



max firtman

@firt firt.mobi

LinkedIn Training

Marakana, Jan 17 2012

# who am I?

mobile+web developer  
[mobilexweb.com](http://mobilexweb.com) blog



---

NOKIA Developer  
Certified Trainer



@firt

# where?



# where?

## buenos aires ~ argentina



# where?

## buenos aires ~ argentina



patagonia  
football  
meat & wine  
tango

# speaker

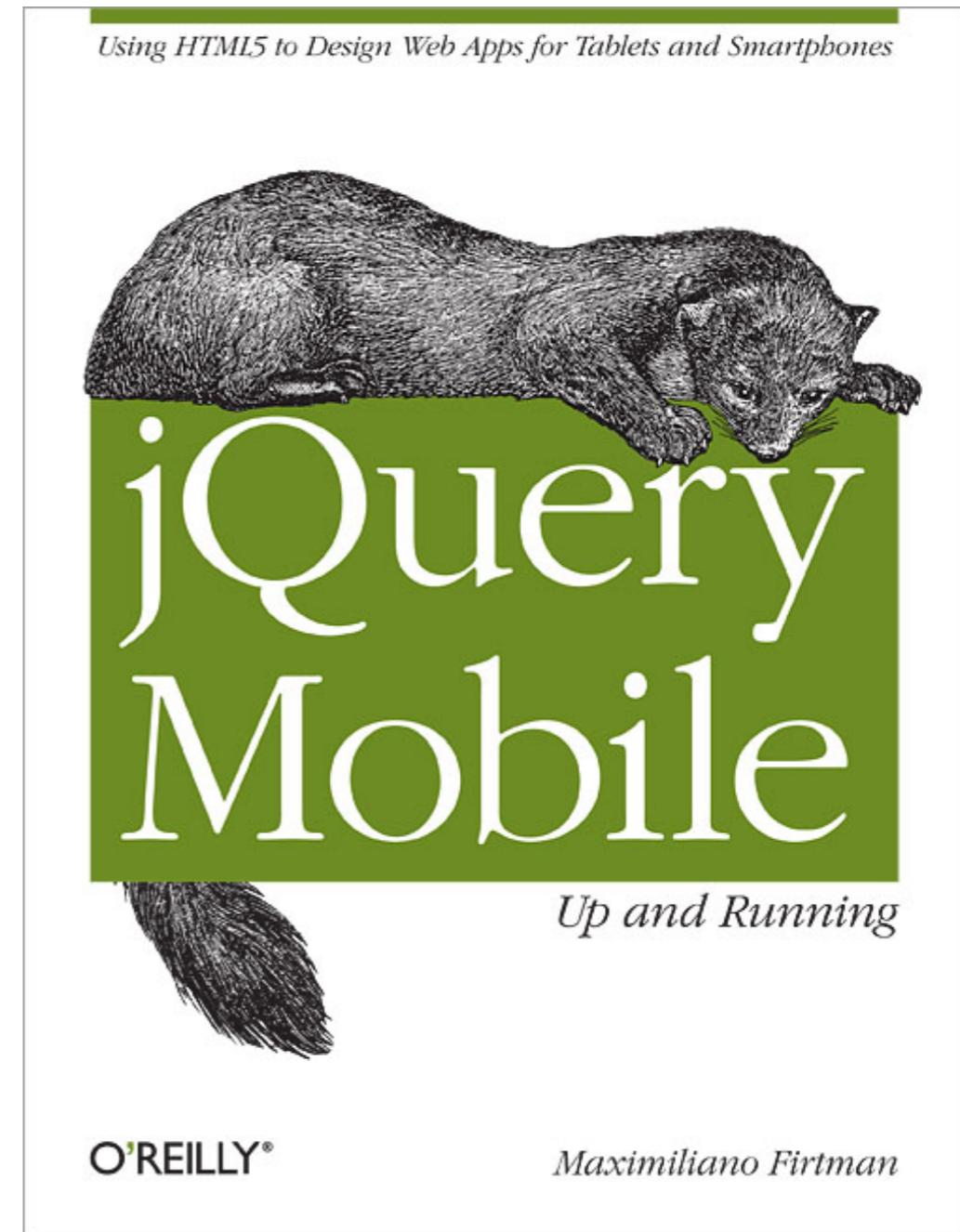
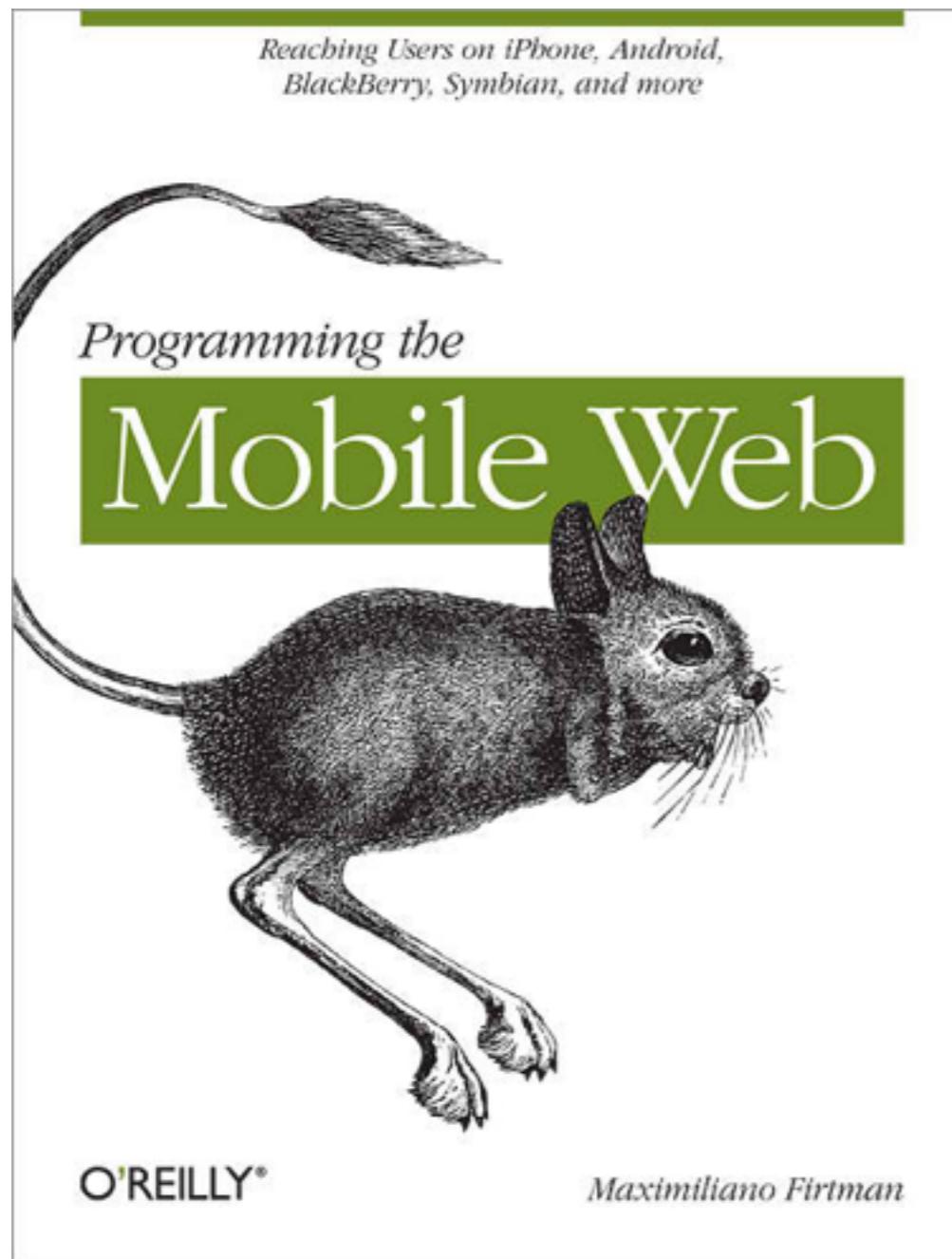


Google  
Developer  
Day 2010

# books



Image from my house



*Using the Latest Today*



O'REILLY®

*Estelle Weyl  
& Maximiliano Firtman*

coming soon...  
also by @estellevw

you have  
a question for me

the answer is no

# MOBILE HTML



Do not program conditionals per platform or version. Always use feature detection.

This list is in progress. New tests, new features, more specificity of each feature and more mobile browsers soon!

If you want to help on the test, [contact me](#).

by [firt](#) | [Updates on Twitter](#) | [Blog](#)

Trying to understand HTML5 compatibility on mobile and tablet browsers

Feature	Safari on iOS	Android Browser		BlackBerry Browser		Internet Explorer	Opera		Firefox	webOS Browser	Symbian Browser
Version tested	iPhone, iPad	Phones (1.0-2.3)	Tablets (3.0+)	Phones	Tablet	Windows Phone	Mobile	Mini	Android		Nokia phones
Minimum version tested	3.2	1.5	3.0	5.0	1.0	9	11	5	6	1.4	^3
<b>Application Cache</b> <a href="#">W3C API</a> Offline package installation.	✓	✓ 2.1+	✓	✓ 6.0+	✓		✓		✓	✓	✓
<b>Web storage</b> <a href="#">W3C API</a> Persistent and session storage.	✓	✓ 2.0+	✓	✓ 6.0+	✓	✓	✓		✓	✓	✓
<b>Web SQL storage</b> <a href="#">W3C API (no active)</a> Persistent SQLite storage.	✓	✓ 2.0+	✓	✓ 6.0+	✓		✓				✓
<b>Geolocation</b> <a href="#">W3C API</a> Geolocation & tracking using GPS, cells or Wi-Fi.	✓	✓ 2.0+	✓	✓ 6.0+	✓	✓	✓		✓	✓	✓
<b>Multimedia</b> <a href="#">W3C API</a> Video & Audio Players	✓	✓ 2.3+	✓	✓ 7.0+	✓	✓	✓		✓	✓	✓
<b>Server-Sent Events</b> <a href="#">W3C API</a> EventSource pattern to maintain the connection to the server open	✓ 4.1+						✓		✓		
<b>Web Sockets</b> <a href="#">W3C API</a> New bidirectional protocol over HTTP	✓ 4.2+			✓ 6.1+	✓		✓		✓		

[www.mobilehtml5.org](http://www.mobilehtml5.org)



# iWebInspector.com

by @firt

Web debugging tool for iOS Simulator

iWebInspector | Remote Web Inspector & Debugger for iOS Simulator - by @firt

Inspector for website For chrome-less webapp For Hybrid / PhoneGap app Current Sessions ?

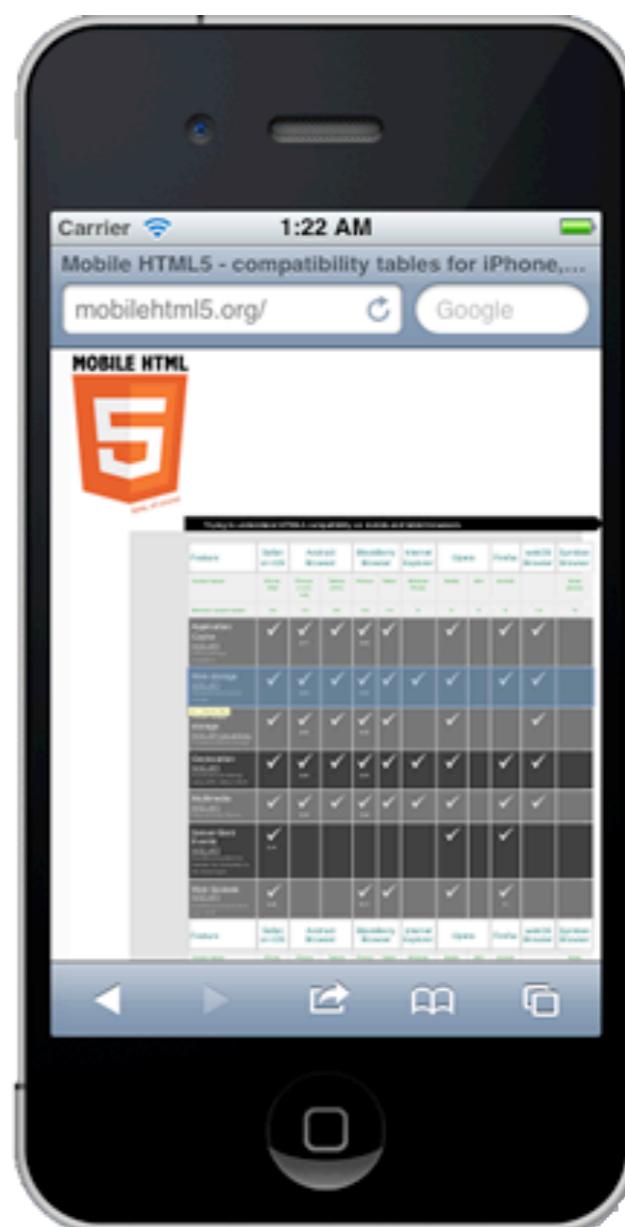
Open iOS Simulator Load from Safari Load from webapp MiApp Load Search Elements

