

Mobile JavaScript Development or HTML5 apps

Nikolai Onken - uxe bu Consulting Ltd. & Co. KG

Hi all

@nonken | @uxebu

the Ajax and JavaScript experts

WAGU

We open the mobile web

Agenda

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- Timetravel

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- Why mobile JavaScript development?

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- Tales of a mobile dev (EventNinja)

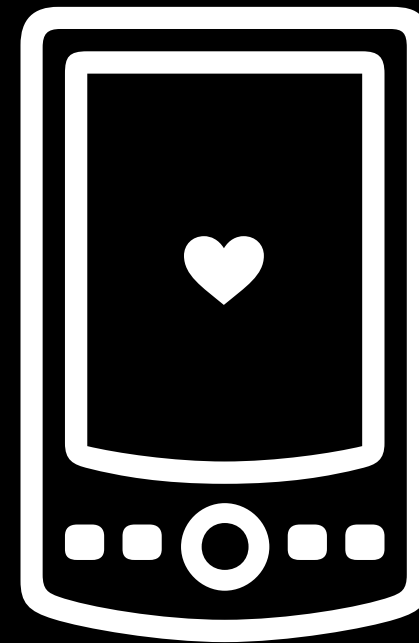
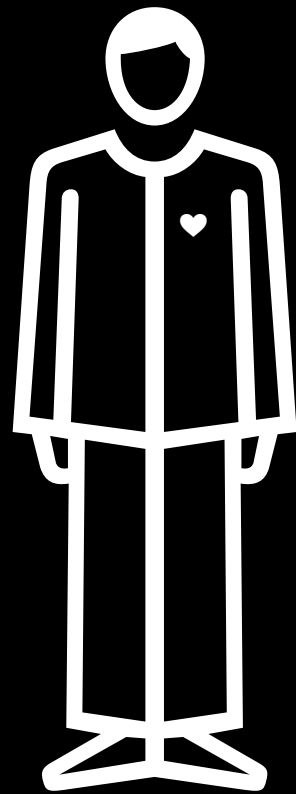
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- Tales of a mobile dev (EventNinja)
- Outlook

Experiment

An ECG written in JavaScript/HTML/CSS

Pulse check



HumanApi - <http://bit.ly/92lpyR>

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COL << 7

YAHOO! GeoCities

UNDER CONSTRUCTION

Archive Guestbook
 E-mail
 News/Blog
 E-Commerce
 About the Webmaster
 SPAMMING

xkcd
 <A HREF= webcomic of romance, sarcasm, math, and language.

GeoCities is shutting down today. To commemora

COMIC TITLE: Nachos

<BLINK> </BLINK>

HELLO? ... OH, HEY. LOOKING FOR MEGAN? SHE'S GAMING. I KNOW. YOU KNOW WHAT'S DELICIOUS? NACHOS.

WHEN YOU LAYER THE CHEESE SO IT GETS ON EVERY CHIP... THEN SMOTHER THEM IN SOUR CREAM AND SALSA...

MMM, THAT IS DELICIOUS. AND I'VE GOT THE INGREDIENTS, TOO! YOU SHOULD MAKE SOME! I WILL! HURRY.

BEEP BEEP WHIRRR

MY WIFI SIGNAL!

BOOM! HEADSHOT.





2010

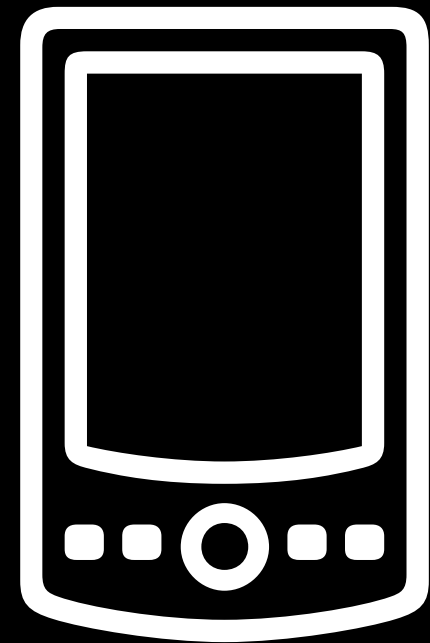
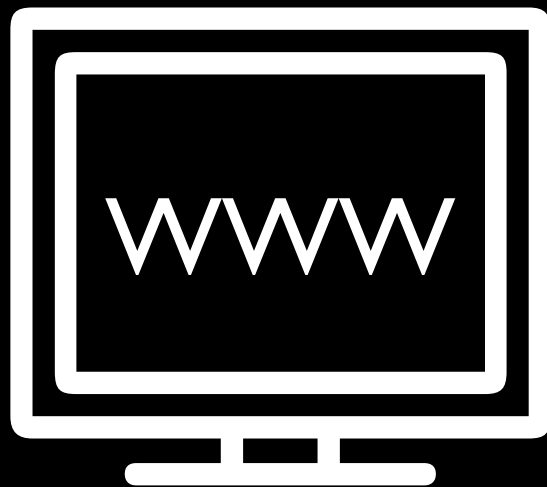
2010

- Eric Schmidt (CEO Google Inc.): “Mobile first”

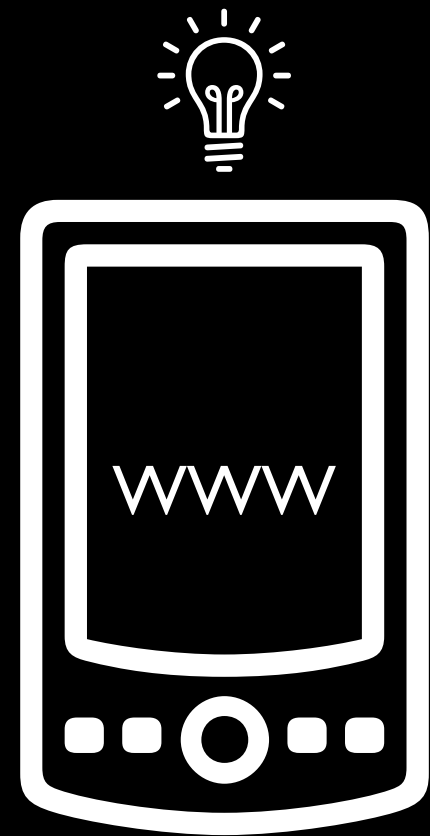
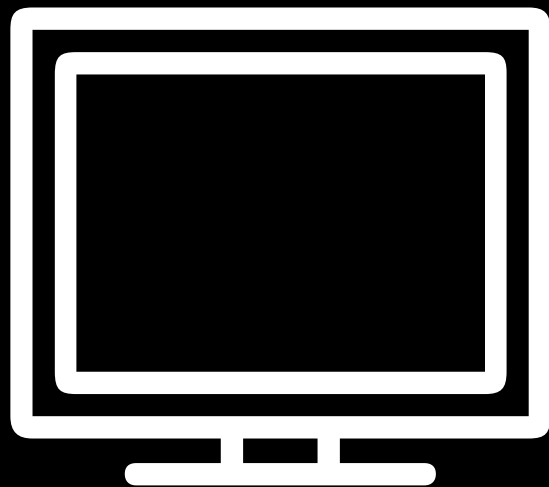
2010

