Web apps for smart cities

Peter-Paul Koch
http://quirksmode.org
http://twitter.com/ppk
Apps for smart cities, 29 March 2012

data

data

data

data

data

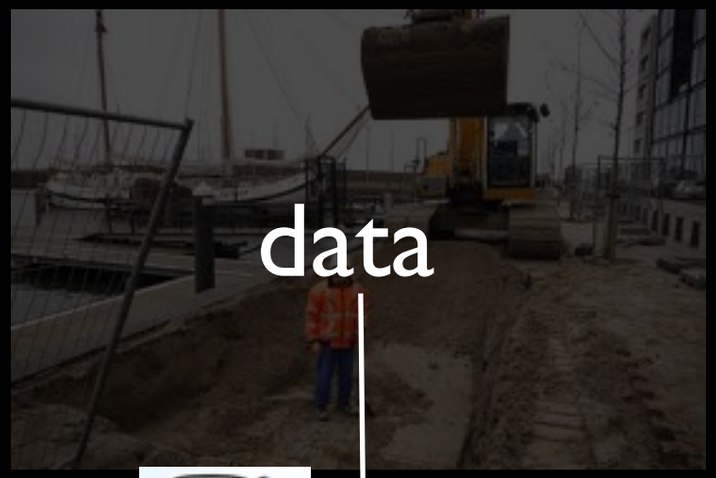
data

data

data

data

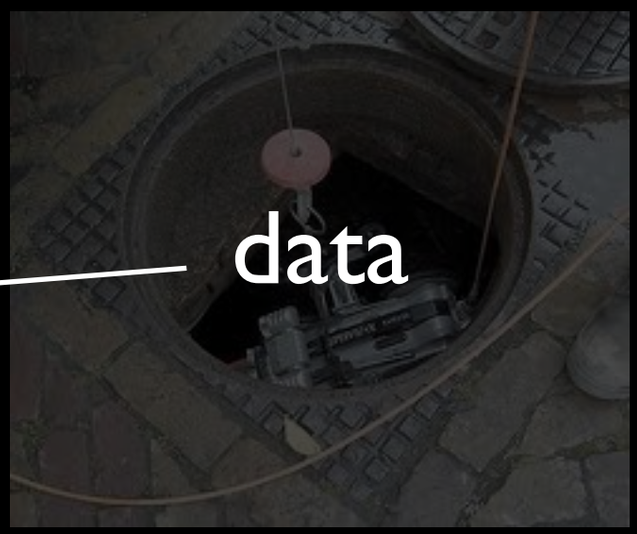
data



data

data

data



data

data

data

data

Native vs. web

Native vs. web

- It depends!
- There's room for both
- What we have to figure out is when native is better than web, and when web is better than native

Xphone II

Sony Ericsson
10:37
XPERIA

NOKIA
NOKIA

BlackBerry

Anycool

12:27 PM
SAMSUNG

htc
10 08

NAVER

MOTOROLA
18 THU NOV

NOKIA

Native vs. web

- It depends!
- There's room for both
- What we have to figure out is when native is better than web, and when web is better than native
- Web is clearly better in a diverse environment