Elements Resources Network Scripts Timeline Profiles Audits Console

```
<!DOCTYPE html>
<!-- I know, you are checking if this site was done using HTML5, right? Ok... be my guest :) -->
<html>
  <head></head>
  <body>
    <section id="container">
      <!-- yes, the logo should be an SVG, but it is not -->
      
    <header>
      <h1>Trying to understand HTML5 compatibility on mobile and tablet browsers </h1>
    </header>
    <section id="zoneTable">
      <table>
        <thead></thead>
        <tbody>
          <tr class="subtitle"></tr>
          <tr class="subtitle"></tr>
          <tr></tr>
          <tr></tr>
          <tr></tr>
          <tr></tr>
          <tr></tr>
          <tr class="subtitle"></tr>
          <tr></tr>
          <tr></tr>
          <tr></tr>
        </tbody>
      </table>
    </section>
  </body>
</html>
```

Computed Style □ Show Inherited  
Styles element.style {  
}  
Matched CSS Rules tr:nth-child(2n+1) { http://mobilehtml5.org/101  
background-color: #666;  
}  
tr { http://mobilehtml5.org/115  
border: 1px solid blue;  
-webkit-transition: -webkit-transform 0.4s;  
}  
tr { http://mobilehtml5.org/104  
color: white;  
padding: 3px;  
-webkit-transition: all 0.2s;  
-moz-transition: all 0.2s;  
}  
tr { user agent stylesheet  
display: table-row;  
vertical-align: inherit;  
border-color: inherit;  
}  
Inherited from table table { user agent stylesheet  
border-collapse: separate;  
border-spacing: 2px;  
}

html > body > section#container > section#zoneTable > table > tbody > tr



# **It's your turn**

name

what do you do

previous experience in:  
HTML4/5, JS, jQuery, mobile

# About this training

# Outline

jQuery Mobile Introduction

The framework

The page

Navigation

UI Components

Toolbars and Navigation Bars

Columns

Buttons

Lists

Forms

# Outline

The framework and JavaScript

New events

Configuring defaults

Navigation and Tools

Dynamic data

Plugin architecture

Geolocation and Web Storage

Packaging for installation

# Logistics

# Logistics

9.30am: start

~11am: break 10/15 min

~12.30pm: lunch 1 hour

~15pm: break 10/15 min

~16.30pm: end

16.30-17.30pm: Q&A

# Logistics

Please:

- Check safety instructions, emergency exits
- Mobile phones in vibration mode
- Participate and ask!

# Logistics

- Download material from **firt.mobi/material/jqm171**
- Presentation, Live code samples, exercises
- Test on desktop browsers, emulators and real devices

For material use Safari for Mac or Firefox.

New download every day

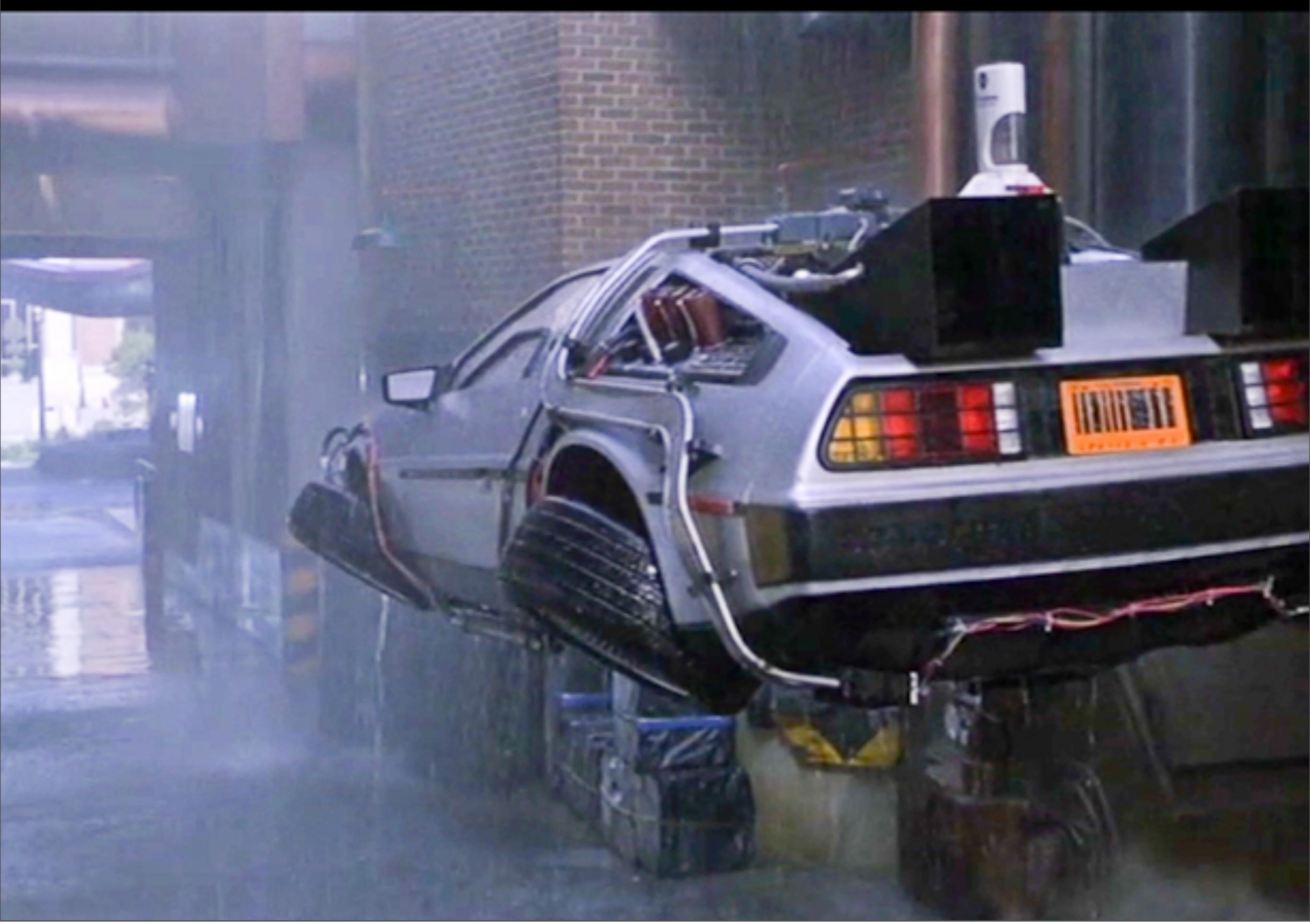
# Let's start

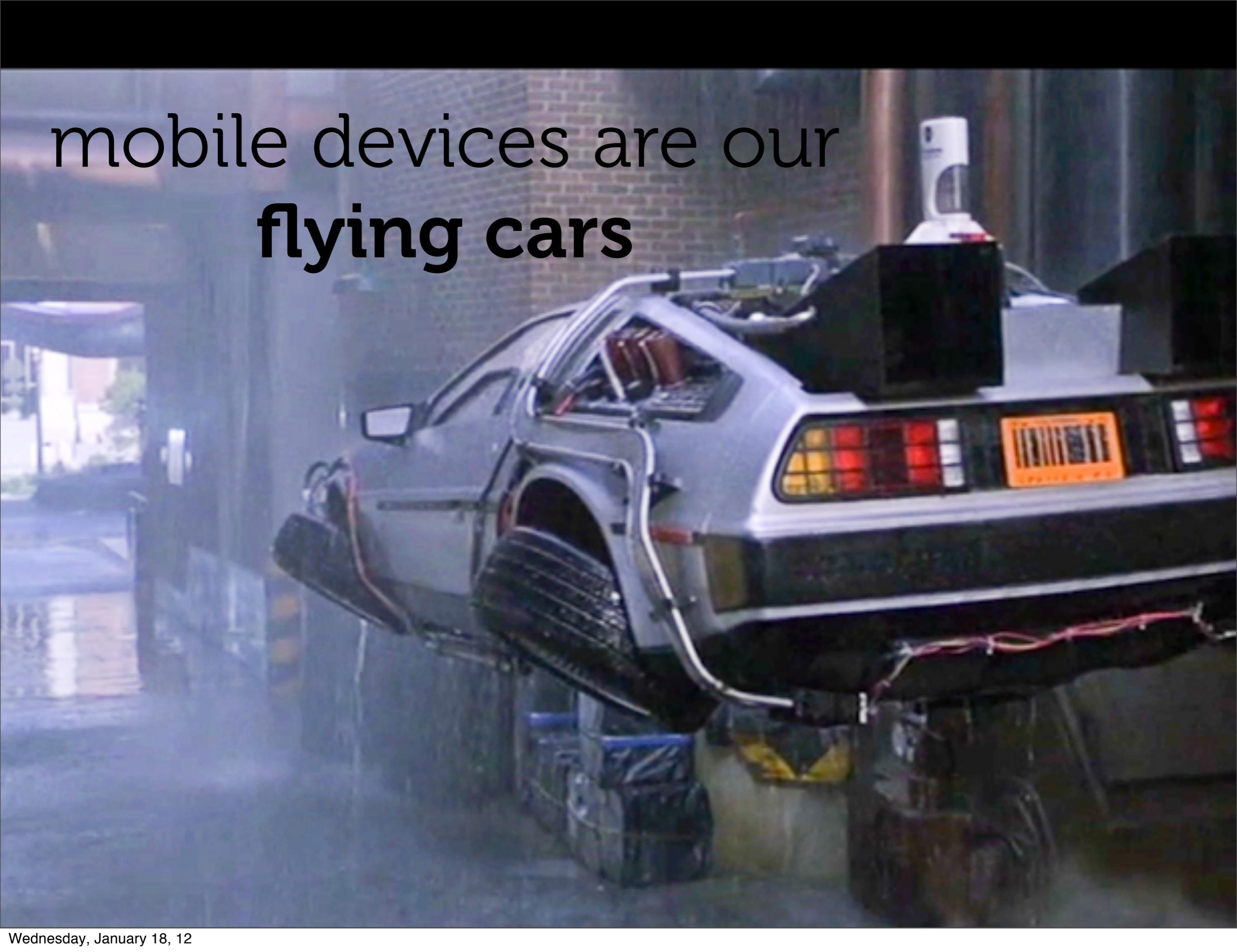


# why mobile?



**2015 is coming...**



A DeLorean DMC-12 from the movie Back to the Future II is shown flying through a city street. The car is silver with a black stripe and has its gull-wing doors open. It is suspended in mid-air by a network of cables and mechanical arms, which are attached to a large, dark, cylindrical device mounted on a building. The background shows a blurred cityscape with buildings and trees.

mobile devices are our  
flying cars

# mobile

# mobile

- ▶ absolutely personal

# mobile

- ▶ absolutely personal
- ▶ +5 billions

# mobile

- ▶ absolutely personal
- ▶ +5 billions
- ▶ make us focus

# mobile

- ▶ absolutely personal
- ▶ +5 billions
- ▶ make us focus
- ▶ read our context...

# mobile

- ▶ absolutely personal
- ▶ +5 billions
- ▶ make us focus
- ▶ read our context...
- ▶ ... always...

# mobile

- ▶ absolutely personal
- ▶ +5 billions
- ▶ make us focus
- ▶ read our context...
- ▶ ... always...
- ▶ ... and everywhere.

then... what is the  
problem?