- Eric Schmidt (CEO Google Inc.): “Mobile first”
- Steve Jobs (CEO Apple Inc.): “Apple is a mobile devices company.”

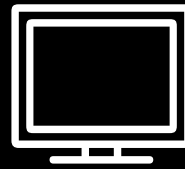
Mobile browsing?



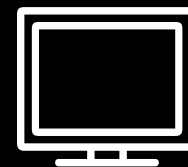
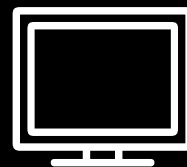
Mobile browsing?



The past



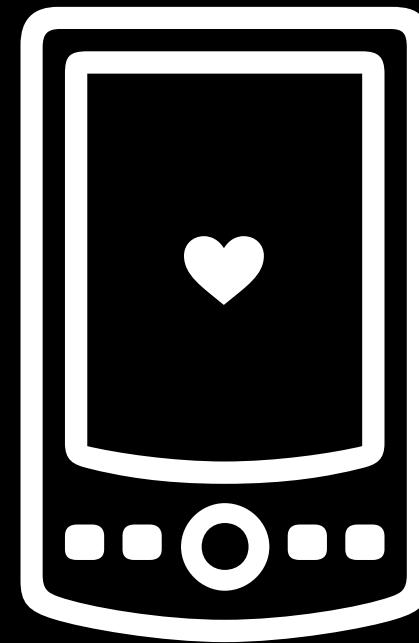
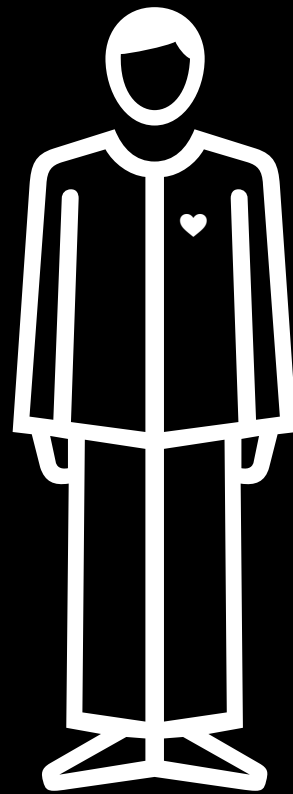
The future



