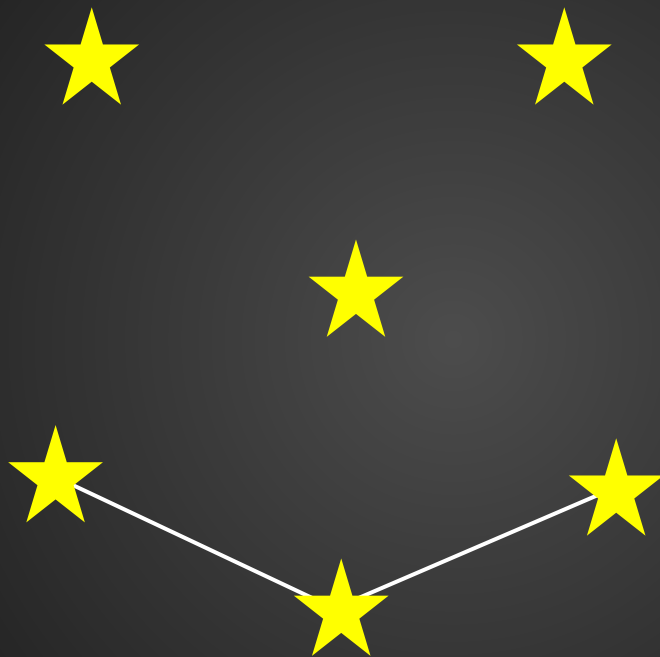
<http://pf2014.sinusgear.com>

Juraj Michálek
Brno



Creativity is just connecting things.

- Jobs



Motivation

Create something new

Learn something new

Do something new

PF 2010



PF 2011



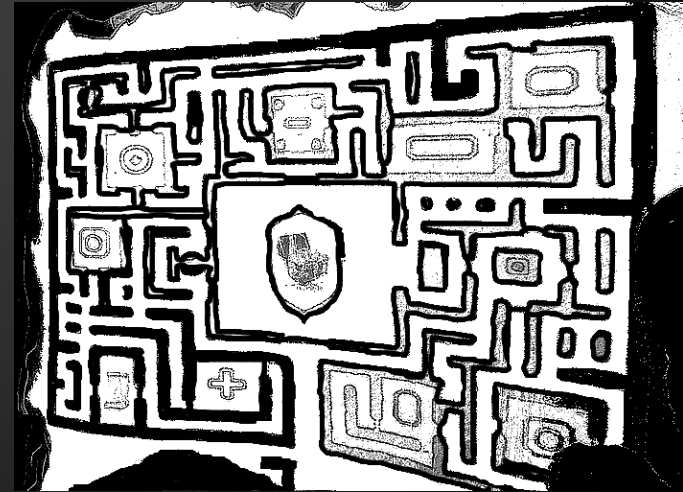
 **jQuery**
write less, do more.



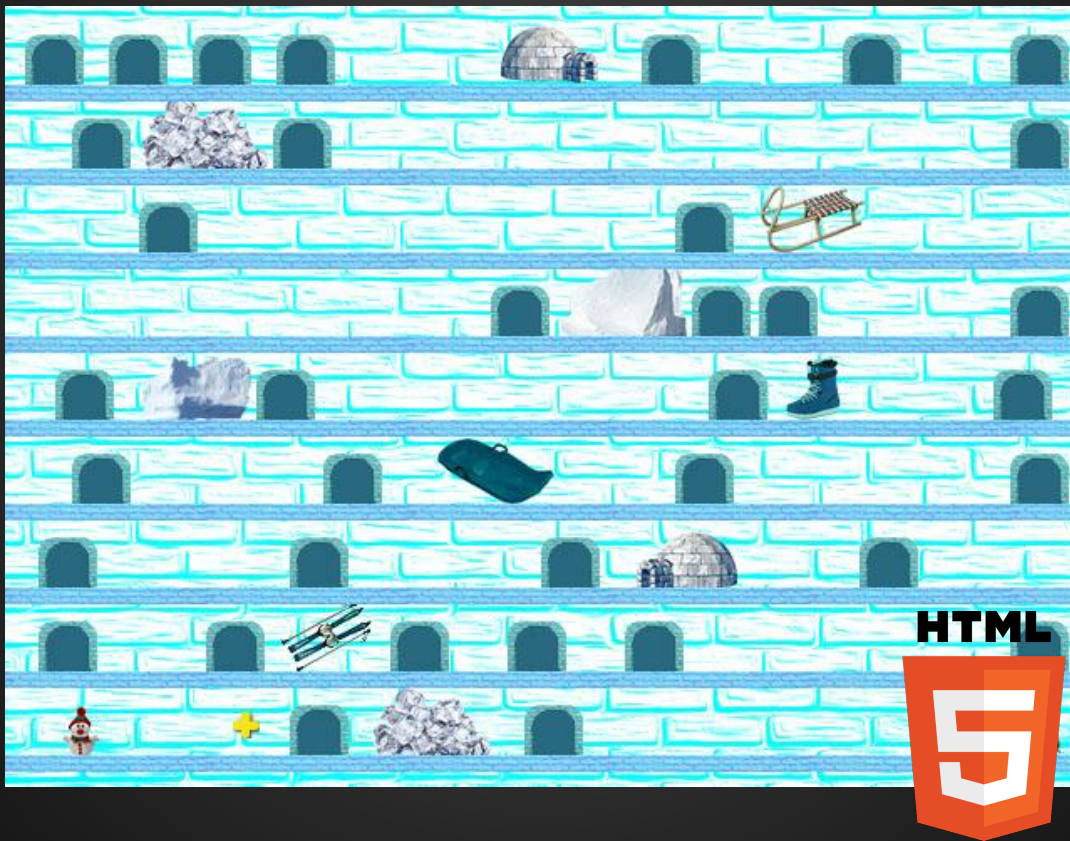
PF 2012



HTML5 Canvas



PF 2013



Webfonts

PF 2014?

