About Us

Holly

- PhoneGap developer since 2011
- Apache Cordova committer
- Community builder, evangelist

Jesse

- PhoneGap developer since 2008
- Apache Cordova committer
- 5+ years at Adobe, still doing the same thing!

Pre-reqs

Step by step instructions here:
http://phonegap.com/workshop-plugins/

Install node-js
- ❖ https://nodejs.org `

Install cordova
- ❖ from terminal run => npm install -g cordova

Install the phonegap-plugin-template tool
- ❖ npm install -g phonegap/phonegap-plugin-template

Ask me for the wifi password!

Who has used Cordova plugins?

Everyone, whether you know it or not.

Who knows how they work?

A much smaller set.

How is Apache Cordova architected?

✧ Apps present a full screen web-view that hosts the application

✧ The view is rendered in html+css

✧ Application logic is implemented in JavaScript running in the web-view.

✧ Cordova framework provides an 'exec' interface which can call native code.

✧ Plugins are modular, so they can be mixed freely.

What is a plugin?

✧ A plugin exposes some native functionality to a Cordova app.

✧ Typically provides a (common) JavaScript interface to an application

✧ **running in the webview**

✧ Includes native code for one or more devices.

✧ **Native code can do anything a native app can do!**

✧ JS code calls native via the 'exec' api

✧ Native code sends status and results back to JS via 'exec' callbacks

3 ways we install plugins

Via npmjs.org registry

```
$ cordova plugin add cordova-plugin-device
```

Github.com

```
$ cordova plugin add https://github.com/apache/cordova-plugin-device
```

From a local path

```
$ cordova plugin add ~/MyPlugins/cordova-plugin-device
```
This is the recommended way for developing!

The 'core' plugins

- battery-status
- camera
- debug-console
- contacts
- device
- device-motion
- device-orientation
- dialogs
- file
- file-transfer
- geolocation

- globalization
- inappbrowser
- media
- media-capture
- network-information
- ~~splash-screen~~
- status-bar
- vibration
- whitelist
- screen-orientation*

This is a great resource for learning about plugins too!

Our plugins (PhoneGap)

- phonegap-plugin-barcodescanner
- phonegap-plugin-contentsync
- phonegap-plugin-push
- phonegap-plugin-multiview

- phonegap-plugin-csdk-asset-browser
- phonegap-plugin-csdk-client-auth
- phonegap-plugin-csdk-image-editor
- phonegap-plugin-csdk-send-to-desktop
- phonegap-plugin-csdk-user-auth

CreativeSDK plugins built for PhoneGap

Plugin Authoring

Plugin.xml defines your plugin

- A plugin **id** for registration and discovery, add/remove
- A version number, author, repo link (similar to package.json)
- A list of platforms and native headers, source files, resources, JavaScript files
- Configuration items, permission requirements
- js-module – the js entry point for your plugin
- Hooks

Let's look at an example … http://github.com/apache/cordova-plugin-device

A minimum viable plugin.xml

```xml
<?xml version="1.0" encoding="UTF-8"?>
<plugin xmlns="http://apache.org/cordova/ns/plugins/1.0"
    xmlns:android="http://schemas.android.com/apk/res/android"
    id="org-jesse-myplugin"
    version="0.0.1">
    <name>My Plugin</name>
</plugin>
```
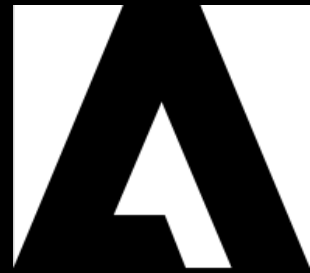
Plugin.xml bonus points – a dependency

<dependency id="cordova-plugin-device"/>

<dependency id="cordova-plugin-console"/>

Dependency mashup IS a valid plugin!

See https://github.com/purplecabbage/cordova-plugin-hardcore/

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