Lets look at some very cool stuff

<http://bit.ly/bqvQIG>

Pulse check

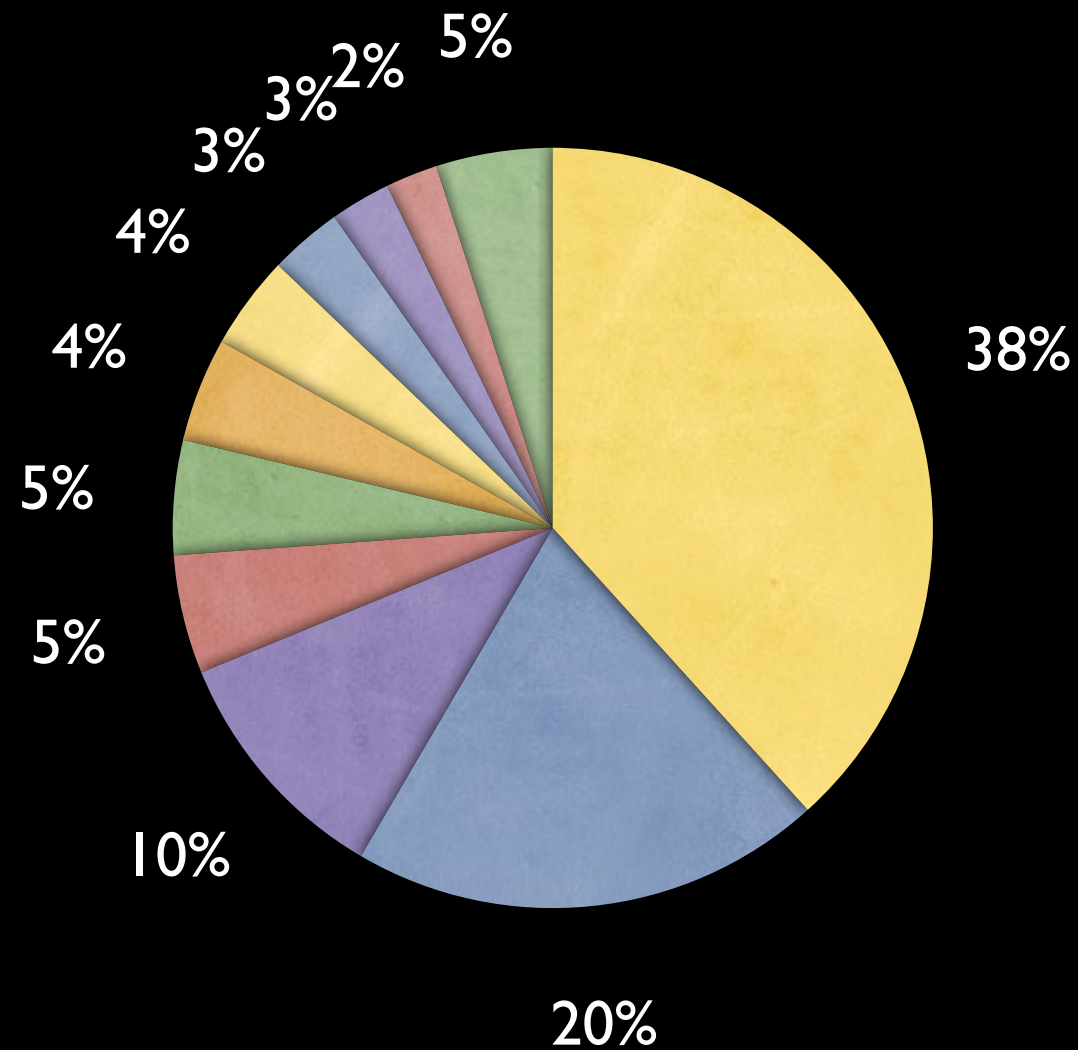


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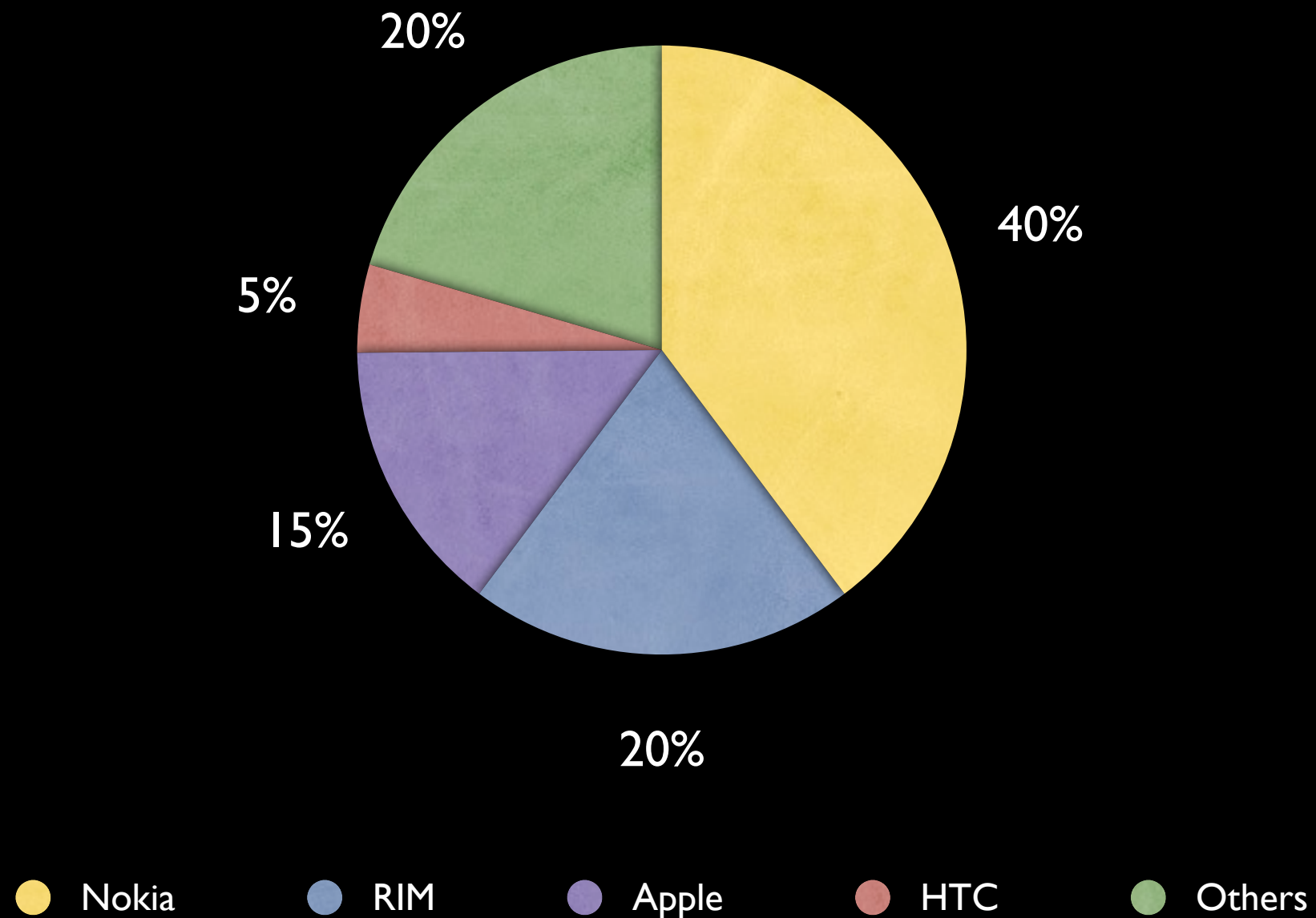
Mobile market



● Nokia ● Samsung ● LG ● Sony Ericsson ● Motorola ● ZTE
● Kyocera ● RIM ● Sharp ● Apple ● Other

<http://bit.ly/bPDn5b>

Smartphone market



<http://bit.ly/bPDn5b>

Is this our (developers) world?



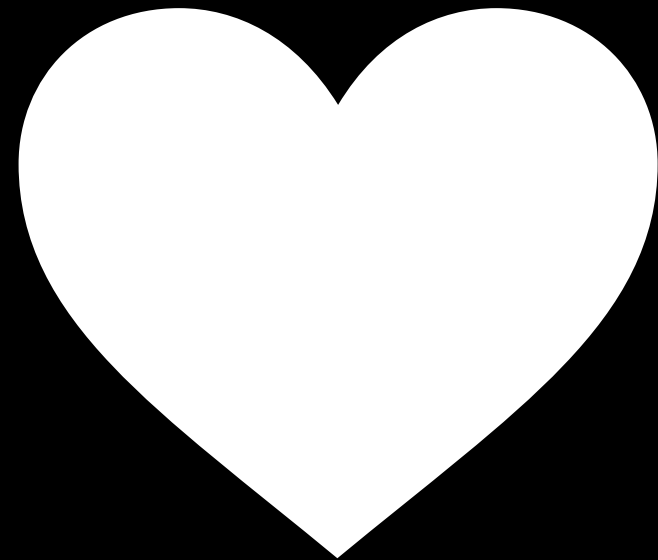
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2%

Seriously?

Are we happy with a 2% market share?