Mobile

Touch

Apache Cordova



HTML



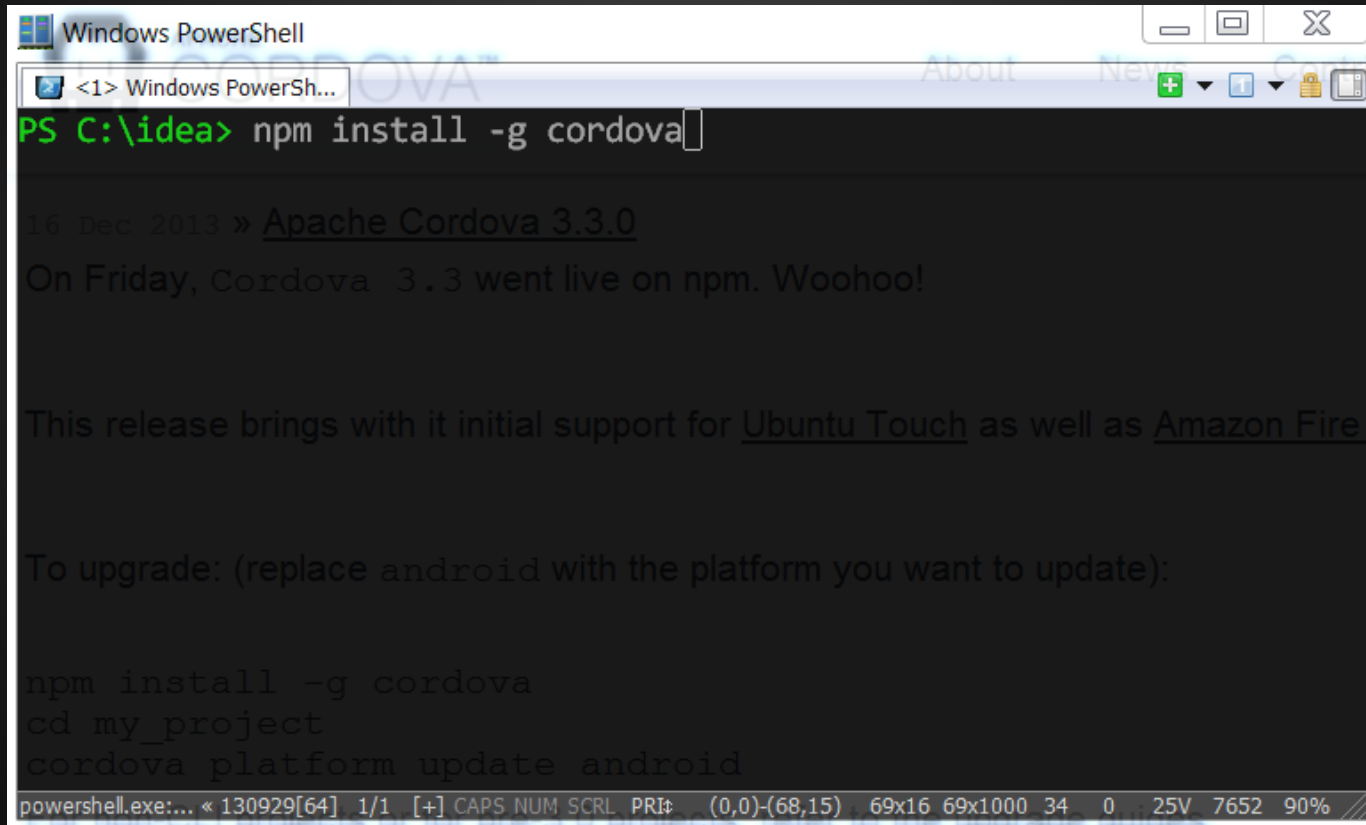
HTML



Install NodeJS



Install Cordova



```
Windows PowerShell
PS C:\idea> npm install -g cordova

16 Dec 2013 » Apache Cordova 3.3.0
On Friday, Cordova 3.3 went live on npm. Woohoo!

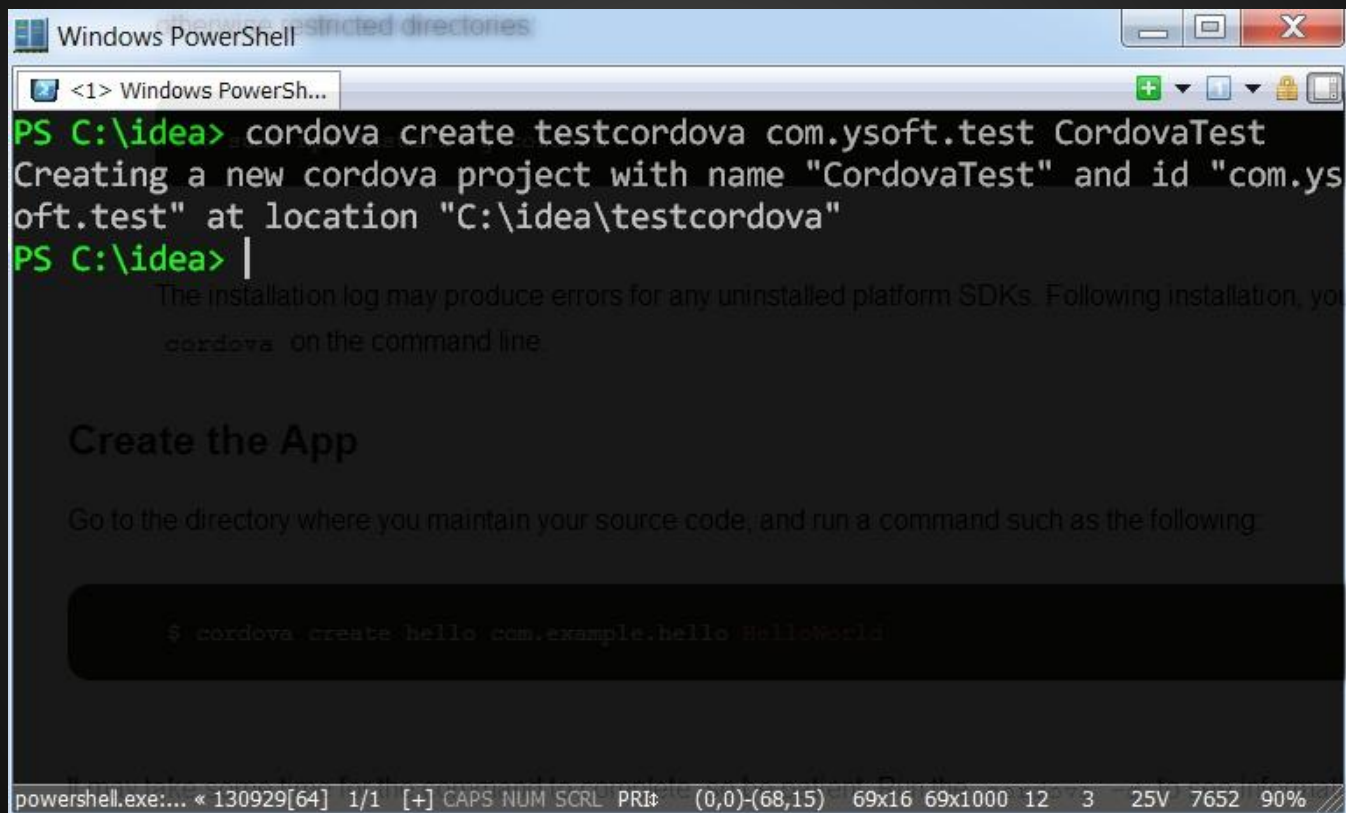
This release brings with it initial support for Ubuntu Touch as well as Amazon Fire

To upgrade: (replace android with the platform you want to update):

npm install -g cordova
cd my_project
cordova platform update android

powershell.exe:.... « 130929[64] 1/1 [+] CAPS NUM SCRL PRI (0,0)-(68,15) 69x16 69x1000 34 0 25V 7652 90%
```

Create project



A screenshot of a Windows PowerShell window. The title bar reads "Windows PowerShell". The address bar shows "<1> Windows PowerSh...". The main content area has a black background with green text for the prompt and white text for the command and output. The command entered is `cordova create testcordova com.ysoft.test CordovaTest`. The output message states: "Creating a new cordova project with name 'CordovaTest' and id 'com.ysoft.test' at location 'C:\idea\testcordova'". Below this, the prompt `PS C:\idea> |` is shown, followed by a line of text: "The installation log may produce errors for any uninstalled platform SDKs. Following installation, you can run the command `cordova` on the command line." Below this text is a section titled "Create the App" in bold, followed by the instruction "Go to the directory where you maintain your source code, and run a command such as the following:". A dark gray rounded rectangle contains the command `$ cordova create hello com.example.hello HelloWorld`. The status bar at the bottom shows "powershell.exe:... < 130929[64] 1/1 [+]" and various system metrics.

```
PS C:\idea> cordova create testcordova com.ysoft.test CordovaTest
Creating a new cordova project with name "CordovaTest" and id "com.ysoft.test" at location "C:\idea\testcordova"
PS C:\idea> |
The installation log may produce errors for any uninstalled platform SDKs. Following installation, you can run the command
cordova on the command line.

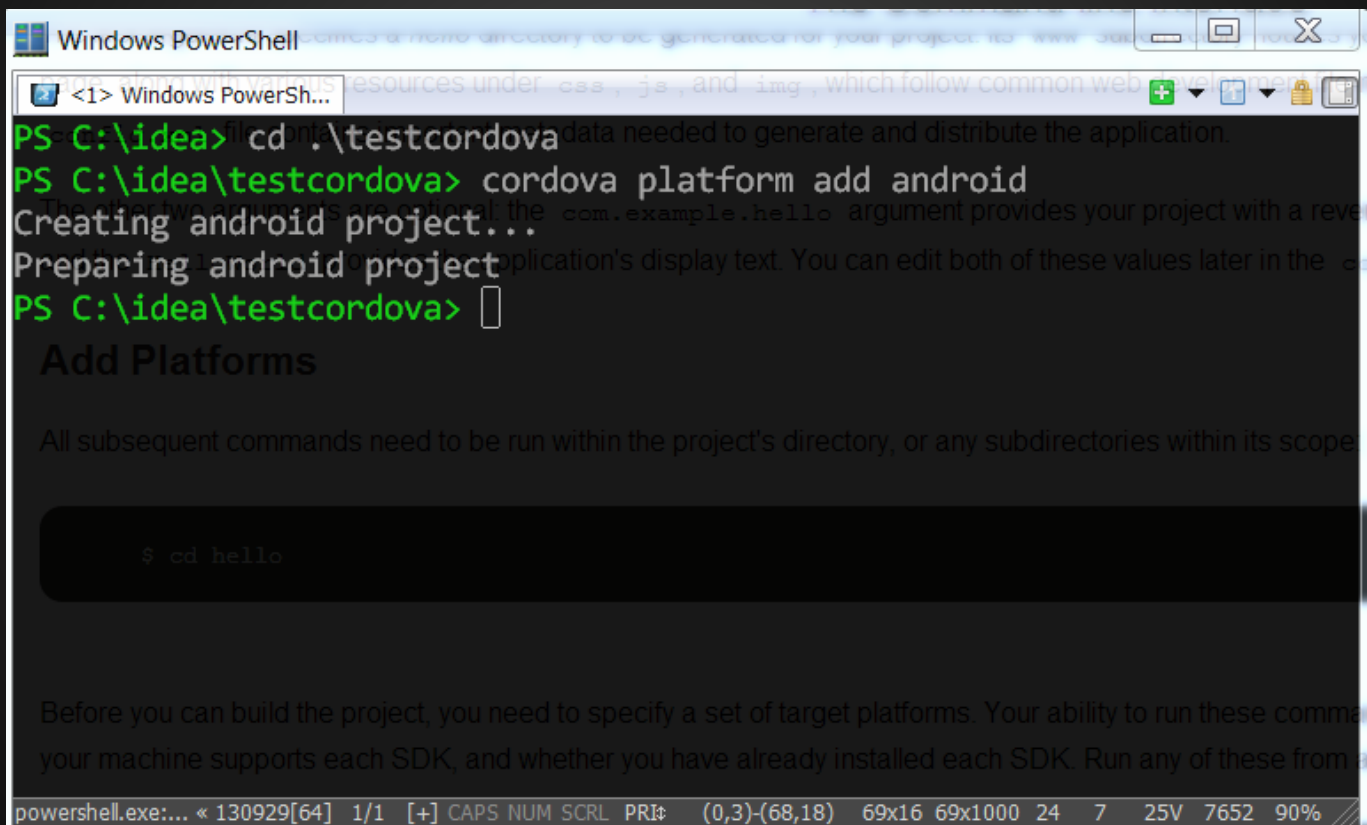
Create the App

Go to the directory where you maintain your source code, and run a command such as the following:

$ cordova create hello com.example.hello HelloWorld
```

powershell.exe:... < 130929[64] 1/1 [+]

Add platform



```
Windows PowerShell
PS C:\idea> cd .\testcordova
PS C:\idea\testcordova> cordova platform add android
Creating android project...
Preparing android project
PS C:\idea\testcordova> 
```