# mobile is a minefield



Photo by World of Good (Flickr)

**Malvinas / Falklands Islands**



# lots of questions

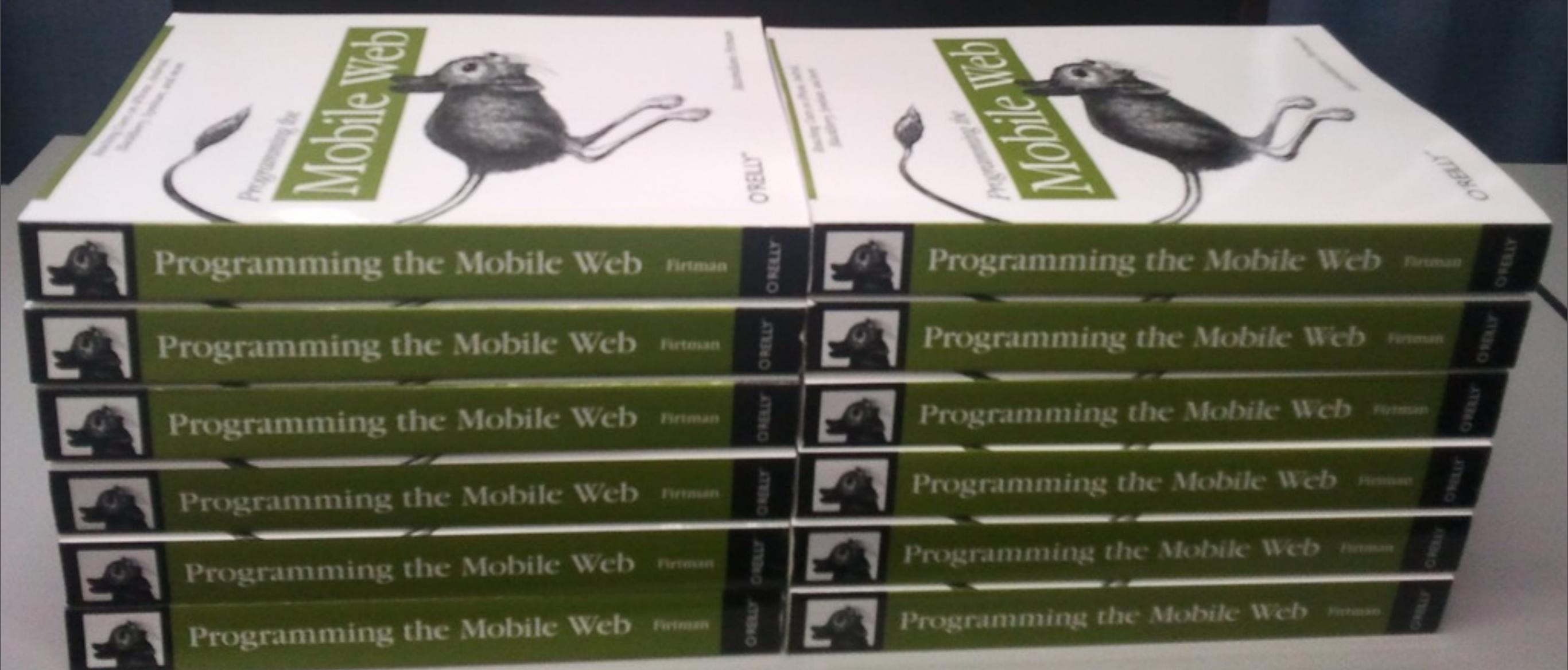
Photo by wayneandwax (Flickr)

we need to learn



lots of platforms

# mobile web appears



# it's different

# it's different

- ▶ slower networks

# it's different

- ▶ slower networks
- ▶ higher latency

# it's different

- ▶ slower networks
- ▶ higher latency
- ▶ slower hardware

# it's different

- ▶ slower networks
- ▶ higher latency
- ▶ slower hardware
- ▶ different browsing experience

# it's different

- ▶ slower networks
- ▶ higher latency
- ▶ slower hardware
- ▶ different browsing experience
- ▶ different context

# it's different

- ▶ slower networks
- ▶ higher latency
- ▶ slower hardware
- ▶ different browsing experience
- ▶ different context
- ▶ different behaviors

# it's different

- ▶ slower networks
- ▶ higher latency
- ▶ slower hardware
- ▶ different browsing experience
- ▶ different context
- ▶ different behaviors
- ▶ different possible networks



native  
vs  
web

# **WAIT!**

# Are you sure?



# native code vs javascript



browser  
vs  
installed apps  
& stores

# **lack of definitions**

# when we say mobile web

# when we say mobile web

*from a developer's perspective it's using HTML,  
CSS and JavaScript to develop mobile apps*

# when we say mobile web

*from a developer's perspective it's using HTML, CSS and JavaScript to develop mobile apps  
(browser or installed)*



**webapp?**

# a webapp can be...

# a webapp can be...

- ▶ a website or service based on the browser

# a webapp can be...

- ▶ a website or service based on the browser
- ▶ a full-screen (chromeless) app on the browser

# a webapp can be...

- ▶ a website or service based on the browser
- ▶ a full-screen (chromeless) app on the browser
- ▶ a hybrid -native app through stores-, i.e. PhoneGap

**what are the  
problems with  
mobile web?**

**we are second class  
producers**

# second class

# second class

- ▶ vague, non-existent or outdated documentation

# second class

- ▶ vague, non-existent or outdated documentation
- ▶ new features discovered by third-parties

# second class

- ▶ vague, non-existent or outdated documentation
- ▶ new features discovered by third-parties
- ▶ lack of samples

# second class

- ▶ vague, non-existent or outdated documentation
- ▶ new features discovered by third-parties
- ▶ lack of samples
- ▶ no developer tools

# Testing & debugging

# Standards!



Photo by Ben Millett (Flickr)

Wednesday, January 18, 12



Are you  
sure?

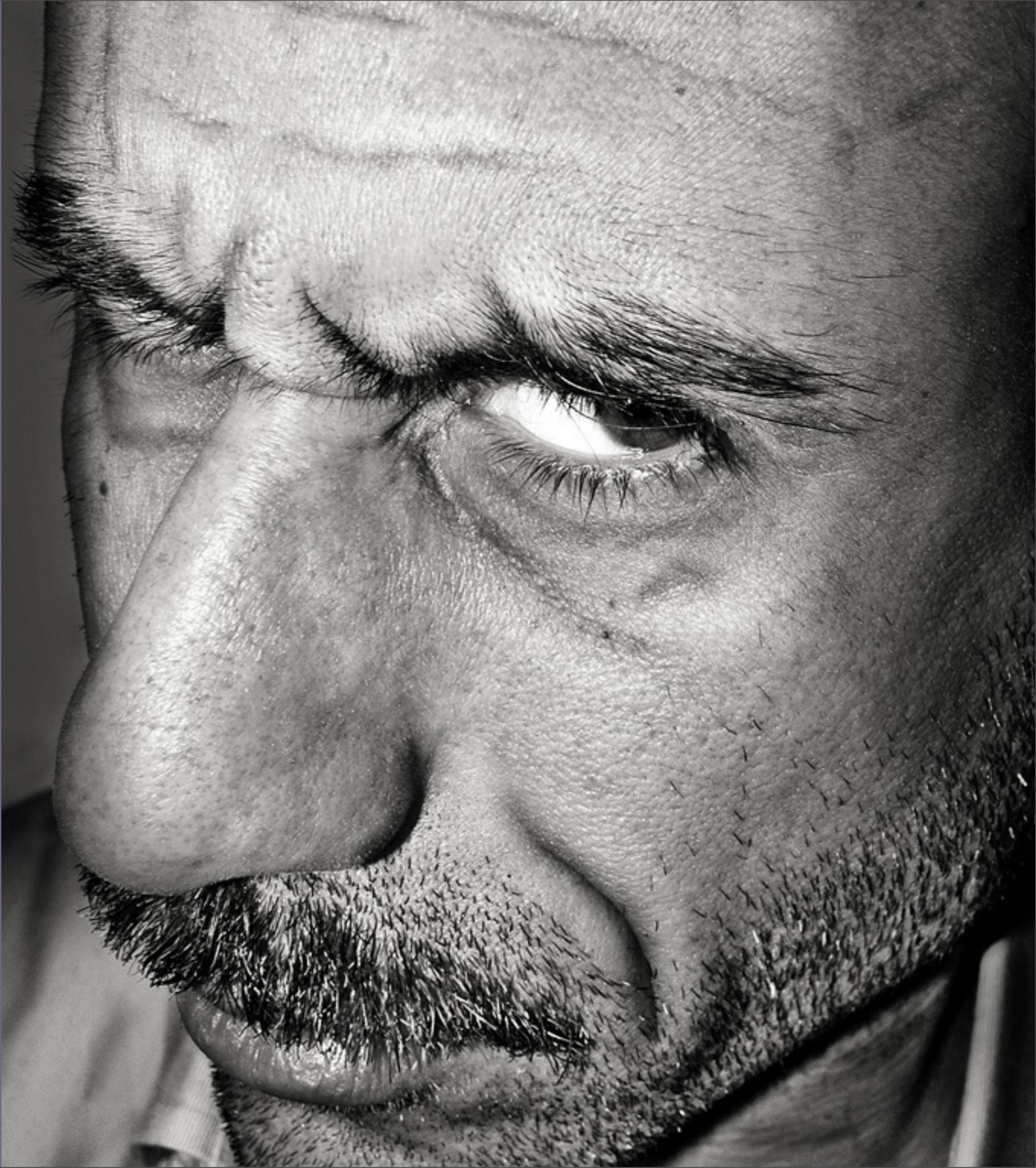


Photo by Ricky David (Flickr)

What is **HTML**  
**5**?



# html5

# html5

- ▶ w3c standards (all in draft)

# html5

- ▶ w3c standards (all in draft)
- ▶ some are other w3c standards

# html5

- ▶ w3c standards (all in draft)
- ▶ some are other w3c standards
- ▶ de-facto standards

# html5

- ▶ w3c standards (all in draft)
- ▶ some are other w3c standards
- ▶ de-facto standards
- ▶ w3c ex-standards

# html5

- ▶ w3c standards (all in draft)
- ▶ some are other w3c standards
- ▶ de-facto standards
- ▶ w3c ex-standards
- ▶ everything “new” on the web

`typeof html5 != boolean`

# Let's clarify

# mobile browsers

# mobile browsers

- ▶ too many

# mobile browsers

- ▶ too many
- ▶ (some) too limited

# mobile browsers

- ▶ too many
- ▶ (some) too limited
- ▶ (some) too innovative

# mobile browsers

- ▶ too many
- ▶ (some) too limited
- ▶ (some) too innovative
- ▶ (some) proxy based

# mobile browsers

- ▶ too many
- ▶ (some) too limited
- ▶ (some) too innovative
- ▶ (some) proxy based
- ▶ (most) without documentation

# mobile browsers

- ▶ too many
- ▶ (some) too limited
- ▶ (some) too innovative
- ▶ (some) proxy based
- ▶ (most) without documentation
- ▶ (most) without a *name*

# mobile browsers

- ▶ too many
- ▶ (some) too limited
- ▶ (some) too innovative
- ▶ (some) proxy based
- ▶ (most) without documentation
- ▶ (most) without a *name*
- ▶ (most) without debugging tools

# mobile browsers

# mobile browsers

- ▶ (some) focus-based

# mobile browsers

- ▶ (some) focus-based
- ▶ (some) cursor-based

# mobile browsers

- ▶ (some) focus-based
- ▶ (some) cursor-based
- ▶ (some) touch-based

# mobile browsers

- ▶ (some) focus-based
- ▶ (some) cursor-based
- ▶ (some) touch-based
- ▶ (some) multitouch-based