How open platforms really are

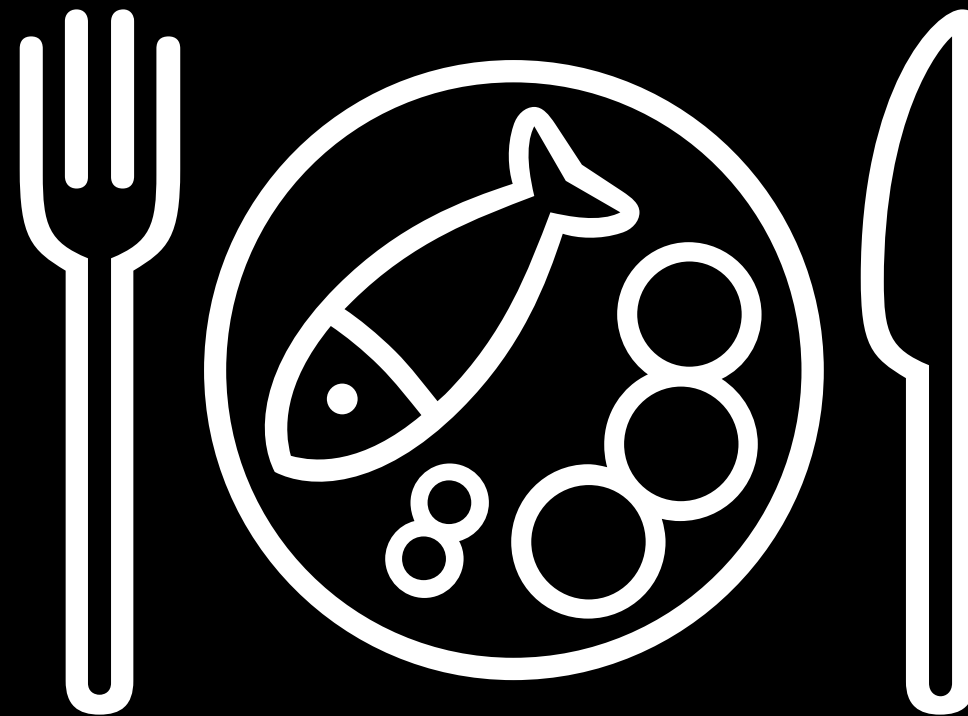


Reality check:

“you're prohibited from distributing it (the app) through competing app stores like Cydia or Rock Your Phone”

<http://bit.ly/dgmJvN>

Everybody wants his/her share



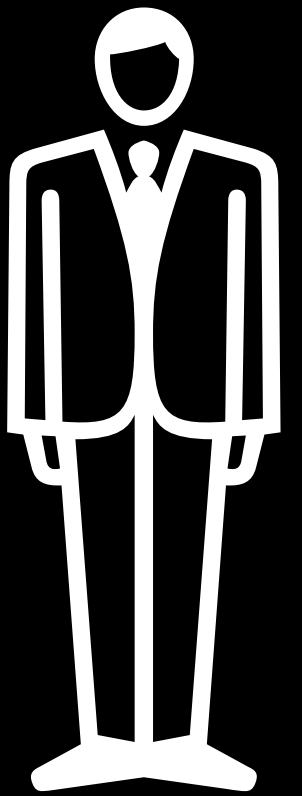
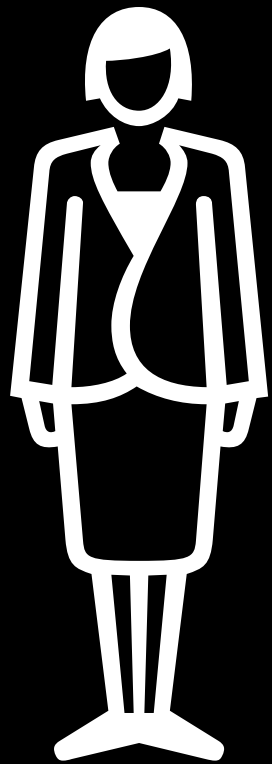
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Some things you actually don't
have to share, weird huh?

Showtime - a strong case for JavaScript

<http://yourappshop.com> - NSFW

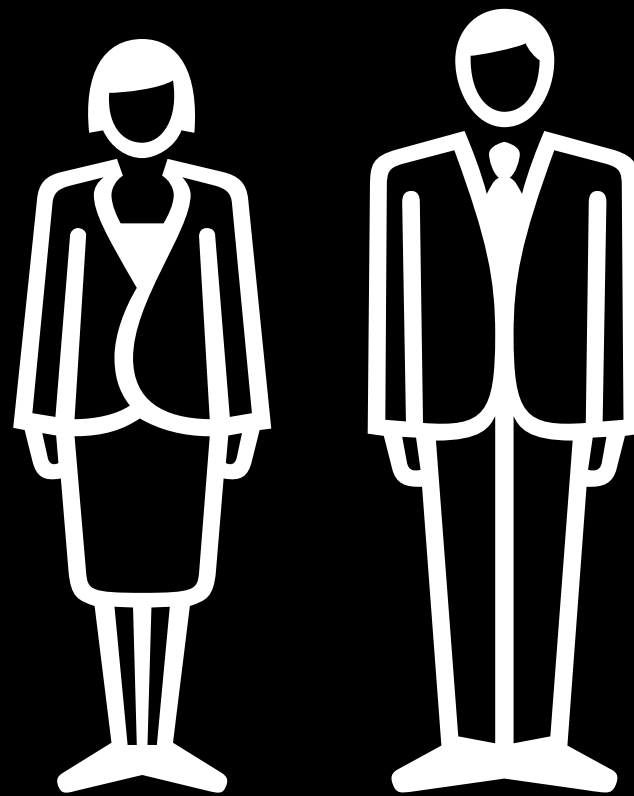
App store without Apple



What companies like Apple don't like

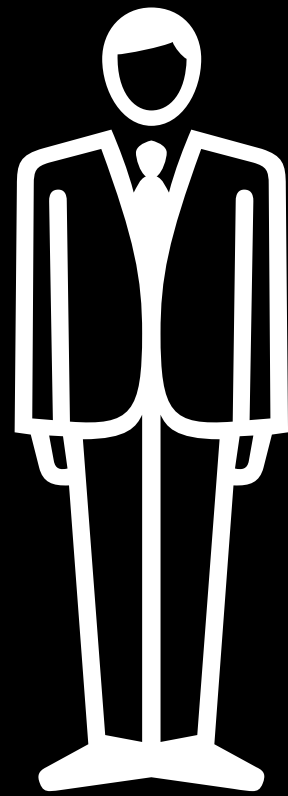


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Your Appshop facts

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- 12.000.000 downloads since december 2009