Add Platforms

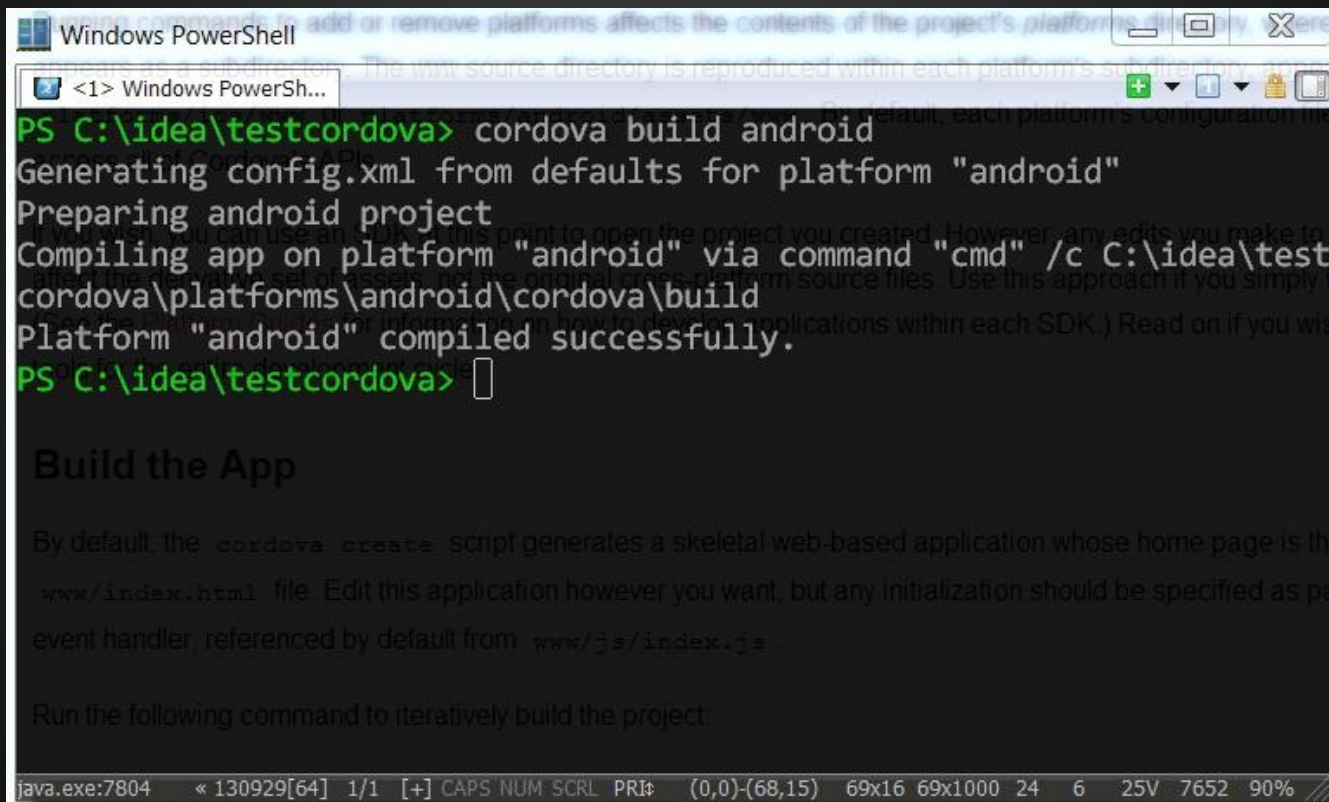
All subsequent commands need to be run within the project's directory, or any subdirectories within its scope

```
$ cd hello
```

Before you can build the project, you need to specify a set of target platforms. Your ability to run these commands depends on whether your machine supports each SDK, and whether you have already installed each SDK. Run any of these from

powershell.exe:... « 130929[64] 1/1 [+] CAPS NUM SCRL PRI (0,3)-(68,18) 69x16 69x1000 24 7 25V 7652 90%

Build



```
Windows PowerShell
PS C:\idea\testcordova> cordova build android
Generating config.xml from defaults for platform "android"
Preparing android project
Compiling app on platform "android" via command "cmd" /c C:\idea\test
cordova\platforms\android\cordova\build
Platform "android" compiled successfully.
PS C:\idea\testcordova>
```

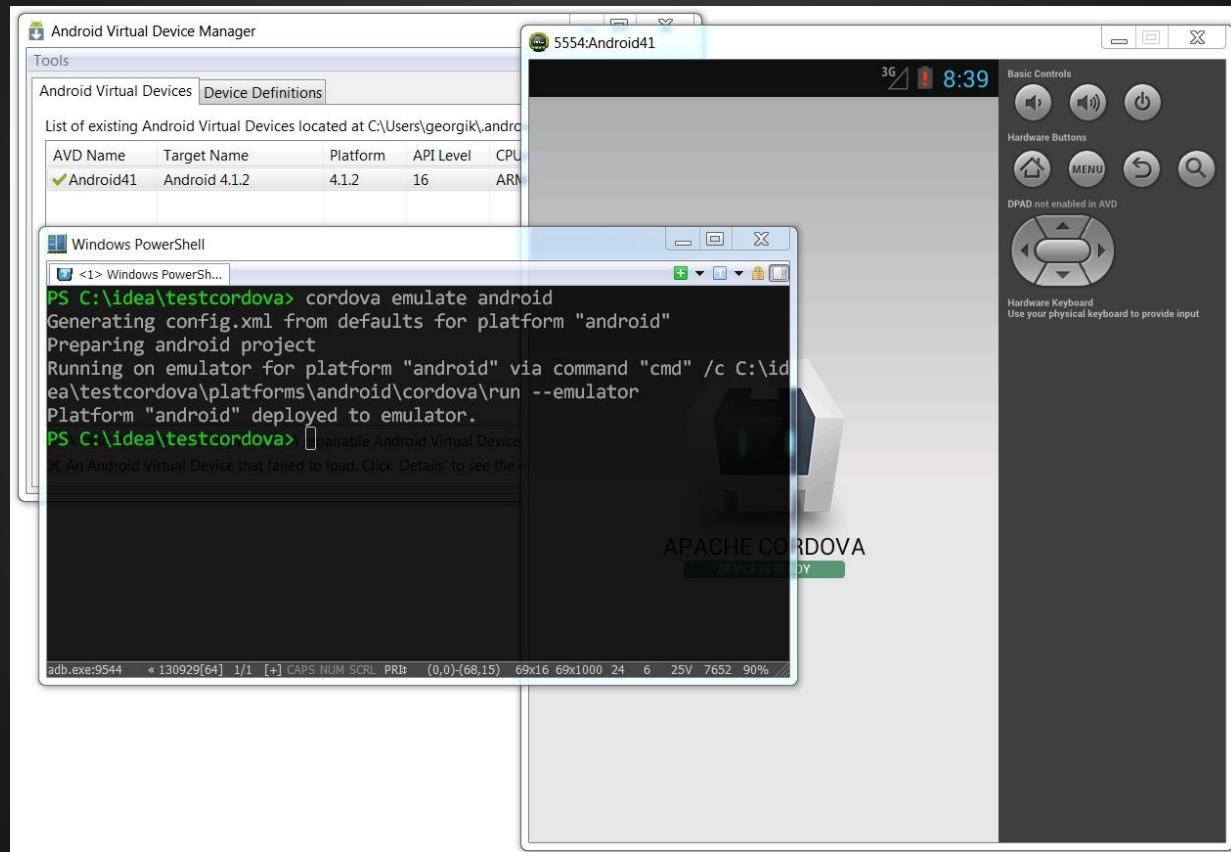
Build the App

By default, the `cordova create` script generates a skeletal web-based application whose home page is the `www/index.html` file. Edit this application however you want, but any initialization should be specified as page event handler, referenced by default from `www/js/index.js`.

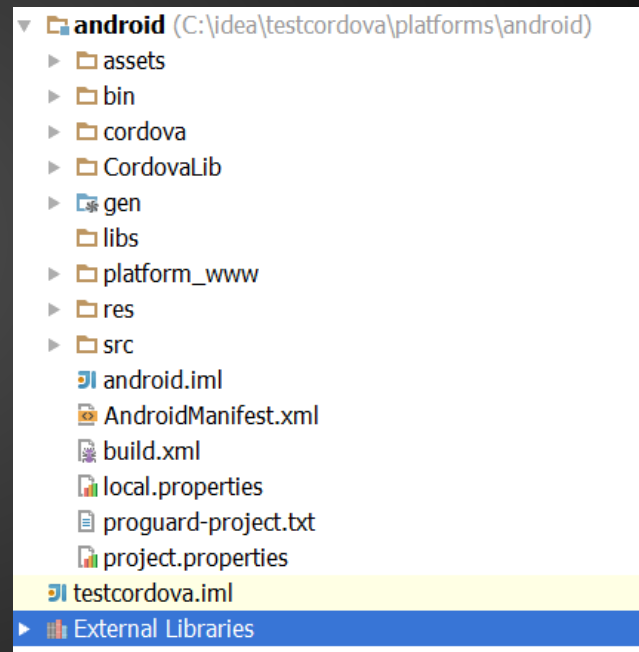
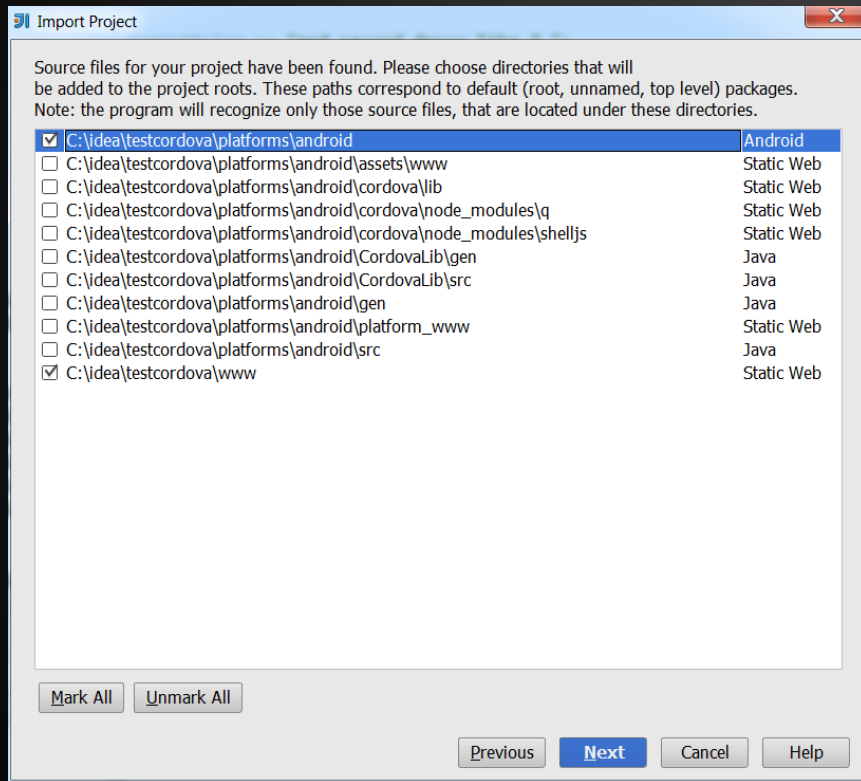
Run the following command to iteratively build the project:

java.exe:7804 « 130929[64] 1/1 [+] CAPS NUM SCRL PRI↑ (0,0)-(68,15) 69x16 69x1000 24 6 25V 7652 90%