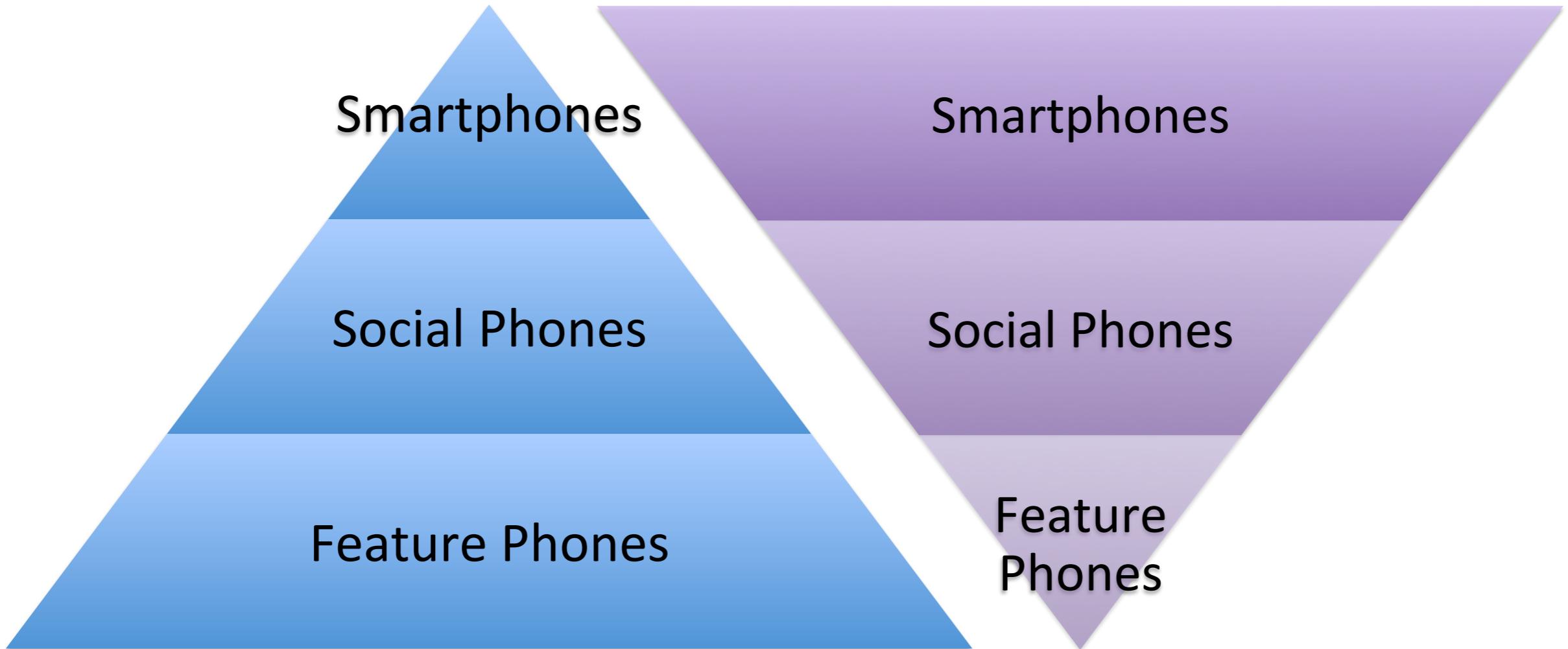
# mobile browsers

- ▶ (some) focus-based
- ▶ (some) cursor-based
- ▶ (some) touch-based
- ▶ (some) multitouch-based
- ▶ (some) with zooming support

# mobile browsers

- ▶ (some) focus-based
- ▶ (some) cursor-based
- ▶ (some) touch-based
- ▶ (some) multitouch-based
- ▶ (some) with zooming support
- ▶ (most) unknown for web devs

## **MOBILE WEB USAGE**



**MARKET SHARE**

# some are known

# some are known

- ▶ **Safari** (on iOS)
- ▶ **Opera Mobile** (on Android & Symbian)
- ▶ **Firefox** (on Android)
- ▶ **Internet Explorer** (on Windows Phone)

# some are unknown

# some are unknown

- ▶ Nokia Browser (on Symbian, S40 & Meego 1.2)
- ▶ BlackBerry Browser
- ▶ webOS Browser
- ▶ Amazon Silk
- ▶ Bada Browser
- ▶ Opera Mini
- ▶ NetFront
- ▶ Myriad
- ▶ Phantom
- ▶ Skyfire

# they are on tablets too!

# they are on tablets too!

- ▶ Safari
- ▶ Android Browser
- ▶ webOS Browser
- ▶ BlackBerry Browser
- ▶ Opera Mini
- ▶ Firefox

and with different  
versions...

**and there's more!**

# pseudo-browsers

# pseudobrowsers

# pseudobrowsers

- ▶ mostly on iOS and Android

# pseudobrowsers

- ▶ mostly on iOS and Android
- ▶ uses the internal web control

# pseudobrowsers

- ▶ mostly on iOS and Android
- ▶ uses the internal web control
- ▶ have different behavior than the native!



# webkit on mobile

# mobile IE reborn

# mobile IE reborn

- ▶ on Windows Phone 7.5, full Internet Explorer 9 with HTML5

# mobile IE reborn

- ▶ on Windows Phone 7.5, full Internet Explorer 9 with HTML5
- ▶ but...

# the webkit problem

# the webkit problem

- ▶ we are doing some things wrong

# the webkit problem

- ▶ we are doing some things wrong
- ▶ mostly css3

# the webkit problem

- ▶ we are doing some things wrong
- ▶ mostly css3
- ▶ IE9, Firefox, Opera second-class citizens

# the webkit problem

- ▶ we are doing some things wrong
- ▶ mostly css3
- ▶ IE9, Firefox, Opera second-class citizens
- ▶ The history is repeating!

# **do responsible web**

# do responsible web

- ▶ do WebKit development for mobile

# do responsible web

- ▶ do WebKit development for mobile
- ▶ but do not discriminate your users

# do responsible web

- ▶ do WebKit development for mobile
- ▶ but do not discriminate your users
- ▶ please?

we need to forget  
and learn

# forget about

# forget about

- ▶ pixels

# forget about

- ▶ pixels
- ▶ desktop frameworks (ok, not always)

# forget about

- ▶ pixels
- ▶ desktop frameworks (ok, not always)
- ▶ always connected

# forget about

- ▶ pixels
- ▶ desktop frameworks (ok, not always)
- ▶ always connected
- ▶ unlimited power

# forget about

- ▶ pixels
- ▶ desktop frameworks (ok, not always)
- ▶ always connected
- ▶ unlimited power
- ▶ everyone see the same

# forget about

- ▶ pixels
- ▶ desktop frameworks (ok, not always)
- ▶ always connected
- ▶ unlimited power
- ▶ everyone see the same
- ▶ emulate native ui exactly

# forget about

- ▶ pixels
- ▶ desktop frameworks (ok, not always)
- ▶ always connected
- ▶ unlimited power
- ▶ everyone see the same
- ▶ emulate native ui exactly
- ▶ device conditionals

# forget about

- ▶ pixels
- ▶ desktop frameworks (ok, not always)
- ▶ always connected
- ▶ unlimited power
- ▶ everyone see the same
- ▶ emulate native ui exactly
- ▶ device conditionals
- ▶ suppose

# learn about

# learn about

- ▶ server-side detection

# learn about

- › server-side detection
- › progressive enhancement

# learn about

- server-side detection
- progressive enhancement
- responsive design, but....

# learn about

- server-side detection
- progressive enhancement
- responsive design, but....
- mobile usability

# learn about

- › server-side detection
- › progressive enhancement
- › responsive design, but....
- › mobile usability
- › best experience for each context

# learn about

- › server-side detection
- › progressive enhancement
- › responsive design, but....
- › mobile usability
- › best experience for each context
- › the “top model” approach, aka WPO

# learn about

- server-side detection
- progressive enhancement
- responsive design, but....
- mobile usability
- best experience for each context
- the “top model” approach, aka WPO
- gain user loyalty

# responsive design

BOSTON.COM CARS | JOBS | REAL ESTATE

MONDAY, OCTOBER 10, 2011



## The Boston Globe

Search



NEWS METRO ARTS BUSINESS SPORTS OPINION LIFESTYLE MAGAZINE TODAY'S PAPER MY SAVED



ESSDRAS M SUAREZ/ GLOBE STAFF

### Tiny grants keep ‘awesome’ ideas coming

The Awesome Foundation, started by a group of tech-savvy twentysomethings, offers small grants for ideas that are, well, awesome.



### Potatoes, pride at risk in Maine

The Aroostook County potato harvest in Maine,

### Early educator union sought

Massachusetts teacher unions are attempting to enroll more than 10,000 early childhood education workers in the private and nonprofit sectors.



### Mass. redistricting plans pit east vs. west

The congressional seats of William Keating and Stephen Lynch could be combined in one plan. Another reportedly merges the seats of Richard E. Neal and John W. Olver.



### Optimism, candor boost Cain in polls

Herman Cain, a pizza magnate and conservative talk-radio host, has

### Linde Family Wing for Contemporary Art

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the new

“

*“Being funded by interested and interesting peers is a whole benefit in itself.”*

Sara Hendren, who was awarded an Awesome Foundation grant

# responsive design

The screenshot shows a desktop view of the Food Sense website. At the top left is the Food Sense logo. To its right is a large image of three cupcakes with white frosting and raspberries. Overlaid on the image is a call-to-action box with the text "Shop for the Best" and "With our carefully curated vendor list, you'll know what to buy." Below the main image are four navigation links: "Tastemakers", "Blog", "The A-List", and "Contribute". Each link has a small icon next to it. At the bottom of the page are sections for "LATEST TWEET" (with a "Join the Conversation" button), "LET'S BE FRIENDS!" (with a "Facebook" link), and a newsletter sign-up form.

food  
sense™

Tastemakers

Blog

The A-List

Contribute

About

LATEST TWEET

Join the Conversation

LET'S BE FRIENDS!

For weekly finds, community recommendations, and more, like us on Facebook.

Sign up for our newsletter to receive a handpicked selection of the best stories, recipes, and news, delivered weekly to your inbox.

Email

Subscribe

photo by Clare Barboza

Tastemakers  
Feast your eyes & get recipes!

Blog  
News, how-tos, stories, and more

The A-List  
Handpicked, absolute favorites

Contribute  
We want to hear from you!

foodsense.is

# learn about

# learn about

- ▶ the viewport

# learn about

- ▶ the viewport
- ▶ target density (pixel ratio)

# learn about

- ▶ the viewport
- ▶ target density (pixel ratio)
- ▶ how and when to fix elements on screen

# learn about

- ▶ the viewport
- ▶ target density (pixel ratio)
- ▶ how and when to fix elements on screen
- ▶ how background code works

# learn about

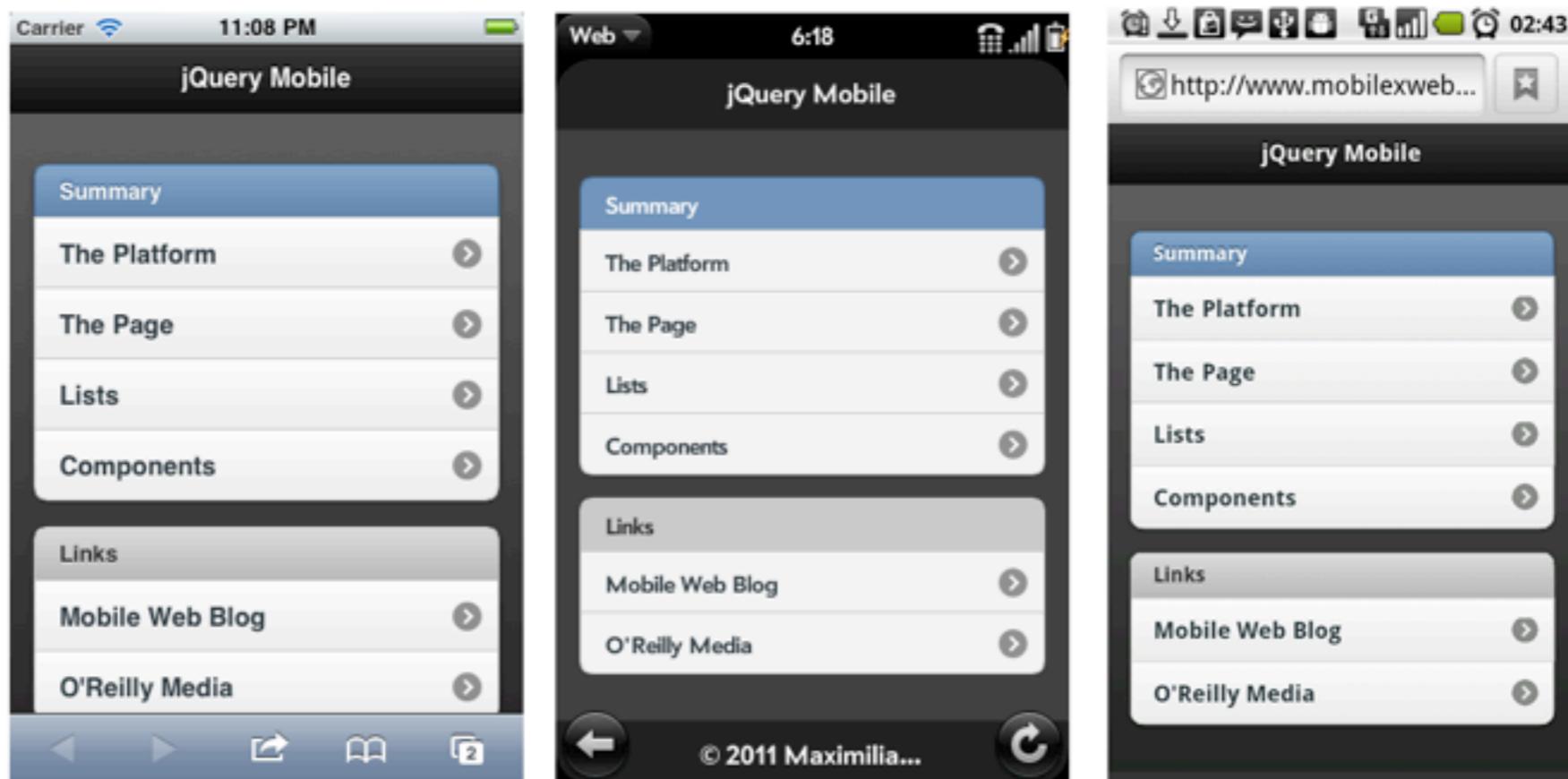
- ▶ the viewport
- ▶ target density (pixel ratio)
- ▶ how and when to fix elements on screen
- ▶ how background code works
- ▶ data URI - inlining content