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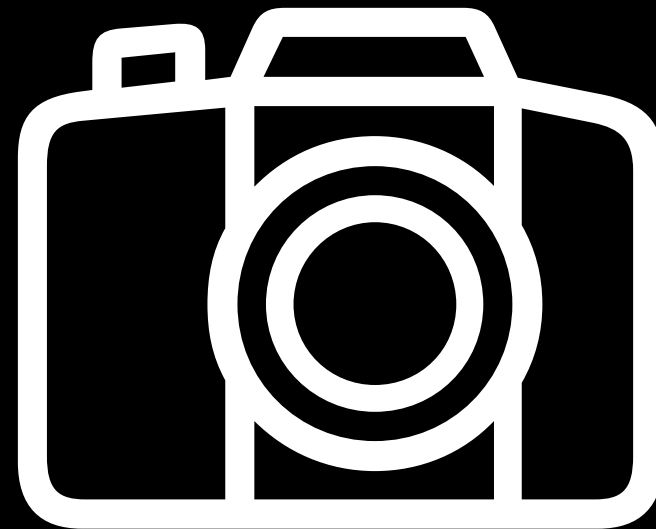
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Your Appshop facts

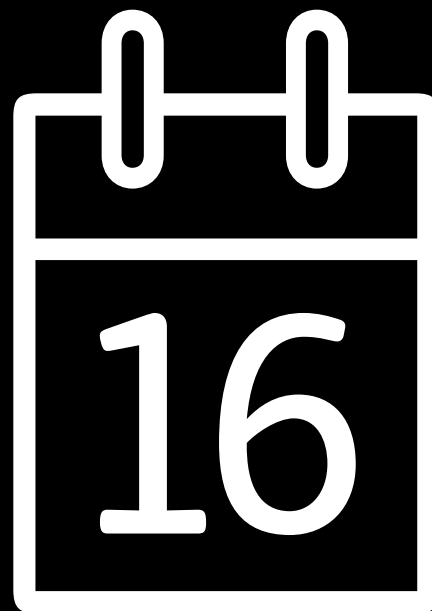
- 100% HTML5
- Apps work offline
- 12.000.000 downloads since december 2009
- Payment gateway
- It feels native

Device APIs

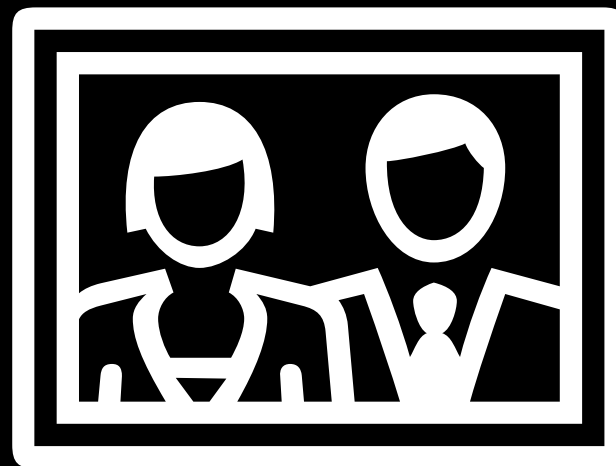
What else is happening in the mobile world?



Camera APIs (AR anyone?)



Calendar APIs

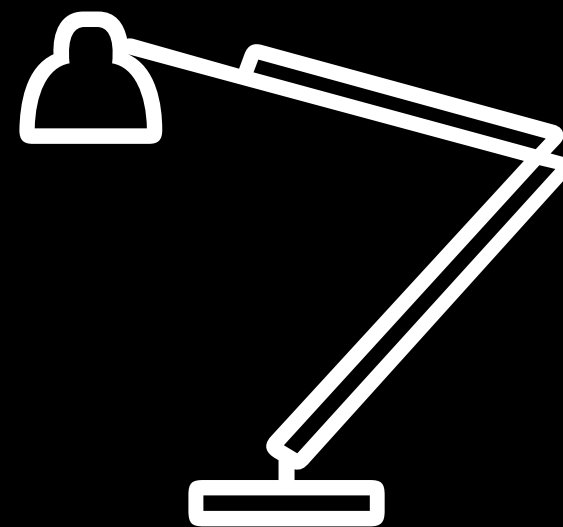
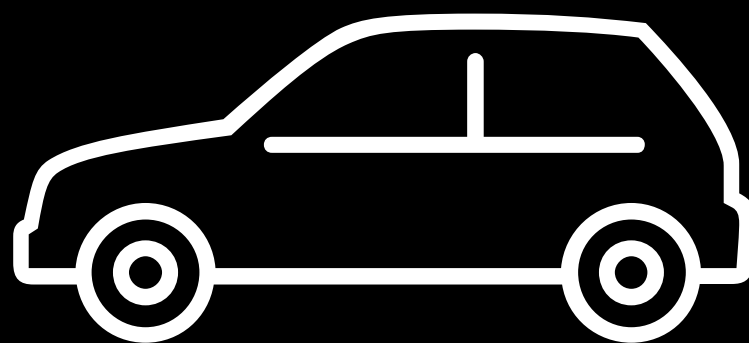
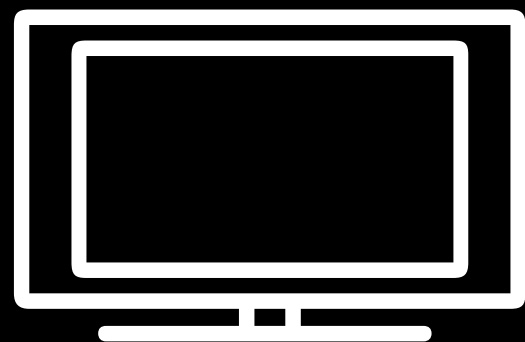


Access to local data

Payment integration



Payment integration



More device APIs

It's all in the works

It's all in the works

- JIL - <http://jil.org>

Vodafone, Verizon Wireless, China Mobile and Softbank Mobile (1.1 billion customers)