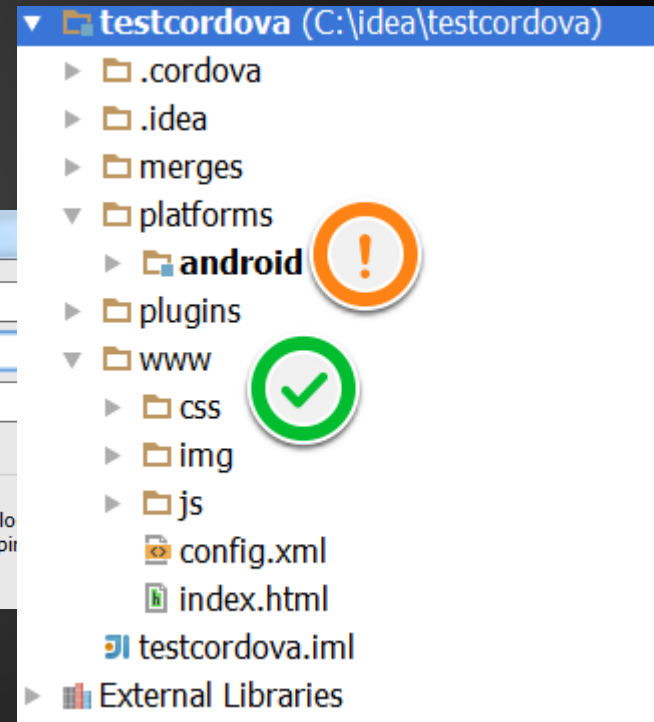
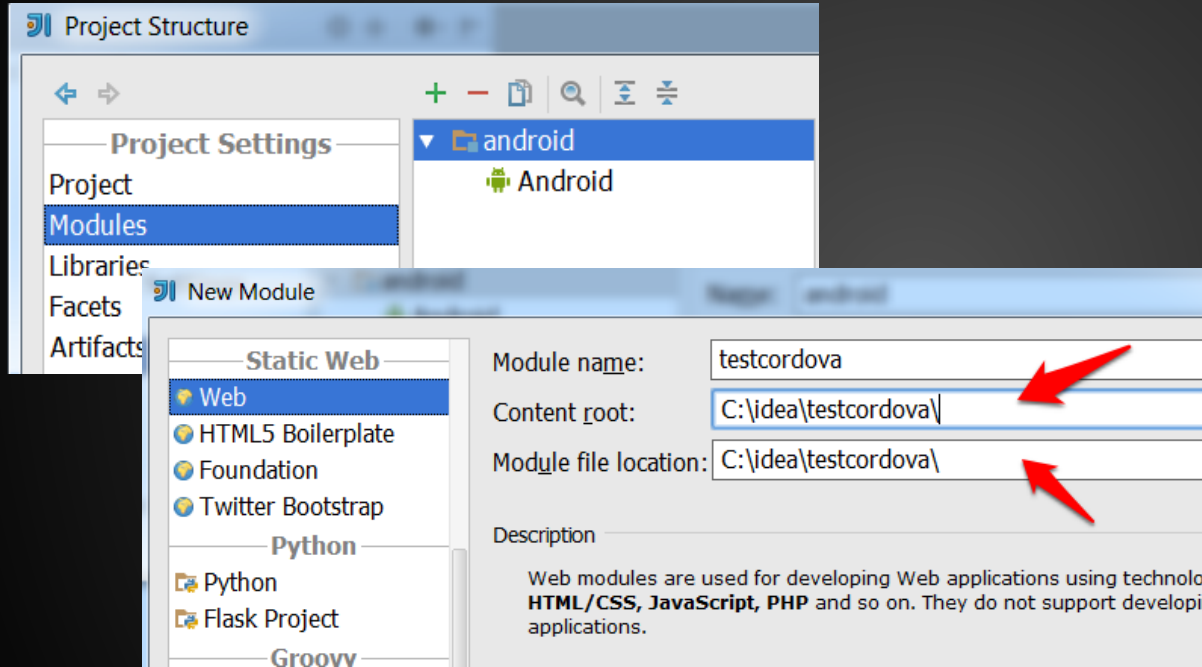
Emulate - AVD Manager



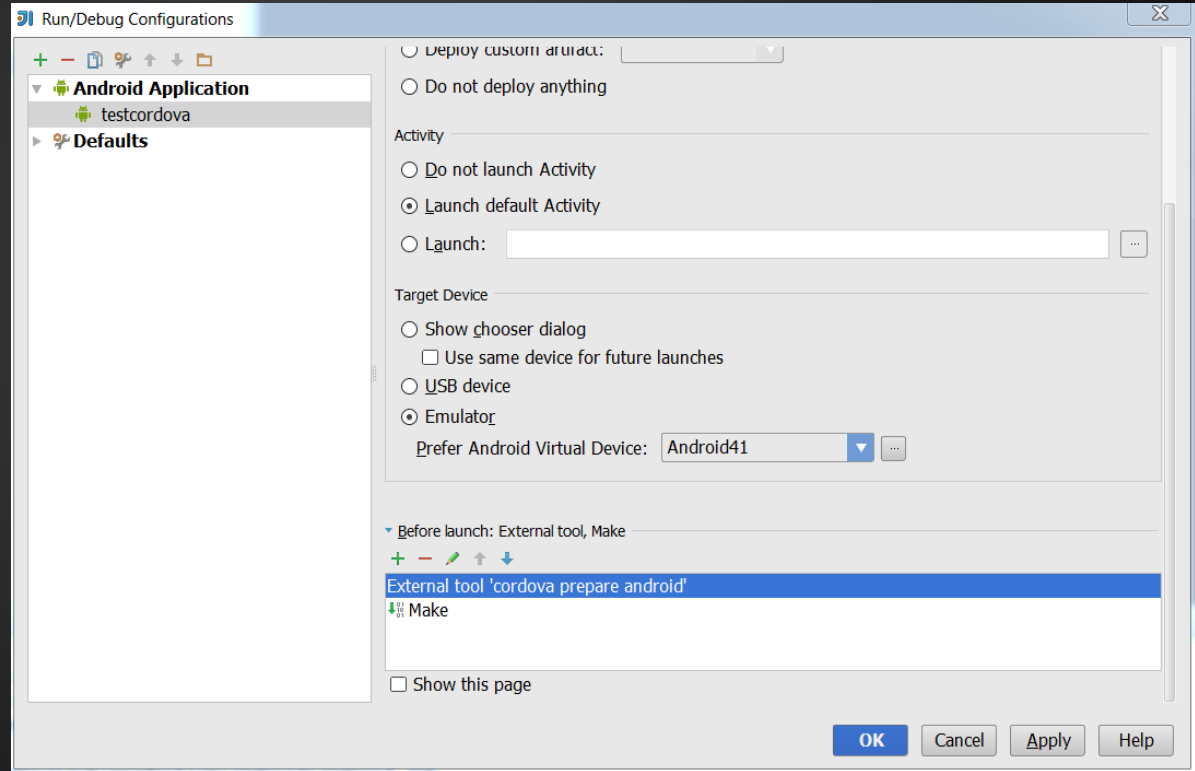
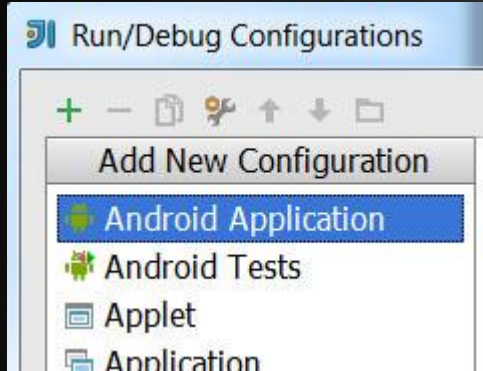
Import to Idea