# mobile web toolkit



# emulators



[www.mobilexweb.com/emulators](http://www.mobilexweb.com/emulators)



# friends

lots of them



# virtual labs

real devices on real networks



[www.perfectomobile.com](http://www.perfectomobile.com)

[www.deviceanywhere.com](http://www.deviceanywhere.com)



# device libraries

detect devices and abilities from server-side

manually tested

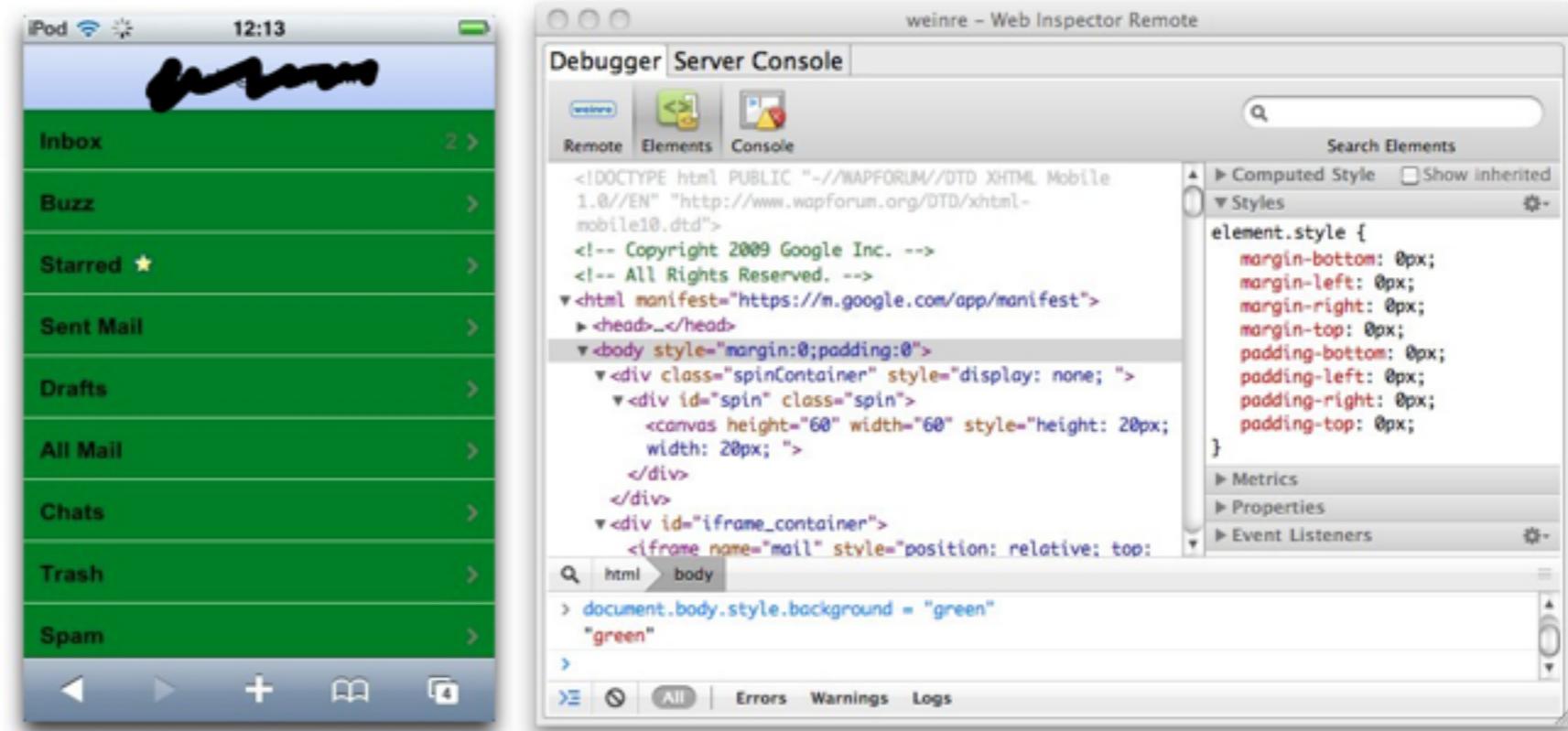
[www.wurfl.com](http://www.wurfl.com)

[www.deviceatlas.com](http://www.deviceatlas.com)



# debugging tools

opera mobile (DragonFly)  
weinre  
iwebinspector



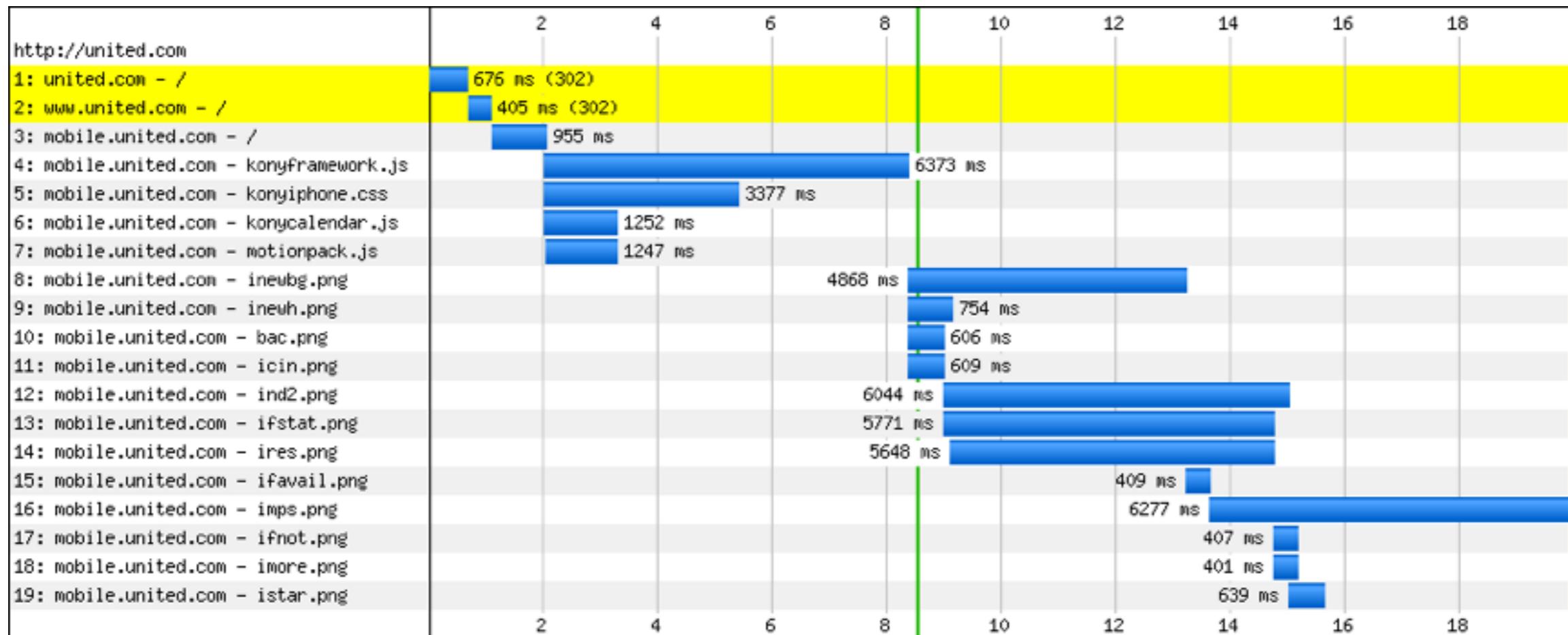
[phonegap.github.com/weinre](https://phonegap.github.com/weinre)

[debug.phonegap.com](http://debug.phonegap.com)



# performance tools

just starting...



<http://stevesouders.com/mobileperf/>

**BTW**

**you are guilty!**

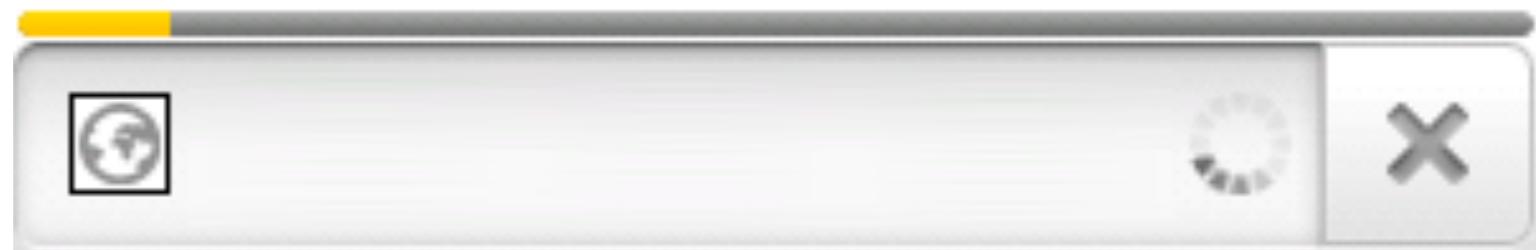
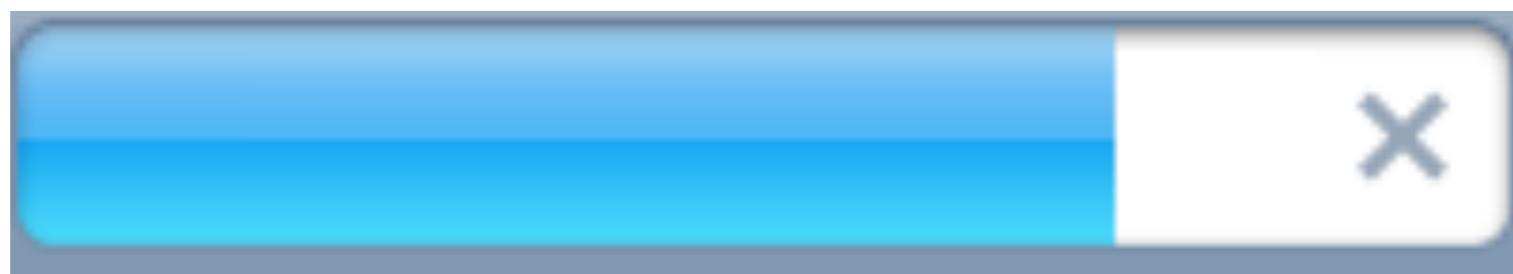
# users hate you

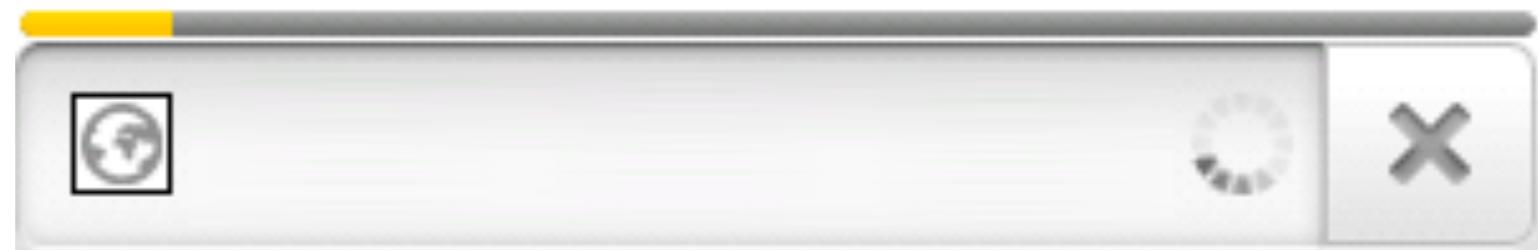
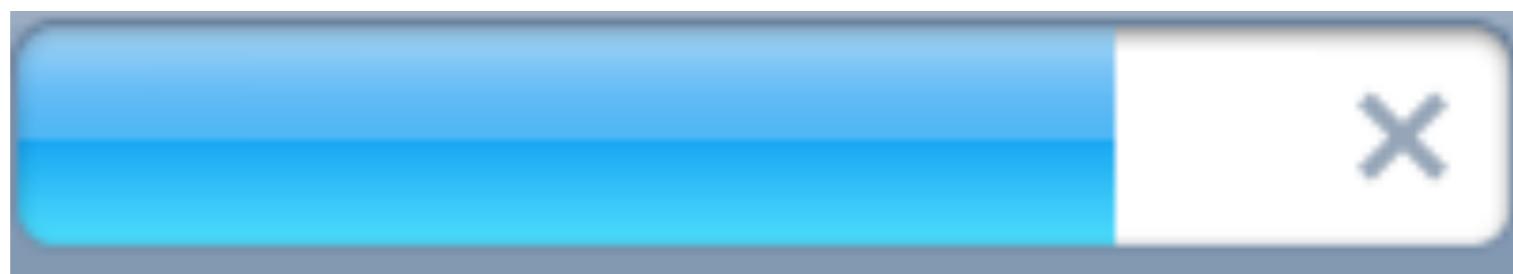


why?









mobile  
web  
is slow



Picture from Simon Howden freedigitalphotos.net

mobile web is **slow**  
because...

mobile web is **slow**  
because...