It's all in the works

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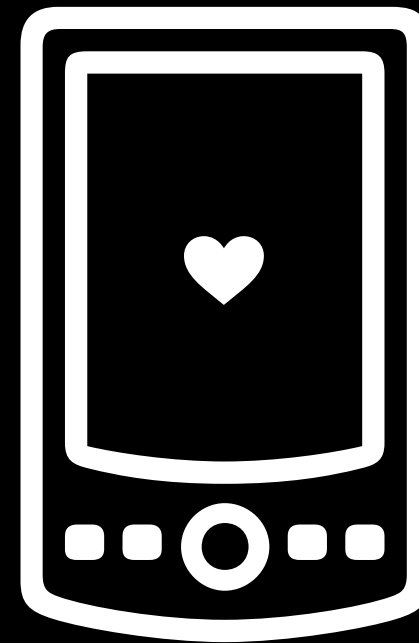
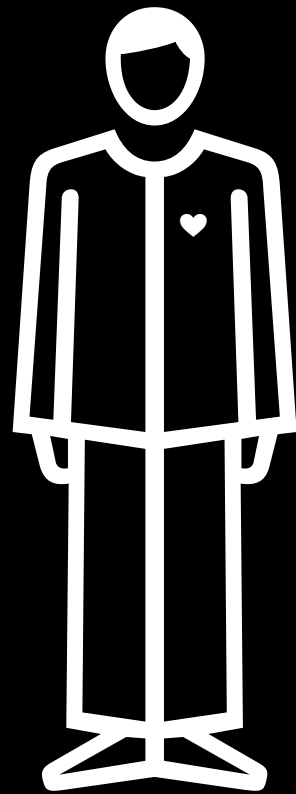
Vodafone, Verizon Wireless, China Mobile and Softbank Mobile (1.1 billion customers)

- BONDI - <http://bondi.omtp.org>

It's all in the works

- JIL - <http://jil.org>
Vodafone, Verizon Wireless, China Mobile and Softbank Mobile (1.1 billion customers)
- BONDI - <http://bondi.omtp.org>
- W3C (Device APIs) - <http://bit.ly/bdm4wv>

Pulse check



HumanApi - <http://bit.ly/92lpyR>

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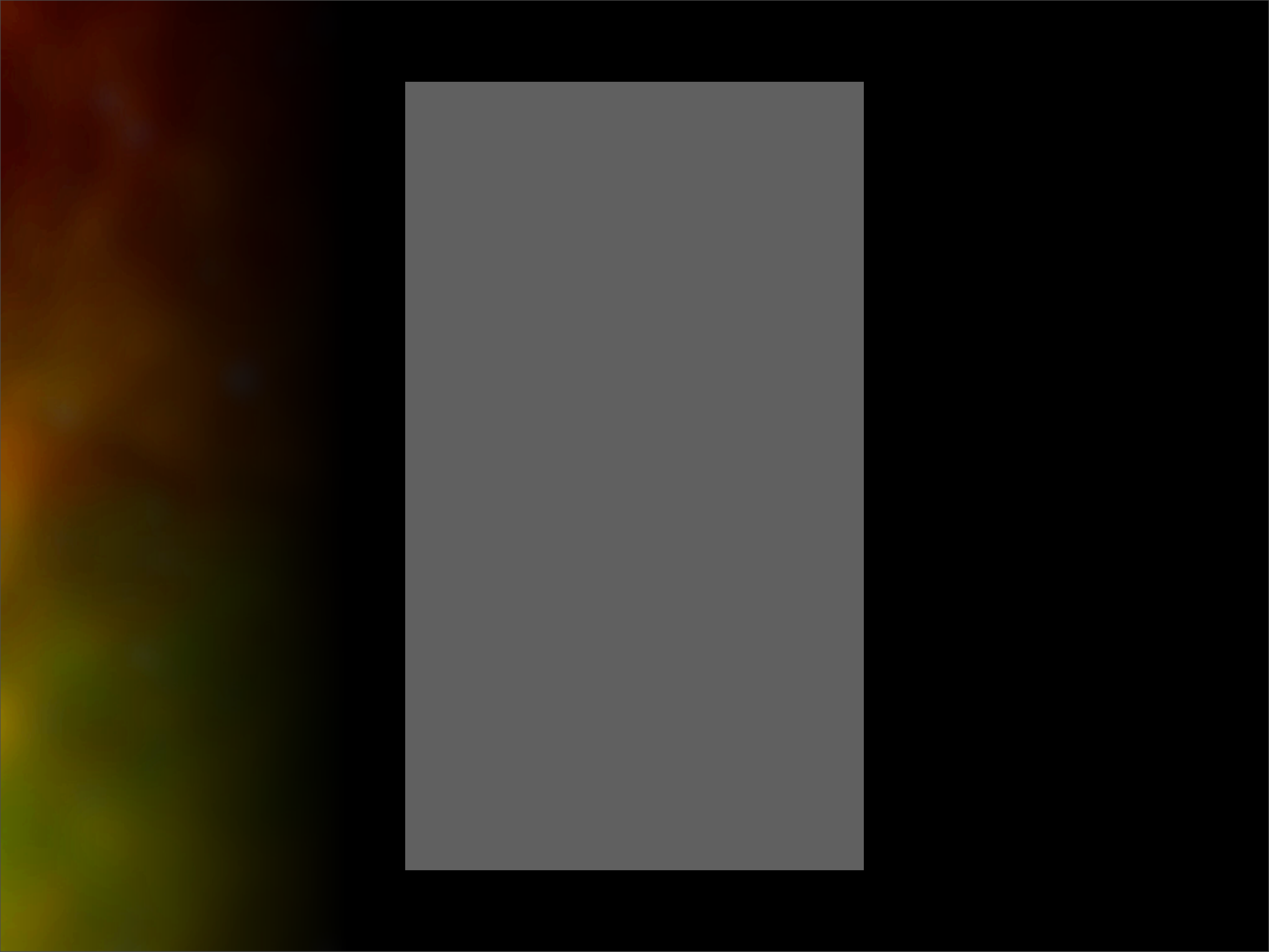
Tales of a mobile dev

EventNinja





<http://www.eventninja.net>





Mobile prototyping

The cloud

Google Calendar

What

When to ☒ All day

Repeats:

Where [map](#)

Calendar

Description









trainer: Dylan Schiemann, Nikolai Onken
price: 300 Euro (until 26th April), 395 Euro
tags: dojo, javascript, ajax, uxebu, sitepen