Correction of modules



Run/Emulate from Idea



Logs

Android DDMS

Devices | logcat ADB logs → » Log level: Verbose 🔽 🔍 No Filters 🔽

Devices →

Emulator Android41 Android ▾

- android.process.acore (324)
- android.process.media (429)
- com.android.calendar (342)
- com.android.contacts (408)
- com.android.defcontainer (572)
- com.android.deskclock (362)
- com.android.email (478)
- com.android.exchange (495)
- com.android.inputmethod.latin (24)
- com.android.keychain (589)
- com.android.launcher (272)
- com.android.mms (447)
- com.android.phone (257)

logcat

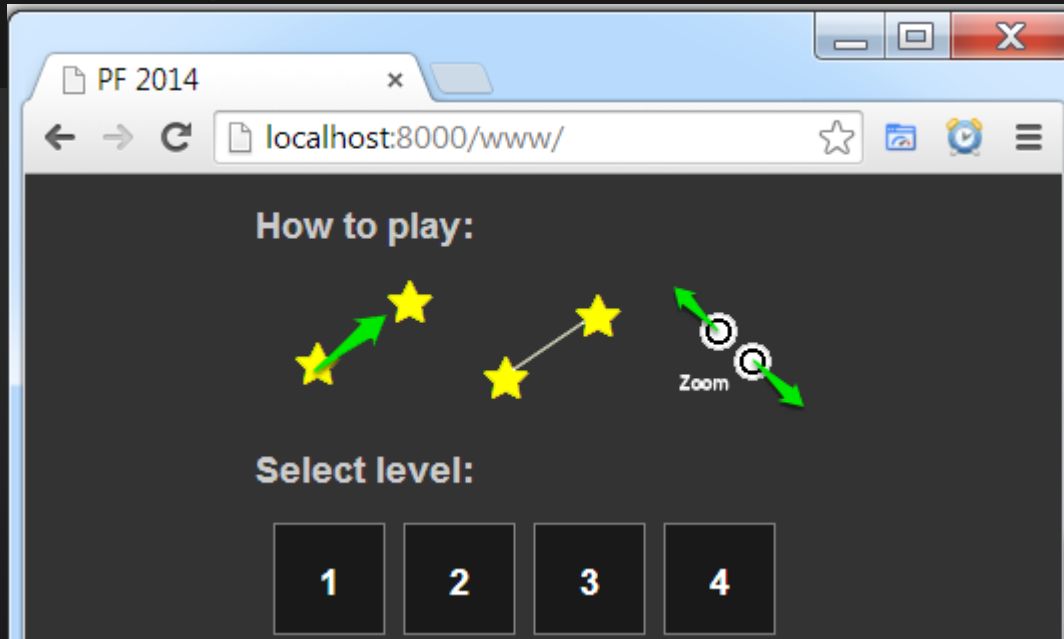
```
4-644/com.ysoft.test D/CordovaActivity: CordovaActivit
4-644/com.ysoft.test D/CordovaWebView: >>> loadUrl(fil
4-644/com.ysoft.test D/PluginManager: init()
4-644/com.ysoft.test D/CordovaWebView: >>> loadUrlNow(
4-644/com.ysoft.test I/CordovaLog: Changing log level
4-644/com.ysoft.test I/CordovaLog: Found start page lo
4-644/com.ysoft.test D/Whitelist: Unlimited access to
4-644/com.ysoft.test D/CordovaActivity: Resuming the A
4-644/com.ysoft.test D/CordovaActivity: CB-3064: The e
4-644/com.ysoft.test D/SoftKeyboardDetect: Ignore this
4-644/com.ysoft.test D/gralloc_goldfish: Emulator with
0-201/system_process I/ActivityManager: Displayed com.
4-644/com.ysoft.test D/SoftKeyboardDetect: Ignore this
4-644/com.ysoft.test D/CordovaActivity: onMessage(onPa
4-646/com.ysoft.test D/dalvikvm: GC_CONCURRENT freed 1
4-644/com.ysoft.test D/CordovaWebViewClient: onPageFin
```

Cordova project structure

- platforms
 - android
 - ios
- plugins
- www (edit code here)

Testing in browser

```
Windows PowerShell
PS C:\idea\pf2014> python -m SimpleHTTPServer
Serving HTTP on 0.0.0.0 port 8000 ...
```

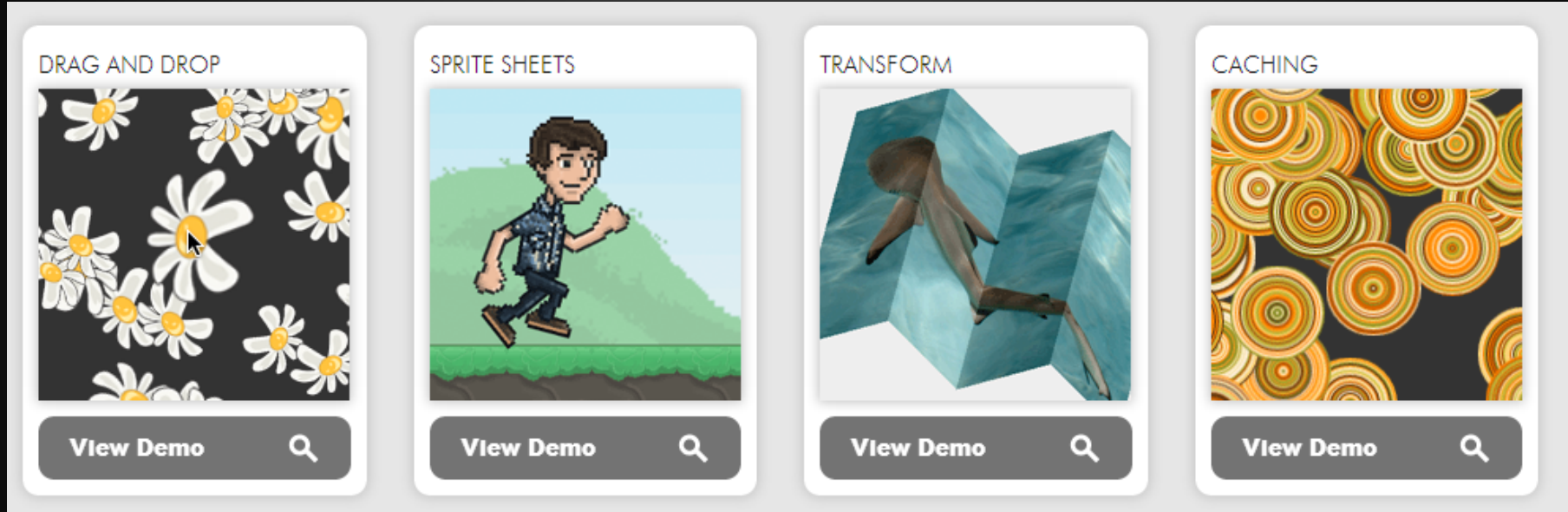


HTML5 Canvas - EaselJS



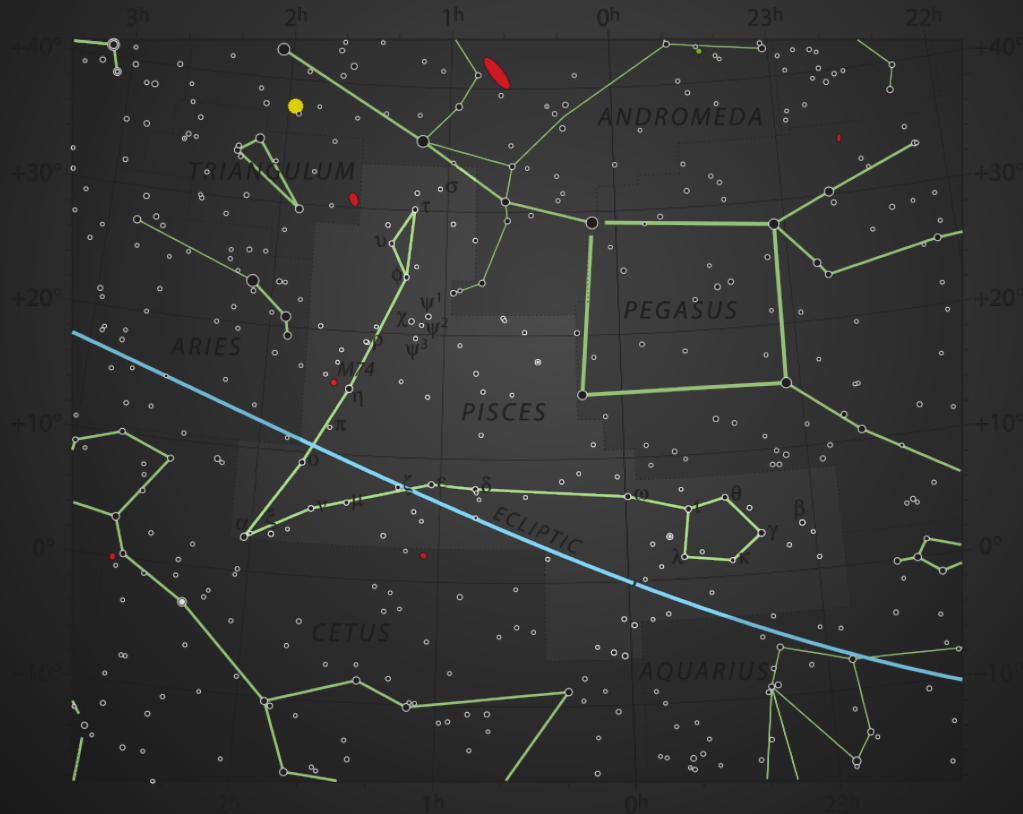
A Javascript library that makes working with the HTML5 Canvas element easy.

