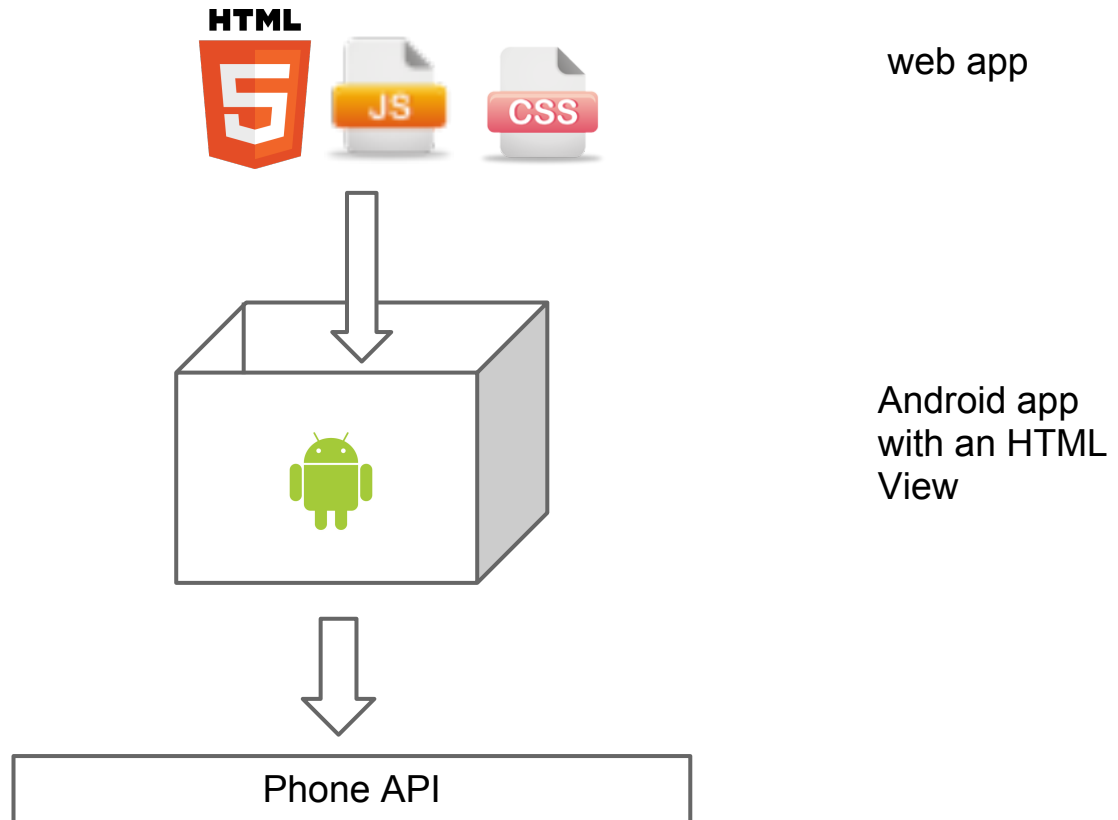


Crash course in PhoneGap (Android)

November 2012

A simple idea



Pre-requirements

Set up your environment:

see [PhoneGap Tutorial](#)

My conf

Eclipse Juno Java EE Developers

Tutorial app

Tutorial app

- read a list of item from server (JSON),
- click on an item to see details,
- create a new item.

What we will learn:

Javascript, jQuery, jQuery Mobile, ...

Exercise 0

Build a simple Hello World app and run it!

Hint: have a look at [PhoneGap Tutorial](#)

Android and Java

Activity

AndroidManifest.xml

A bit of Java

- import
- extends/implements
- overriding

Exercise 1

Read a JSON from a remote location via http and display it as an html list.

JSON url: <http://dl.dropbox.com/u/645186/data.json>

You will learn

- Ajax requests: http://www.w3schools.com/ajax/tryit.asp?filename=tryajax_first
- Same Origin Policy: http://en.wikipedia.org/wiki/Same_origin_policy
 - http://docs.phonegap.com/en/1.8.0/guide_whitelist_index.md.html#Domain%20Whitelist%20Guide
- Javascript Html DOM manipulation: <http://www.w3schools.com/jsref/default.asp>

Exercise 2

Use jQuery Mobile to improve the look 'n feel of your application.

Download [jQuery](#)

Download [jQuery Mobile](#)

Copy files in assets/www

You will learn

- basic jQuery mobile
- use logcat within PhoneGap
- when to load javascript <http://api.jquery.com/ready/>
- how to do ajax call <http://api.jquery.com/jQuery.ajax/>
- how to build a list of item <http://jquerymobile.com/demos/1.2.0/docs/lists/docs-lists.html>

Exercise 4

When users click on an item, open a details page.

You will learn

- jQuery mobile paging system
- how to pass parameters between pages
- jQuery events

Exercise 5

Add a 'new item' button. When clicked, an entry form appears.

You will learn:

- create forms
- add actions to toolbars

Homework(*)

Implement an Ajax request to save the content of the form on the server.

What you need

- a remote web service in your favourite language
- a POST Ajax request (see exercise 1)

(*) or just send me an email for a solution :P

Advanced topics

Backbone.js: Model View Controller

- Controller = Backbone.Router
- View = Backbone.View
- Model = Backbone.Model

Idea: use jQuery mobile as an UI library, delegate routing, events etc... to Backbone.

Source: <http://coenraets.org/blog/2012/03/using-backbone-js-with-jquery-mobile/>

Exercise 6

Refactor your application and use Backbone.js to organise better your code.

<https://github.com/documentcloud/backbone/blob/master/backbone.js>

<http://coenraets.org/blog/2012/03/using-backbone-js-with-jquery-mobile/>

References

PhoneGap

<http://phonegap.com/>

Javascript

Douglas Crockford

[Javascript: the good parts](#)

2008

jQuery/jQuery Mobile

<http://jquerymobile.com/demos/1.2.0/docs>

<http://api.jquery.com/>

Other goodies

<http://backbonejs.org/>

<http://underscorejs.org/>