The architecture of EventNinja

Runtimes used

- PhoneGap (<http://phonegap.com>)
- W3C Widgets (Opera)
- (Others) Palm

Appstore coverage

	Apple AppStore	Android Market	Vodafone Store	Palm Catalog	OVI Store	Orange Application Shop	RIM Catalog	Windows Marketplace
								
Android G1		x				x		
Android HTC Hero		x				x		
Android HTC Magic		x				x		
Android Motorola Droid		x				x		
Android Nexus One		x				x		
iPhone 3G	x							
iPhone 3GS	x							
Nokia 5800 XpressMusic			x		x	x		
Nokia N97			x		x	x		
Vodafone360 H1			x					
Vodafone360 M1			x					
Palm Pre				x				
Palm Pixi				x				
Blackberry Storm2						x	x	
HTC Touch2						x		x
Number of tested devices	2	5	4	2	2	9	1	1
	x - approved and available in the store							
	x - submitted, still in the store's (QA) process							
	x - submitted, still in the store's (QA) process							
	x - approved and available in the store							
Number of tested devices	5	2	4	5	5	8	1	1
HTC Touch2						x		x
Blackberry Storm2						x	x	
Palm Pixi				x				

Dojo

Performance

Why performance?

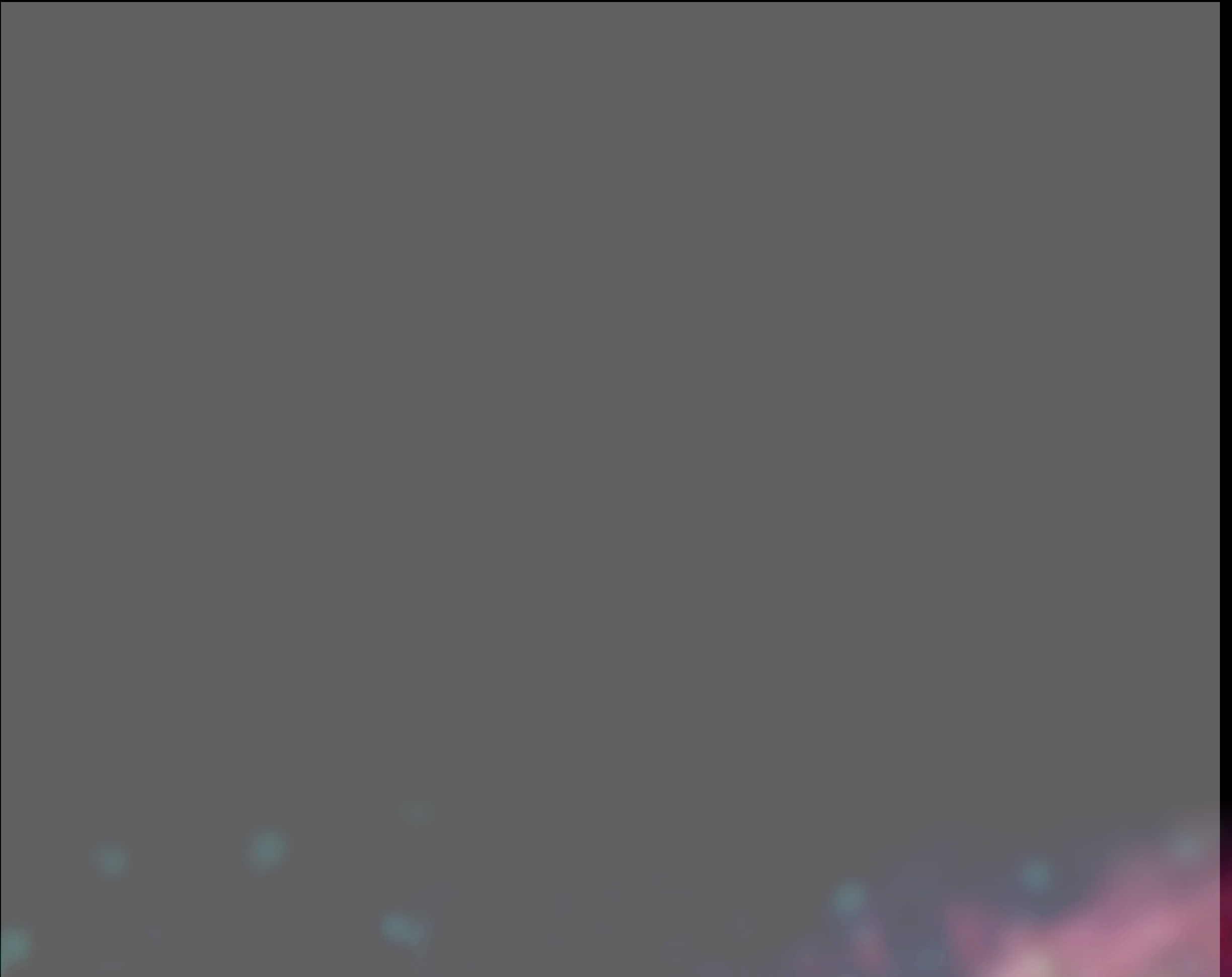
What we do has direct Impact!