Problems



performance: Caching demo - 2 FPS - Samsung Galaxy S
worse tooling than HTML :-)

Constellations



Tracing Paper tool

<http://tp.sinusgear.com>



Tracing paper tool x

← → ↻ tracing-paper.sinusgear.com ☆

Tracing paper tool

This tool can help you to determine coordinates of items on displayed image. You can use data from Record mode as input for JavaScript methods. More information at: [Github](#). Version: 1.3

Image:

Origin coordinates: ,

Selected coordinates: 307, 206

Point management

☒ Record mode

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Additional attributes

magnitude:

Points

- 0. x: 130, y: 231 , magnitude:
- 1. x: 207, y: 129 , magnitude:
- 2. x: 307, y: 206 , magnitude:

Code management

JavaScript code:

```
{ x: 130, y: 231 , magnitude: "" },  
{ x: 207, y: 129 , magnitude: "" },  
{ x: 307, y: 206 , magnitude: "" },
```

Display stars

```
<i class="positionMarker fa fa-star"  
  data-index="{{ $index }}"  
  ng-repeat="item in visibleStars" ng-style="  
    getStarStyle(item)">  
</i>
```

Font Awesome

THE ICONIC FONT DESIGNED FOR BOOTSTRAP



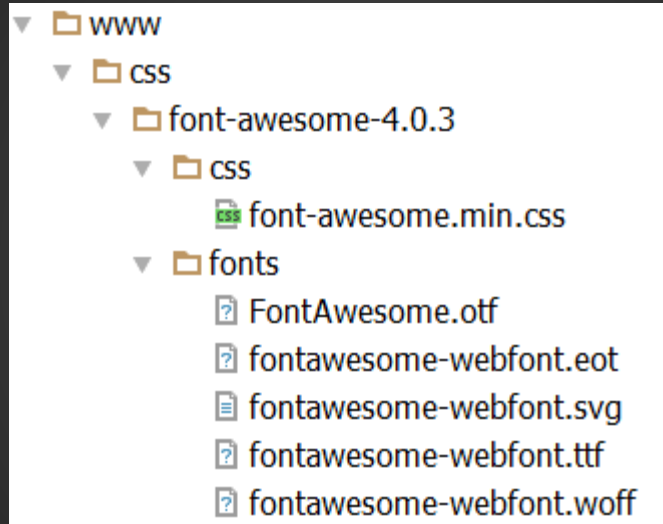
Download

Version 4.0.3 · [GitHub Project](#) · [Old 3.2.1 Docs](#) · Created by [Dave Gandy](#)



<http://fontawesome.io/>

Use Font Awesome in Cordova



```
<title>PF 2014</title>
```

```
<link href="css/font-awesome-4.0.3/css/font-awesome.min.css" rel="stylesheet">
```


Drag the star



Angular-drag-drop, Angular-touch

```
angular.module('app', ['ngTouch',  
  'ngDragDrop'])  
  .controller('ConstellationController', ...
```

Drag'n'drop

jQuery-ui - animation
drag by mouse

No Canvas?

How to draw a line?!



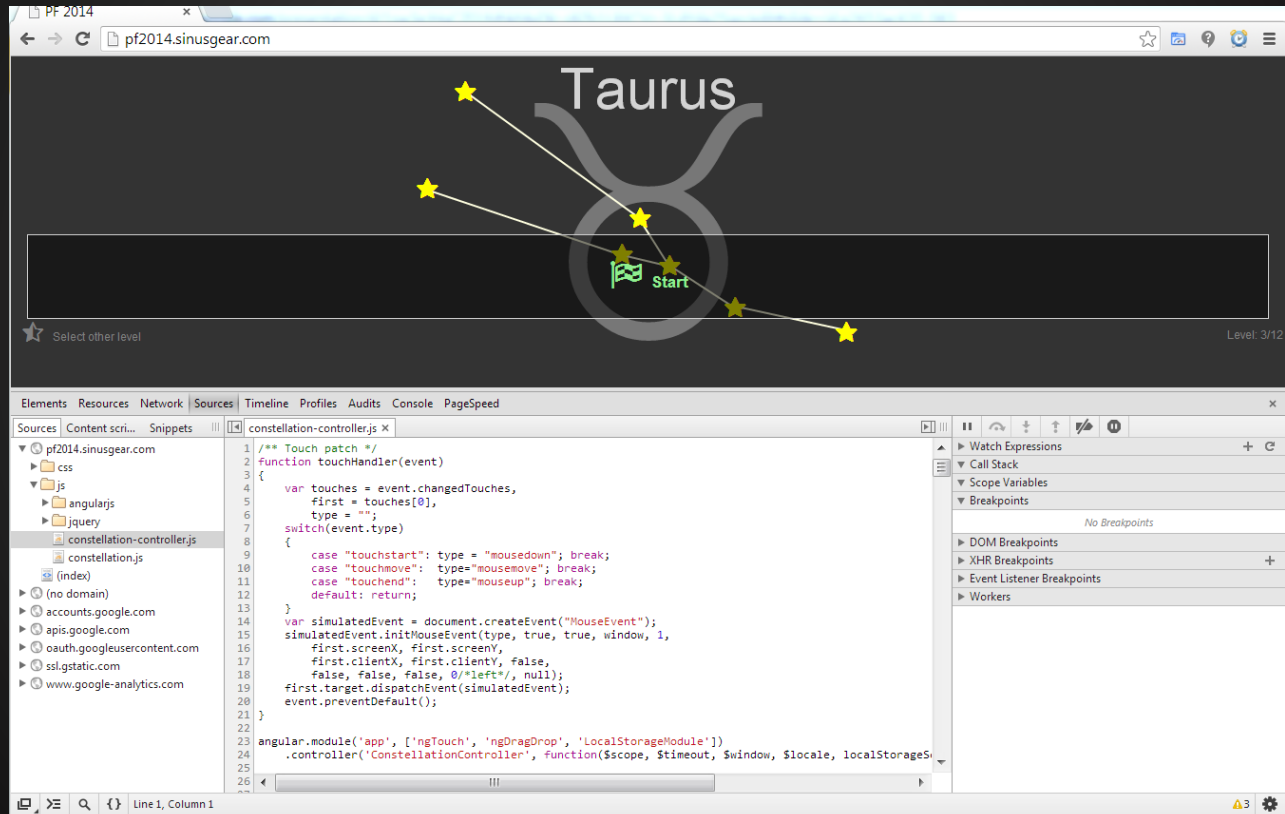
Div + CSS3

```
.line {  
    width: 100px;  
    height: 2px;  
    transform: rotate(120deg);  
    background: lightyellow; ...  
}
```

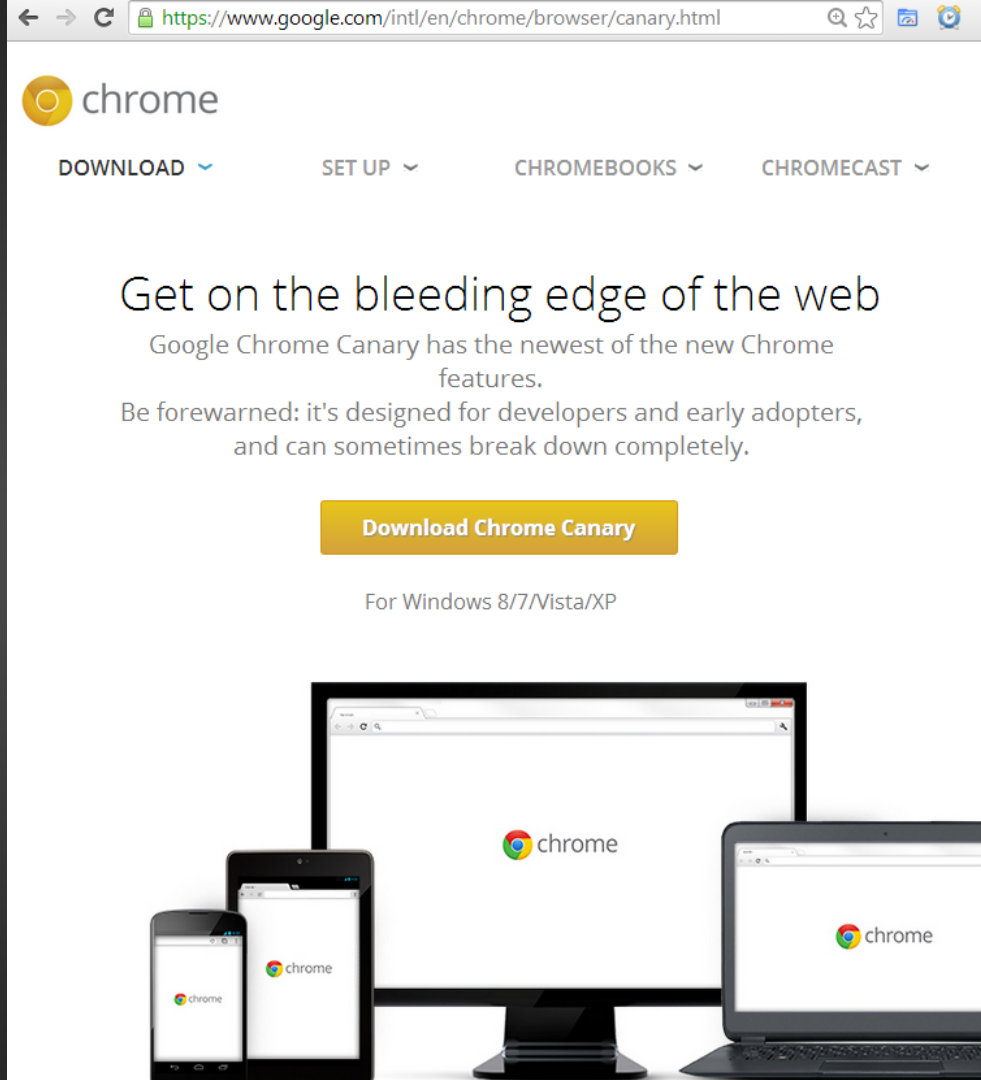
AngularJS dynamic style

```
<div class="line"  
  ng-repeat="line in visibleLines" ng-style="  
  getLineStyle(line)">  
</div>
```

Chrome Developer Tools - F12



Google Chrome Canary



A screenshot of the Google Chrome Canary website. The browser's address bar shows the URL <https://www.google.com/intl/en/chrome/browser/canary.html>. The page features the Chrome logo and the word "chrome" in a sans-serif font. Below this, there are four navigation links: "DOWNLOAD", "SET UP", "CHROMEBOOKS", and "CHROMECAST", each followed by a downward-pointing chevron. The main heading reads "Get on the bleeding edge of the web", followed by the text "Google Chrome Canary has the newest of the new Chrome features." and a warning: "Be forewarned: it's designed for developers and early adopters, and can sometimes break down completely." A prominent yellow button labeled "Download Chrome Canary" is centered on the page. Below the button, it specifies "For Windows 8/7/Vista/XP". At the bottom, there is a visual representation of the Chrome interface on multiple devices: a smartphone, a tablet, a desktop monitor, and a laptop, all displaying the Chrome logo and name.

chrome

DOWNLOAD ▾ SET UP ▾ CHROMEBOOKS ▾ CHROMECAST ▾

Get on the bleeding edge of the web

Google Chrome Canary has the newest of the new Chrome features.