**we are doing it wrong**

# web performance optimization

# packaging with phonegap



**UI**



**HTML**

.elements  
.canvas  
.svg  
.webgl



**CSS**

.basic & adv  
.transforms  
.transitions  
.animations



**PhoneGap**

.notification  
.events



**Sencha**  
**jQuery**  
mobile framework





**HTML**

.web workers  
.touch events



**jQuery**  
write less, do more.

...



**HTML**

.elements  
.canvas  
.svg  
.webgl



**CSS**

.basic & adv  
.transforms  
.transitions  
.animations



PhoneGap

.notification  
.events



**Logic**

**UI**



.web storage  
.sql storage  
.indexeddb  
.web sockets  
.server-sent events



Asynchronous Javascript And XML

.local files  
.remote http  
.xhr 2



PhoneGap

.file api  
.contacts api



.web workers  
.touch events



...



.elements  
.canvas  
.svg  
.webgl



.basic & adv  
.transforms  
.transitions  
.animations



PhoneGap

.notification  
.events



Data

Logic

UI

## Device



.geolocation  
.motion  
.multimedia



PhoneGap .accelerometer  
.camera  
.compass  
.network info



plugins

## Data



.web storage  
.sql storage  
.indexeddb  
.web sockets  
.server-sent events



Asynchronous Javascript And XML

.local files  
.remote http  
.xhr 2



PhoneGap

.file api  
.contacts api

## Logic



.web workers  
.touch events



...

## UI



.elements  
.canvas  
.svg  
.webgl



.basic & adv  
.transforms  
.transitions  
.animations



PhoneGap

.notification  
.events



## Device



.geolocation  
.motion  
.multimedia



PhoneGap .accelerometer  
.camera  
.compass  
.network info



plugins



.web storage  
.sql storage  
.indexeddb  
.web sockets  
.server-sent events



Asynchronous Javascript And XML

.local files  
.remote http  
.xhr 2



PhoneGap .file api  
.contacts api



.web workers  
.touch events



...



.elements  
.canvas  
.svg  
.webgl



.basic & adv  
.transforms  
.transitions  
.animations



PhoneGap



## Logic

## UI

per platform

Meta data



Native code

PhoneGap  
Plugins



Compilation



Stores

## Device



- .geolocation
- .motion
- .multimedia



PhoneGap .network info



plugins

## Data



- .web storage
- .sql storage
- .indexeddb
- .web sockets
- .server-sent events



Asynchronous Javascript And XML

- .local files
- .remote http
- .xhr 2



- .file api
- .contacts api

## Logic



- .web workers
- .touch events



...

## UI



- .elements
- .canvas
- .svg
- .webgl



- .basic & adv
- .transforms
- .transitions
- .animations



- .notification
- .events



per platform

Meta data



Native code

PhoneGap  
Plugins



Compilation



Stores

let's start with  
html5

# why mobile html5?

**some features safe**

**some features only on  
few platforms**

some features  
experimental

# jQuery mobile

**what is ... ?**

# what is not ...?

# jQuery mobile is not...

# jQuery mobile is not...

- ▶ alternative mobile jQuery framework

# jQuery mobile is not...

- ▶ alternative mobile jQuery framework
- ▶ SDK for native/hybrid compilation

# jQuery mobile is not...

- ▶ alternative mobile jQuery framework
- ▶ SDK for native/hybrid compilation
- ▶ a framework for doing all using JS

# jQuery mobile is not...

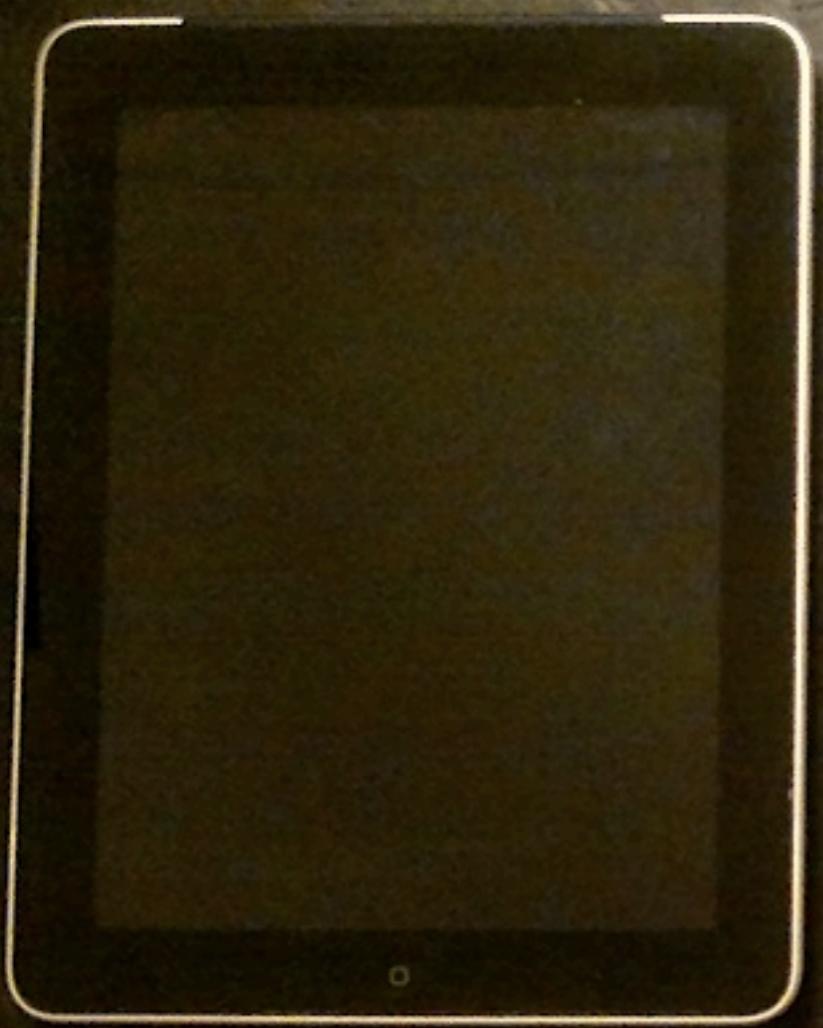
- ▶ alternative mobile jQuery framework
- ▶ SDK for native/hybrid compilation
- ▶ a framework for doing all using JS
- ▶ the solution for every app

# jQuery mobile is...

# jQuery mobile is...

a cross-platform **UI**  
**framework** for creating  
**webapps** for touch-enabled  
smartphones and tablets

# why jQuery mobile?





webOS



`typeof html5 != boolean`

# features

# features

# features

- ▶ non-intrusive semantic html5 code

# features

- ▶ non-intrusive semantic html5 code
- ▶ open sourced

# features

- ▶ non-intrusive semantic html5 code
- ▶ open sourced
- ▶ lightweight

# features

- ▶ non-intrusive semantic html5 code
- ▶ open sourced
- ▶ lightweight
- ▶ multiplatform with progressive enhancement

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- ▶ accessibility support

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- ▶ lightweight
- ▶ multiplatform with progressive enhancement
- ▶ accessibility support
- ▶ customizable

# features

- ▶ non-intrusive semantic html5 code
- ▶ open sourced
- ▶ lightweight
- ▶ multiplatform with progressive enhancement
- ▶ accessibility support
- ▶ customizable
- ▶ includes javascript api