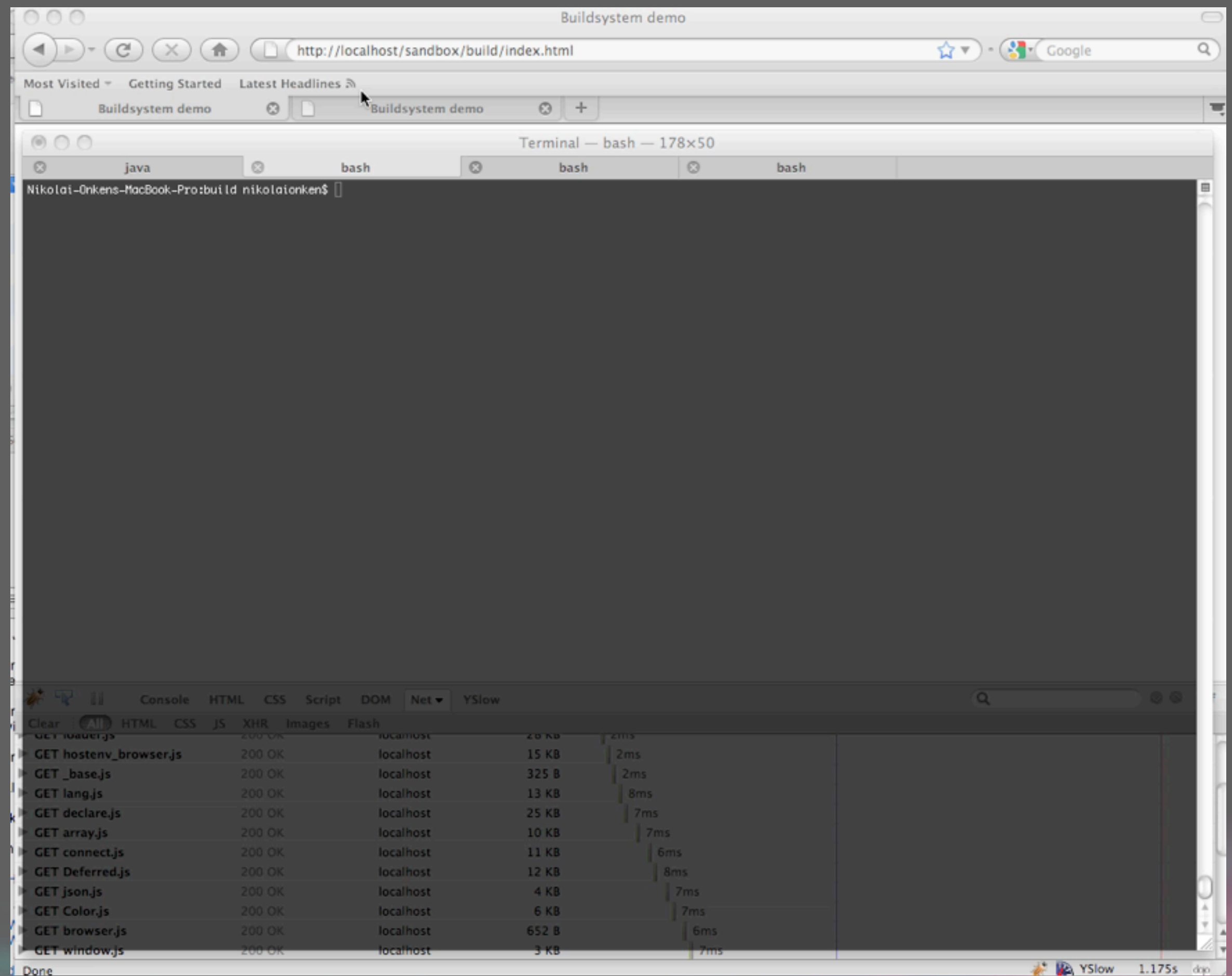
- Datavolume (Someone has to pay for it)
- Like or Dislike - mobile apps get thrown away very quickly

Dojo's toolchain

Dojos Buildsystem

- Minify and shrink JavaScript
- Build into single or several files
- Build and concatenate CSS
- Optimize images





Other Dojo goodness

Other Dojo goodness

- Class inheritance - `dojo.declare`

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- Powerful extendable query engine - `dojo.query`

Other Dojo goodness

- Class inheritance - `dojo.declare`
- Dojos event system - `dojo.connect`
- Powerful extendable query engine - `dojo.query`
- Much much more (See Dylans talk today)

But!

document.getElementById...

Don't forget about “real” JavaScript

What we have learned

Code simple!

Step back!

Especially if the desktop browser was your
runtime of the past

Semantics?

A short story



```
<ul>
```

```
  <li>Hi</li>
```

```
</ul>
```

```
<ul>
```

```
  <li>Hi</li>
```

```
</ul>
```

```
<ul>
```

```
  <li><a href="">Hi</a></li>
```

```
</ul>
```

```
<ul>
```

```
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```

```
</ul>
```

```
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```

```
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```

```
</ul>
```

```
<a href="">Hi</a>
```

IE anyone?

IE anyone?



IE anyone?

Do what your runtime
can do

Not more

Communications

Communications

- XMLHttpRequest?

Communications

- XMLHttpRequest?
- JSONP / JSON?

Look ahead

Look ahead
But don't implement
everything

Scaling and ppi

Be aware

Testing

The browser is your
friend

The browser is your friend

Really

The browser is your friend

Really
Really

The browser is your friend

Really

Really

Really

The browser is your friend

Really

Really

Really

Really

The browser is your friend

Really

Really

Really

Really

Really

Set headers... and steal



Send iPhone headers from within Firefox for example

Hmmmm, alert(“Hi”);

Automate

Create routines

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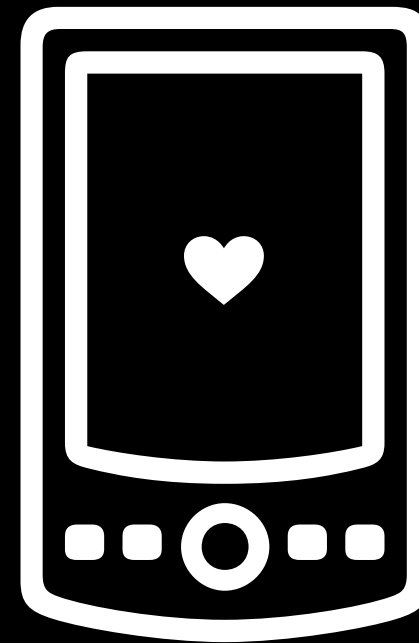
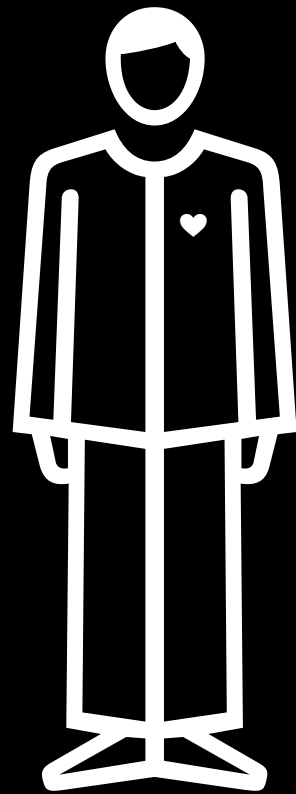
Better browsers

Faster devices

More market coverage

Richer device APIs

Pulse check



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Other advantages of mobile development



thx to @wolframkriesing for the link

Other advantages of mobile development



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Share your knowledge

Mobile JavaScript development is young

the Ajax and JavaScript experts

UAGebu

@nonken | @uxebu

@dojo | @dojocampus