Be forewarned: it's designed for developers and early adopters, and can sometimes break down completely.

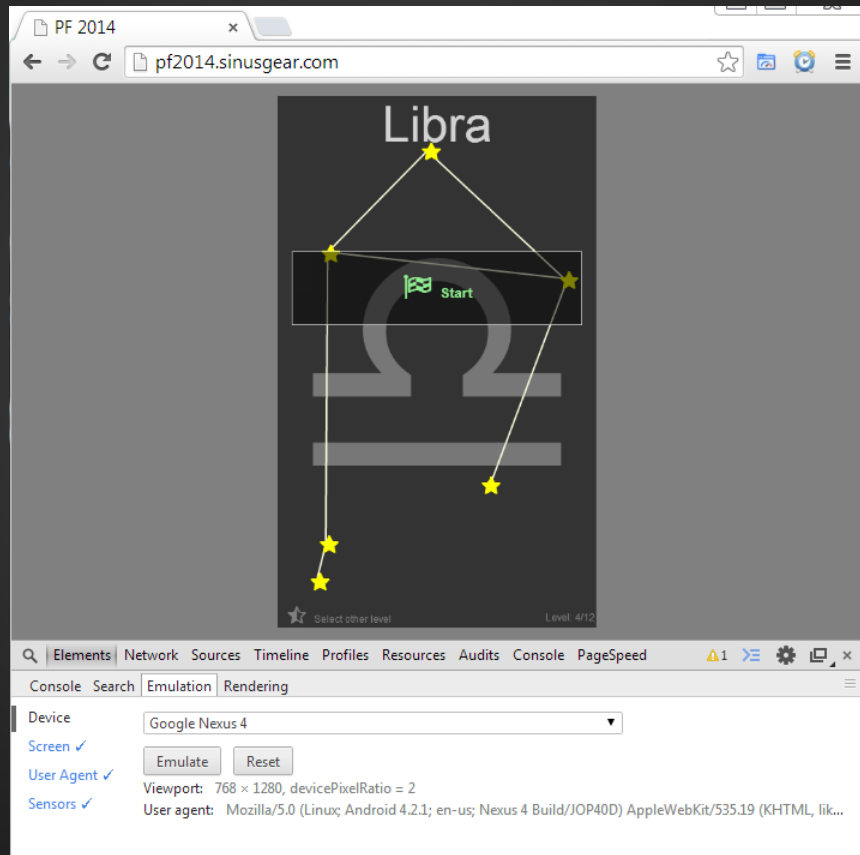
[Download Chrome Canary](#)

For Windows 8/7/Vista/XP



A visual representation of the Chrome interface on multiple devices: a smartphone, a tablet, a desktop monitor, and a laptop, all displaying the Chrome logo and name.

Mobile device emulation



Hups!

Drag'n'drop does not work on mobile!

Event mapping override

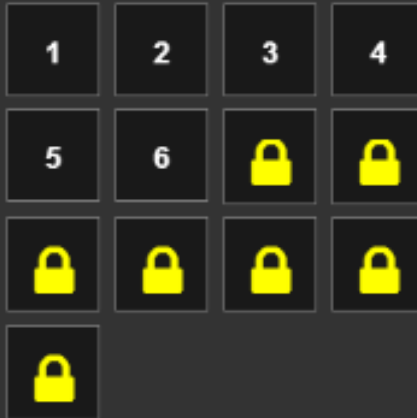
```
switch(event.type)
{
  case "touchstart": type = "mousedown"; break;
  case "touchmove": type="mousemove"; break;
  case "touchend":  type="mouseup"; break;
  default: return;
}
```

Persisting game state

How to play:



Select level:



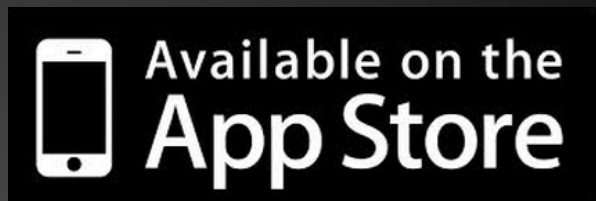
Angular local storage

```
<script src="js/angularjs/angular-local-storage.js"></script>
```

```
angular.module('app', ['ngTouch', 'ngDragDrop', 'LocalStorageModule'])  
  .controller('ConstellationController', function($scope, $timeout, $window, $locale, localStorageService) {
```

```
    $scope.storeConfiguration = function() {  
      if (!localStorageService.isSupported) {  
        return;  
      }  
  
      localStorageService.add('levelLock', $scope.levelLock);  
    };
```