you don't need to know

# you don't need to know

- ▶ html5

# you don't need to know

- ▶ html5
- ▶ css 3

# you don't need to know

- ▶ html5
- ▶ css 3
- ▶ javascript

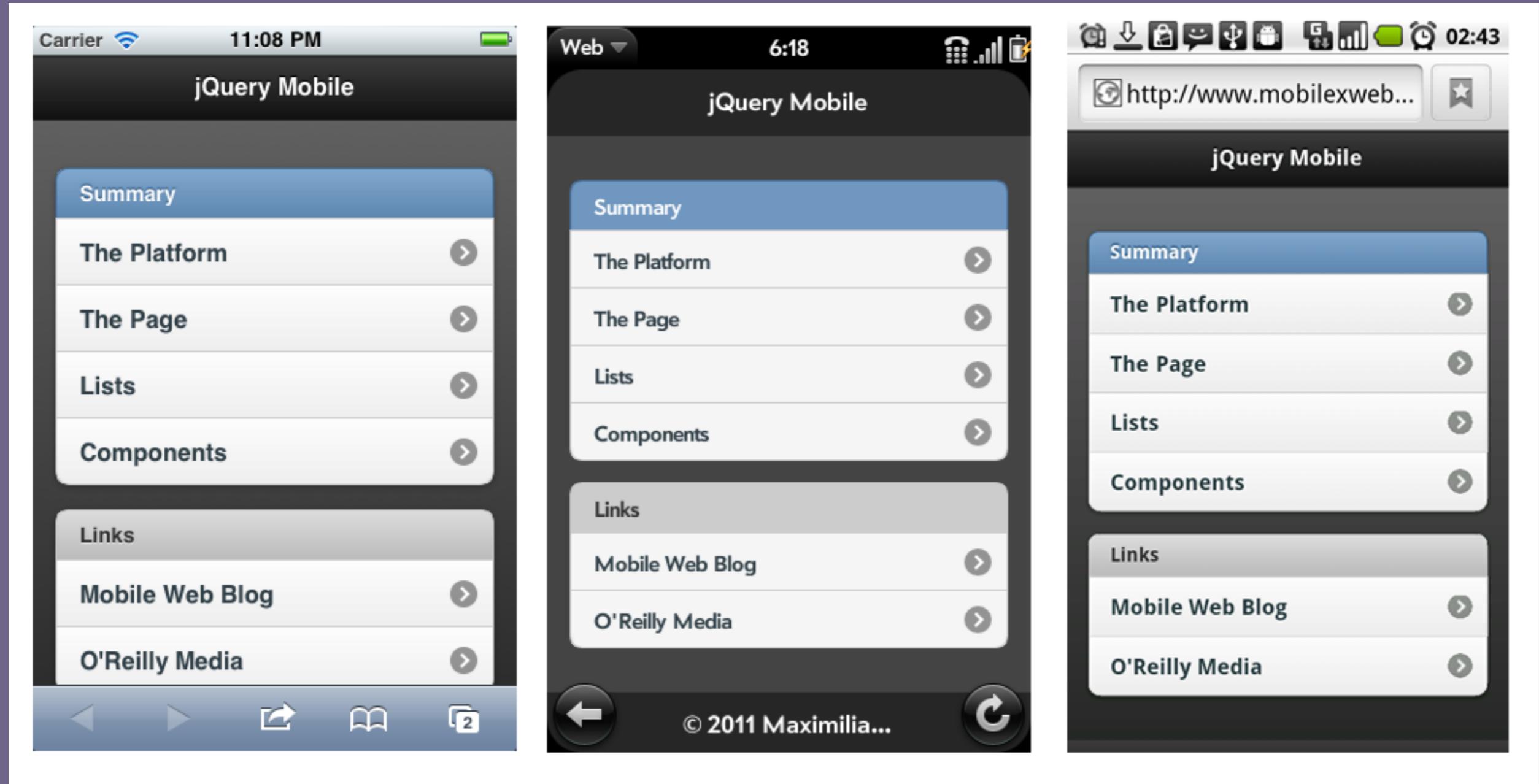
# you don't need to know

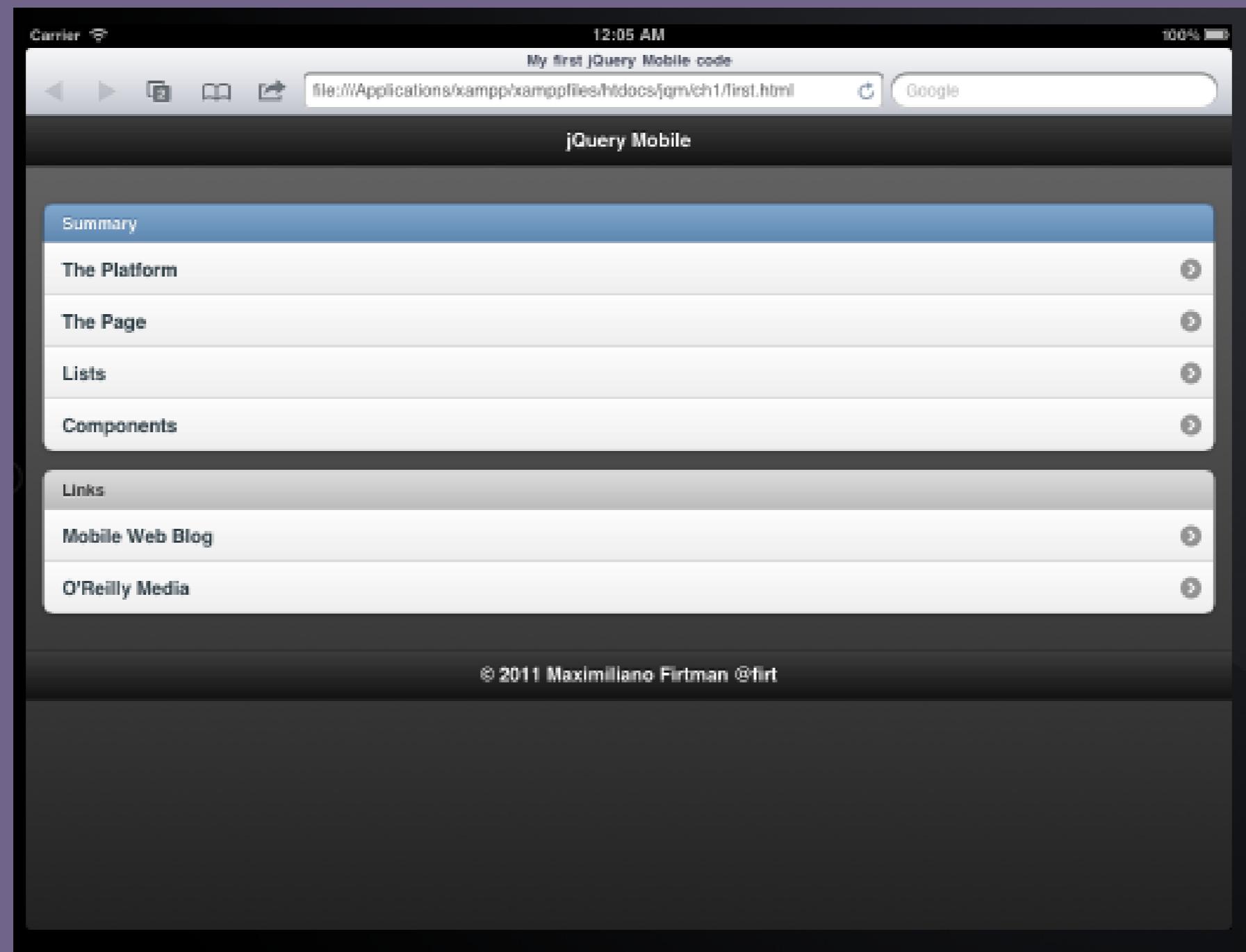
- ▶ html5
- ▶ css 3
- ▶ javascript
- ▶ jQuery

# you don't need to know

- ▶ html5
- ▶ css 3
- ▶ javascript
- ▶ jQuery

but... you should :)





# what do we need?

# what do we need?

# what do we need?

- ▶ a text editor

# what do we need?

- ▶ a text editor
- ▶ a browser

# what do we need?

- ▶ a text editor
- ▶ a browser
- ▶ and the framework?

# what do we need?

- ▶ a text editor
- ▶ a browser
- ▶ and the framework?
- ▶ and hybrid compilers?

# what do we need?

- ▶ a text editor
- ▶ a browser
- ▶ and the framework?
- ▶ and hybrid compilers?
- ▶ and emulators and simulators?

# what do we need?

- ▶ a text editor
- ▶ a browser
- ▶ and the framework?
- ▶ and hybrid compilers?
- ▶ and emulators and simulators?

[www.mobilexweb.com/emulators](http://www.mobilexweb.com/emulators)

# compatibility

1.0

# compatibility

# compatibility

- ▶ iOS
- ▶ Android
- ▶ BlackBerry >= 5.0
- ▶ Symbian touch
- ▶ HP webOS
- ▶ Windows Phone
- ▶ Opera Mini, Opera Mobile, Firefox
- ▶ Bada, Meego, Kindle 3+, ...
- ▶ Others?

# the framework

# the framework

# the framework

- ▶ a javascript file

# the framework

- ▶ a javascript file
- ▶ a css file and a group of images

# the framework

- ▶ a javascript file
- ▶ a css file and a group of images
- ▶ optionally, a structural-only css file

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- ▶ optionally, a structural-only css file
- ▶ self-hosted

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- 
- ▶ self-hosted
  - ▶ CDN - “stable” versions

# the framework

- ▶ a javascript file
  - ▶ a css file and a group of images
  - ▶ optionally, a structural-only css file
- 
- ▶ self-hosted
  - ▶ CDN - “stable” versions
  - ▶ CDN - latest versions

ThemeRoller | jQuery Mobile

jquerymobile.com/themeroller/

ThemeRoller For jQuery Mobile Download Theme Help Import Share

Global A B C +

**Swatch A**

**Header/Footer Bar**

TEXT COLOR #ffffff  
TEXT SHADOW 0 1px 1px #444444  
BACKGROUND #c1272d  
BORDER #c1272d

**Content Body**

LINK COLOR #2489CE  
TEXT COLOR #333333  
TEXT SHADOW 0 1px 0 #fff  
BACKGROUND #f0f0f0  
BORDER #B3B3B3

**Button: Normal**

TEXT COLOR #000000  
TEXT SHADOW 0 1px 1px #eeeeee  
BACKGROUND #ffffff  
BORDER #ffffff

**Button: Hover**

**Button: Pressed**

Inspector: On Off

Drag a color onto an element below or in the panel or pick one from the Adobe Kuler swatches

LIGHTNESS SATURATION

**A** **B** **C**

Sample text and [links](#).

List Header

Radio 1  
 Radio 2  
 Checkbox

On Off

Option 1

Text Input

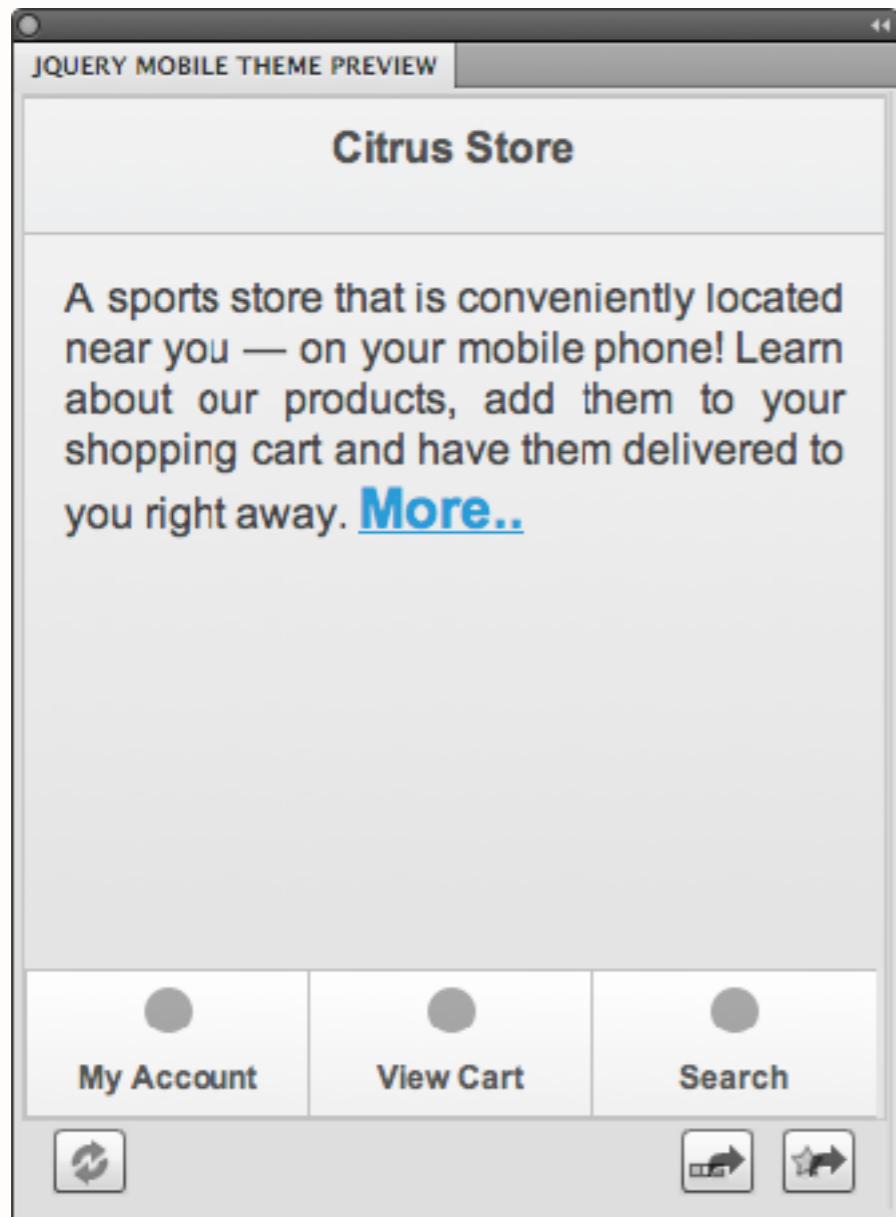
0

Button

Add swatch...

**jQuery mobile framework**

The screenshot shows the ThemeRoller interface for jQuery Mobile. On the left, there's a sidebar with sections for Header/Footer Bar, Content Body, and Buttons (Normal, Hover, Pressed). The Content Body section includes link and text color挑選器, text shadow, background, and border settings. The Buttons section includes text color, text shadow, background, and border settings. The main area has an 'Inspector' tab with 'On' and 'Off' buttons, a color palette, and lightness/saturation sliders. Three theme swatches are displayed: A (red header), B (green header), and C (orange header). Each swatch shows a sample page with a list header, radio buttons, checkboxes, a switch, a dropdown, a text input, and a button. A dashed box highlights the 'Add swatch...' button at the bottom.