Going mobile





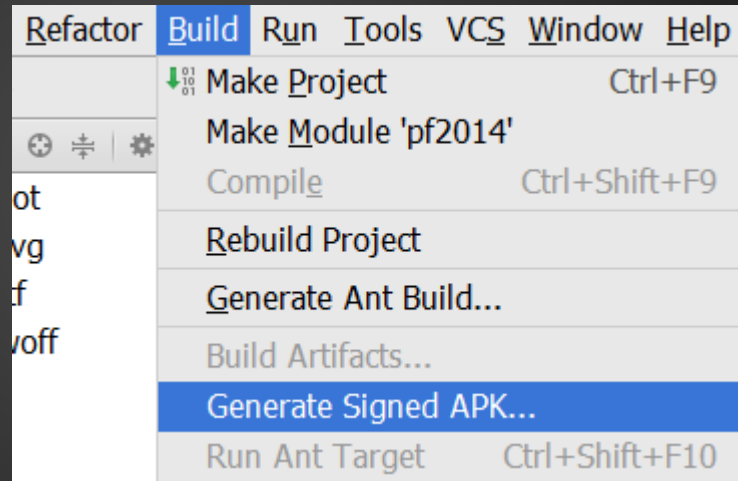
<https://play.google.com/apps/publish>

Registration: 25\$

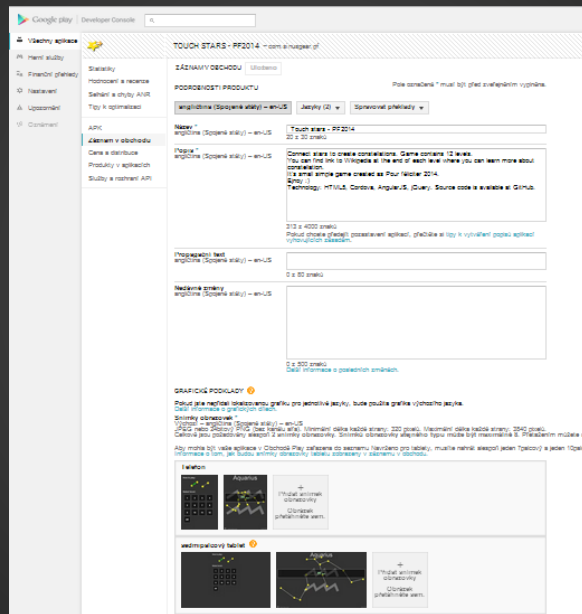
- one time payment for developer



Signed APK



Prepare and publish

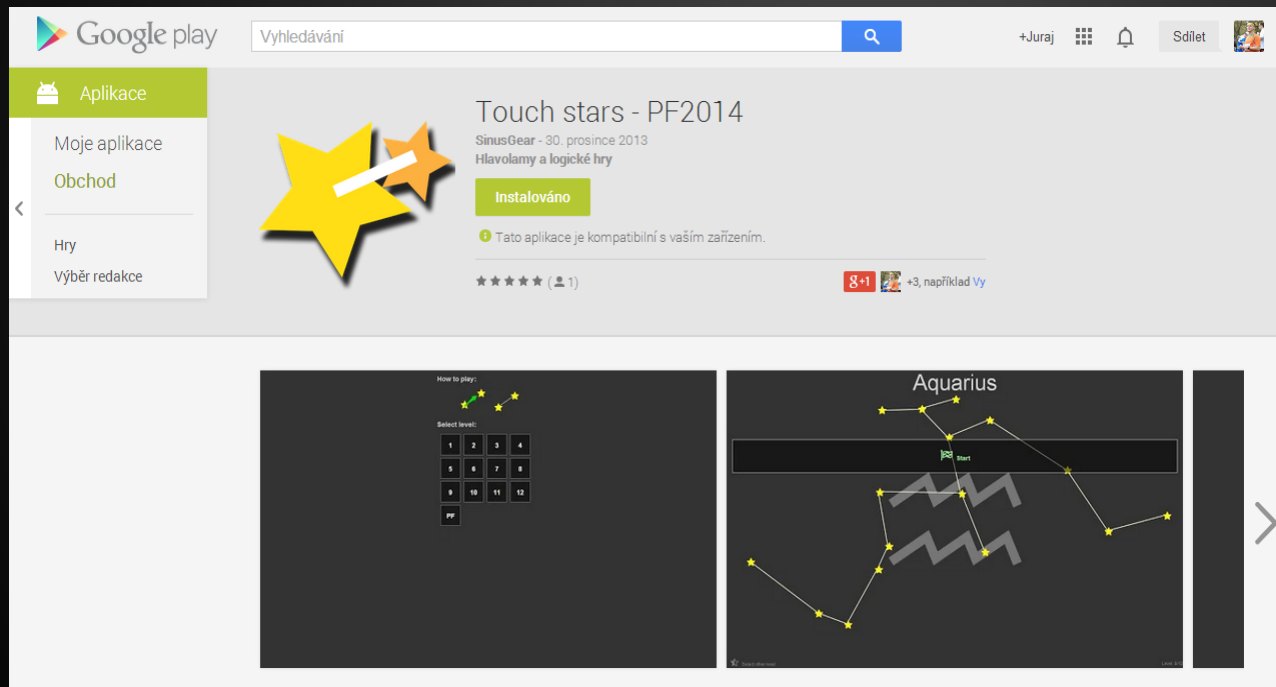


<https://play.google.com/apps/publish>

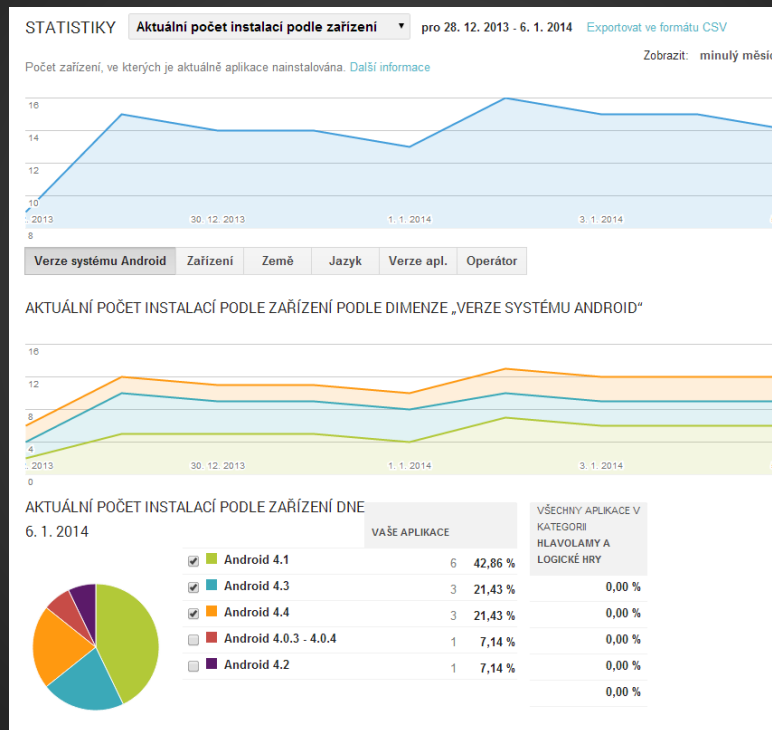


Review ~ 1 day

Going live



Analytics





<http://developer.apple.com>

Registration: 99\$ / year

Approved bank account: ~2 days

Carrier 

7:28 AM



How to play:



Select level:

1

2

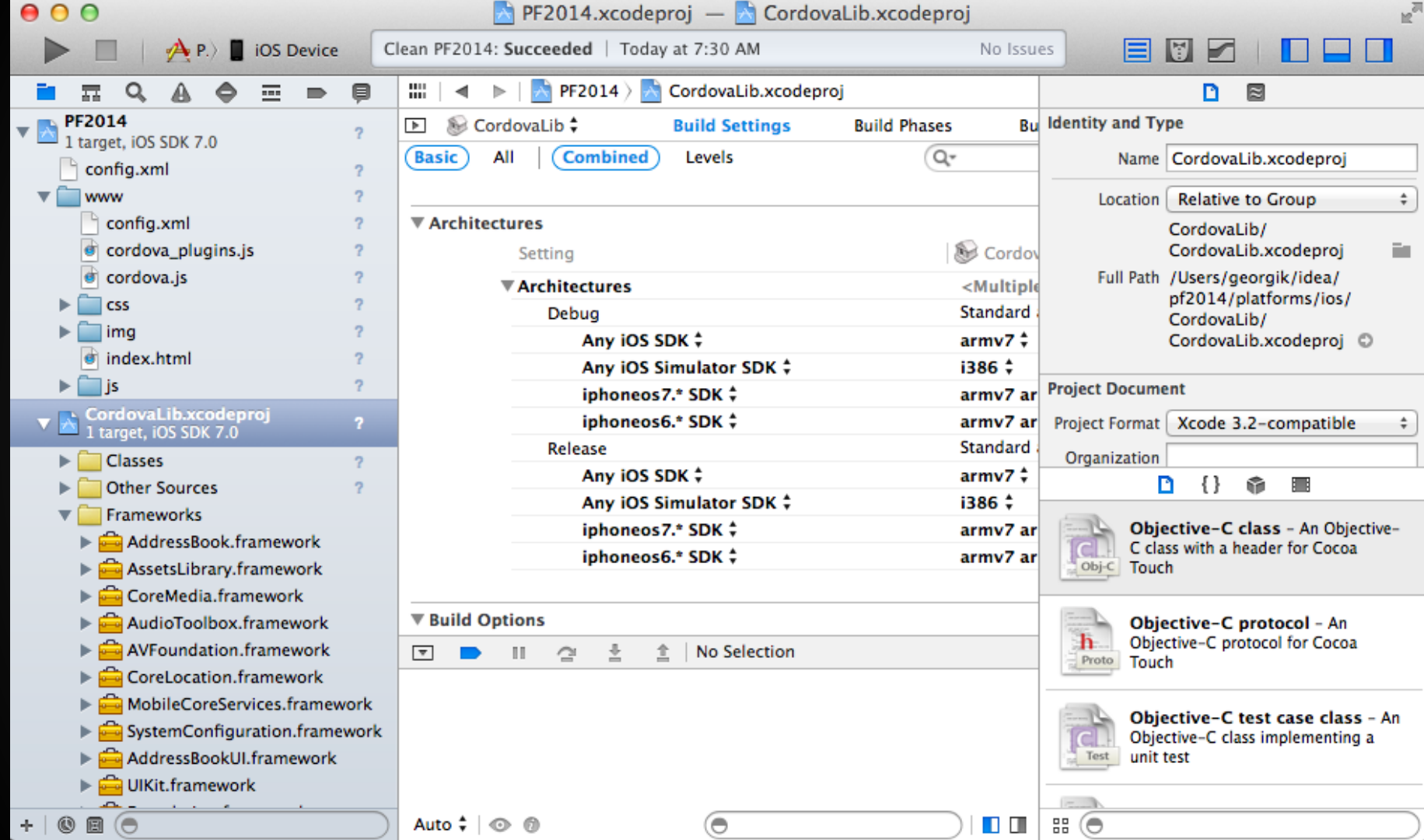
3



georgik@ysoft-... | 158x40 | ttys000

georgik

```
(georgik@ysoft-mac:s000)
(07:26:%) cordova emulate ios
Generating config.xml from defaults for
Preparing ios project
Running on emulator for platform "ios"
Platform "ios" deployed to emulator.
(georgik@ysoft-mac:s000)
(07:28:%) 
```





Available on the
App Store

Build: only Mac OS X

- requires: XCode
- sign by valid Apple certificate



Review: 5-7 days



<http://www.windowsphone.com/>

Registration: 19\$/year

Build: WP8 requires Windows 8



<https://developer.amazon.com/home.html>

Registration: free

Review: ~1 day



Touch Stars - PF2014

by [SinusGear](#)

Platform: Android

Rated: [All Ages](#)

[Be the first to review this item](#)

Price: **\$0.00** Price inclusive of VAT if applicable.

Sold by: Amazon Digital Services, Inc.

Available *instantly* for your Android device

Click for larger image and other views



[Share your own related images](#)

PF 2014 summary

Web: 188 visits

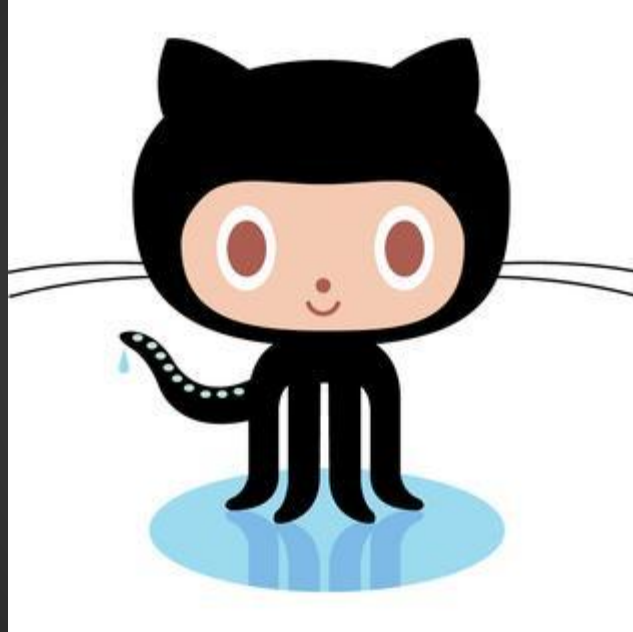
Google Play: 25

Amazon: 6

Apple App Store: 0, still waiting for approval

Campaign channels: Mail, Skype, Google+

Grab the source code :-)



<https://github.com/georgik/pf2014>

Share and enjoy

PF 2014: <http://georgik.sinusgear.com/2013/12/28/pf-2014/>

PF 2013: <http://georgik.sinusgear.com/2012/12/22/pf-2013/>

PF 2012: <http://georgik.sinusgear.com/2011/12/31/pf-2012/>

PF 2011: <http://georgik.sinusgear.com/2010/12/23/pf2011/>

PF 2010: <http://georgik.sinusgear.com/2009/12/26/pf-2010/>