# css3 mobile pack

[http://labs.adobe.com/technologies/fireworks\\_css3mobile/](http://labs.adobe.com/technologies/fireworks_css3mobile/)

AT&T 10:02 PM 29 %



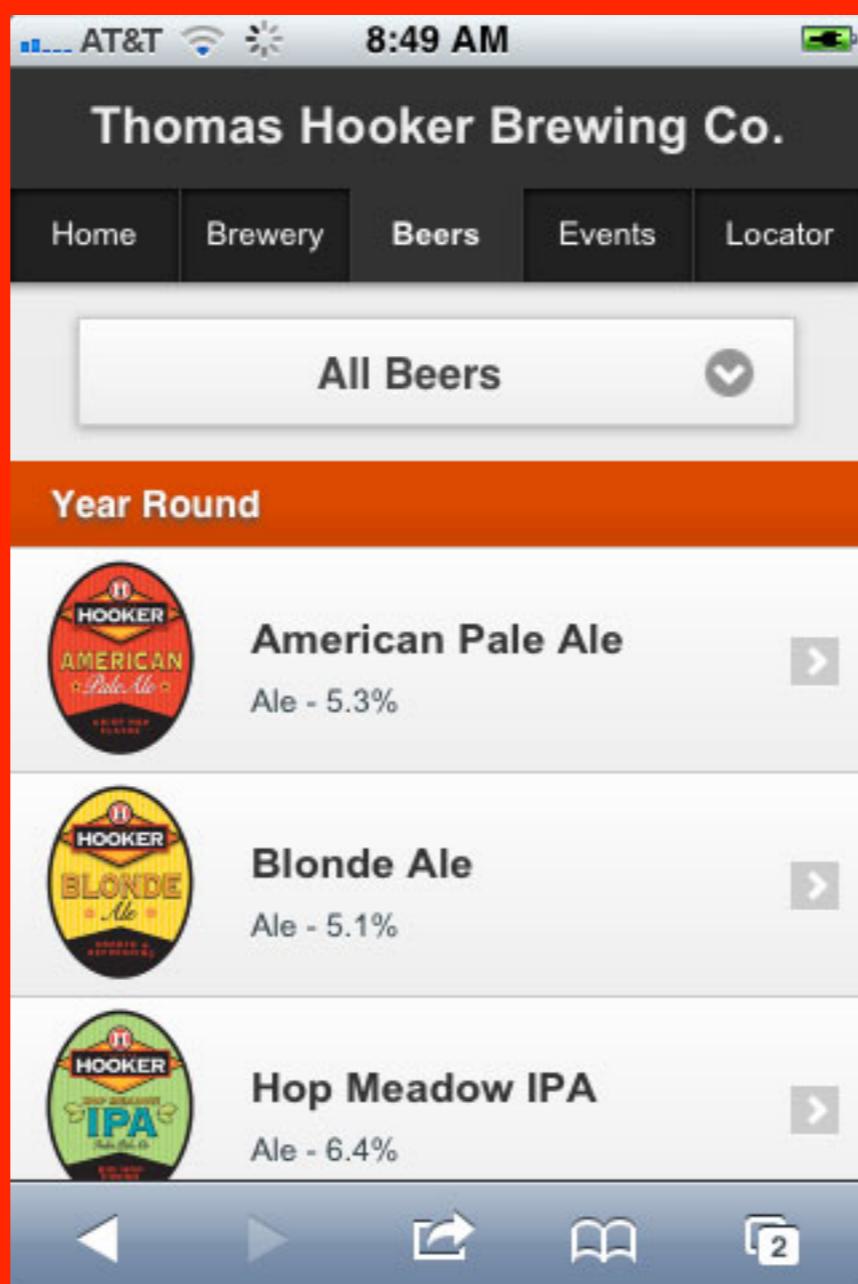
The VeeV Açaí Spirit website features a white background with a green leaf logo at the top. Below it is the slogan "a better way to drink." A bottle of VeeV spirit is shown on the left. A sidebar on the right lists "RECIPES", "FIND VEEV", "ABOUT", and "CONTACT". At the bottom, there's a Facebook like button with 34,900 likes.

V E E V<sup>®</sup>  
a better way to drink.  
**The World's First  
Açaí Spirit**

**RECIPES** >  
**FIND VEEV** >  
**ABOUT** >  
**CONTACT** >

VeeV Açaí Spirit on Facebook  
Like 34,900

AT&T 8:49 AM



The Thomas Hooker Brewing Co. website shows a navigation bar with "Home", "Brewery", "Beers", "Events", and "Locator". A dropdown menu for "All Beers" is open. The "Year Round" section displays three beer options: "American Pale Ale", "Blonde Ale", and "Hop Meadow IPA". Each entry includes a small image of the beer label and its alcohol percentage.

Thomas Hooker Brewing Co.

Home Brewery Beers Events Locator

All Beers

Year Round

**American Pale Ale**  
Ale - 5.3%

**Blonde Ale**  
Ale - 5.1%

**Hop Meadow IPA**  
Ale - 6.4%

AT&T 3G 9:04 AM 100 %



The analogia.it website has a light blue header with the logo and the text "Bem-Vindo à Analogia IT". The main content area features a green cartoon character holding a tablet. Below the character are four green rectangular buttons labeled "Agência", "Soluções", "Portfólio", and "Contato", each with a corresponding icon.

analogia.it

Bem-Vindo à Analogia IT

Agência

Soluções

Portfólio

Contato

AT&T 3G 1:42 PM 55 %

**STANFORD UNIVERSITY**

News  
Events  
Athletics  
Maps & Directions  
Contact Us  
Links

◀ ▶ ⌂ ⌂ ⌂ ⌂

This screenshot shows the Stanford University mobile website. At the top, there's a banner with the university's name and a photo of its campus. Below the banner is a sidebar with links to News, Events, Athletics, Maps & Directions, Contact Us, and Links. The main content area features a large button labeled "STANFORD UNIVERSITY".

AT&T 3G 11:20 PM 37 %

Home - Undergraduate Admissions

**Undergraduate Admissions**  
Welcome to Carleton University's Undergraduate Admissions mobile website.

Programs  
How to Apply  
Scholarships & Bursaries  
Tours and Events  
CU Blogs  
News

◀ ▶ ⌂ ⌂ ⌂ ⌂

This screenshot shows the Carleton University Undergraduate Admissions mobile website. It has a red header with the page title. The main content includes a logo, a welcome message, and several navigation links: Programs, How to Apply, Scholarships & Bursaries, Tours and Events, CU Blogs, and News. A footer bar at the bottom contains navigation icons.

AT&T 3G 11:25 AM 87 %

**OpenTable®**

Make a Restaurant Reservation

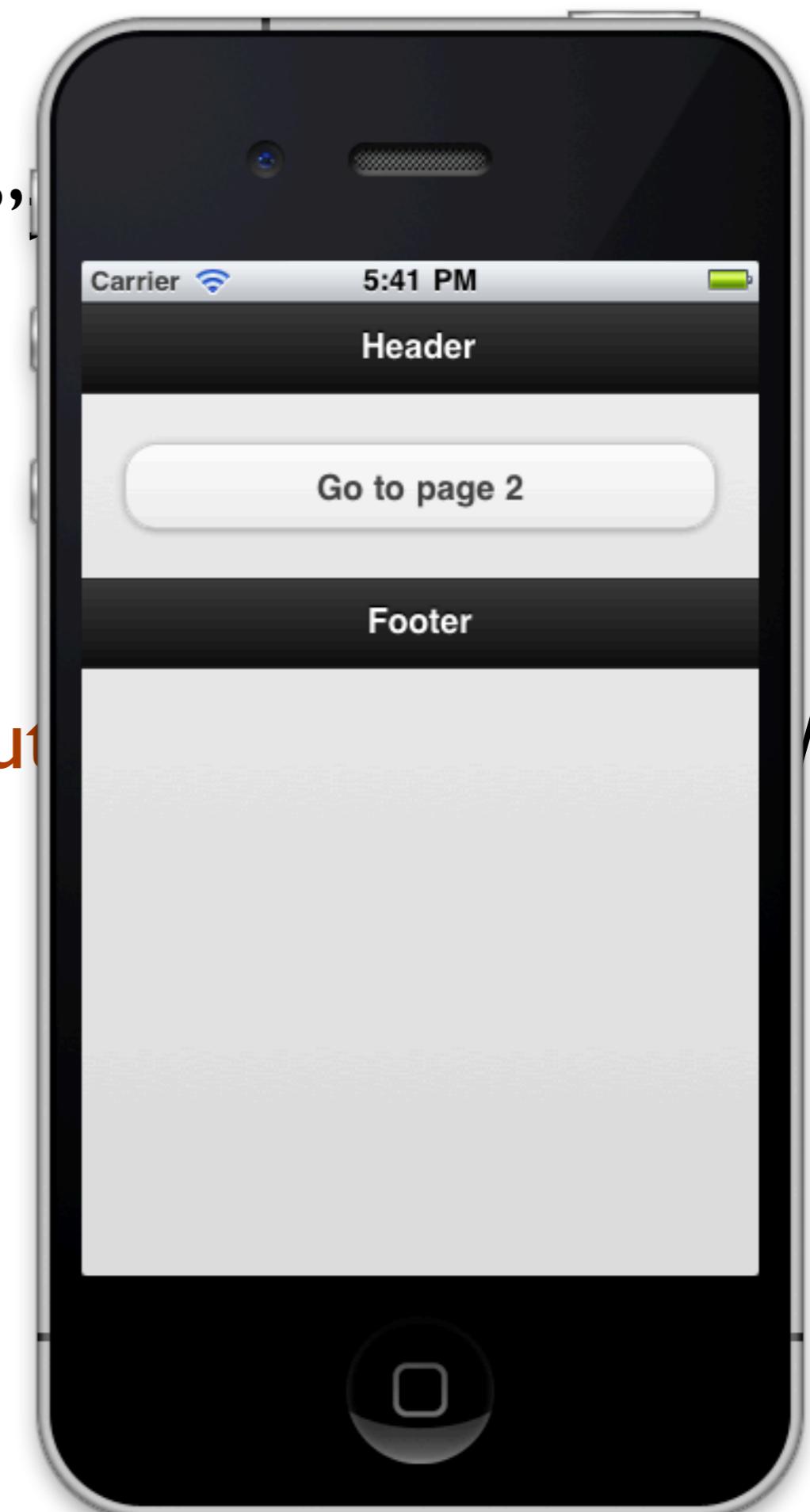
Nearby  
By Location  
By Name  
My OpenTable

◀ ▶ ⌂ ⌂ ⌂ ⌂

This screenshot shows the OpenTable mobile website. It features the OpenTable logo and a call-to-action button. Below it are four search options: Nearby (with a person icon), By Location (with a location pin icon), By Name (with a magnifying glass icon over a letter A), and My OpenTable (with a user profile icon). A footer bar at the bottom contains navigation icons.

```
<div data-role="page" id="page1">
  <div data-role="header">
    <h1>Header</h1>
  </div>
  <div data-role="content">
    <a href="#page2" data-role="button">Go to page 2</a>
  </div>
  <div data-role="footer">
    <h4>Footer</h4>
  </div>
</div>
```

```
<div data-role="page" id="page1">
  <div data-role="header">
    <h1>Header</h1>
  </div>
  <div data-role="content">
    <a href="#page2" data-role="button">Go to page 2</a>
  </div>
  <div data-role="footer">
    <h4>Footer</h4>
  </div>
</div>
```



```
<div data-role="content">
  <ul data-role="listview">
    <li>iPhone
    <li>Android
    <li>BlackBerry
    <li>Symbian
    <li>webOS
    <li>MeeGo
    <li>Bada
  </ul>
</div>
```

```
<div data-role="content">  
  <ul data-role="listview">  
    <li>iPhone  
    <li>Android  
    <li>BlackBerry  
    <li>Symbian  
    <li>webOS  
    <li>MeeGo  
    <li>Bada  
  </ul>  
</div>
```



```
<form>
  <label for="name">Name</label>
  <input id="name">

  <label for="chk">I accept</label>
  <input id="chk" type="checkbox">

  <label for="country">Country</label>
  <select id="country"></select>

</form>
```

```
<form>
  <label for="name">Name</label>
  <input id="name">

  <label for="chk">I accept</label>
  <input id="chk" type="checkbox">

  <label for="country">Country</label>
  <select id="country"></select>

</form>
```



# features

# features

- ▶ fixed toolbars

# features

- ▶ fixed toolbars
- ▶ “real” fixed toolbars for iOS 5

# features

- ▶ fixed toolbars
- ▶ “real” fixed toolbars for iOS 5
- ▶ list, content and form rich controls

# features

- ▶ fixed toolbars
- ▶ “real” fixed toolbars for iOS 5
- ▶ list, content and form rich controls
- ▶ theming and color swatches

# features

- ▶ fixed toolbars
- ▶ “real” fixed toolbars for iOS 5
- ▶ list, content and form rich controls
- ▶ theming and color swatches
- ▶ transitions

# features

- ▶ fixed toolbars
- ▶ “real” fixed toolbars for iOS 5
- ▶ list, content and form rich controls
- ▶ theming and color swatches
- ▶ transitions
- ▶ ajax



**slide**



**slideUp**



**slideDown**



**pop**



**fade**



**flip**



# advanced topics

# advanced topics

- › using javascript for loading content

# advanced topics

- › using javascript for loading content
- › theming and customization

# advanced topics

- › using javascript for loading content
- › theming and customization
- › styling for non-compatible devices

# advanced topics

- › using javascript for loading content
- › theming and customization
- › styling for non-compatible devices
- › javascript api & events

# advanced topics

- › using javascript for loading content
- › theming and customization
- › styling for non-compatible devices
- › javascript api & events
- › html5 (geolocation, offline storage, offline access, accelerometer)

# thanks!

firt.mobi  
twitter: @firt  
[mobilexweb.com](http://mobilexweb.com)

Pictures from freedigitalphotos.net