symbian

HTML

Chrome Firefox Internet Explorer

Konqueror Opera Safari

webOS™

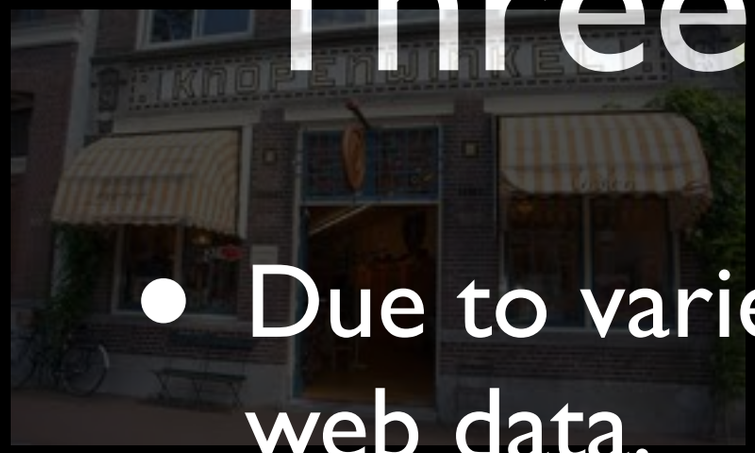
HTML5 apps

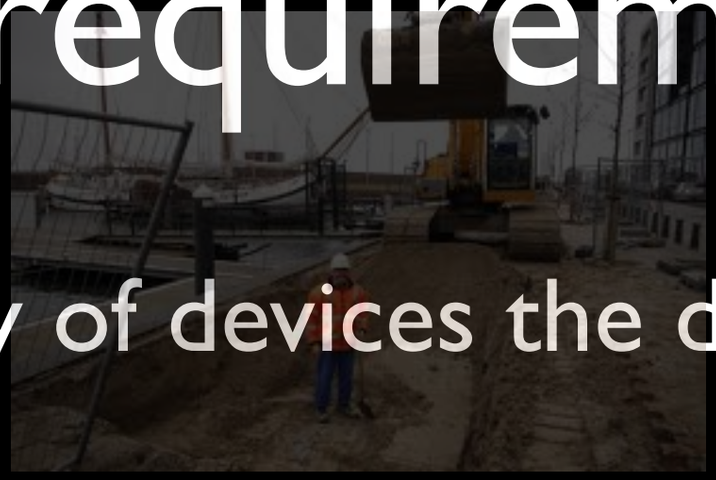
- One core application written with web technology
- Deployed to several mobile platforms, most likely by using PhoneGap (http://phonegap.com)
- If it can't be deployed it's still a website

HTML5 app or site?

- Apps are what everyone wants
- except the consumer, who doesn't want to download hundreds of them to interact with his city
- So websites make much more sense in a city environment
- Go there, look up what you need, and leave
- Phone won't be filled with hundreds of apps you used only once

Three requirements

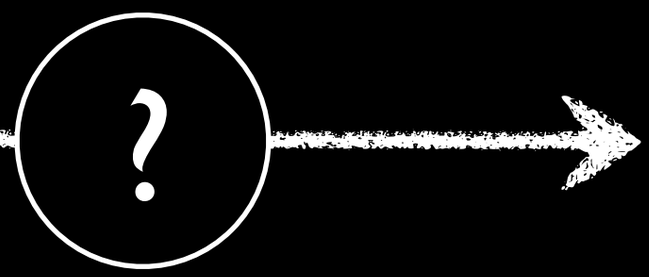




- Due to variety of devices the data must be web data.
- Devices must be able to retrieve web data via a peer-to-peer connection
- Devices must be alerted that data is available

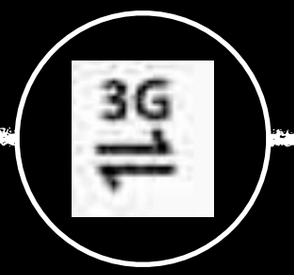
Extreme circumstances

How do we transfer data?



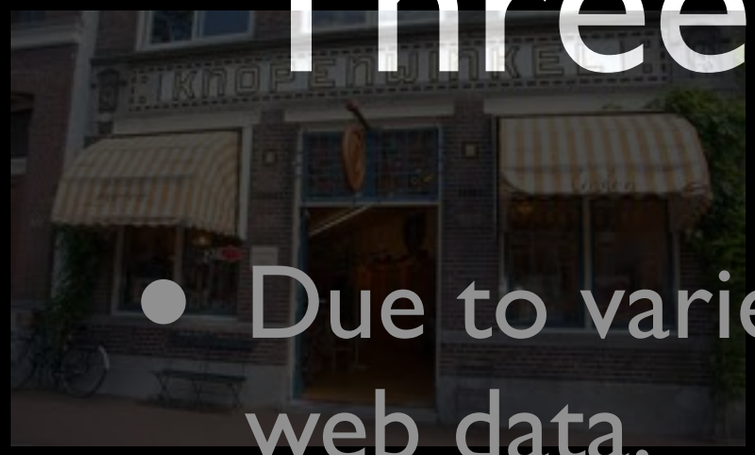
Wifi?
Not always available

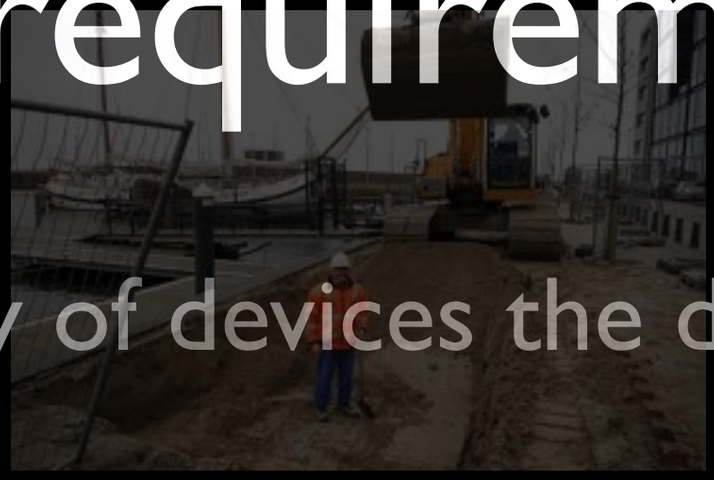
Data plan?
Possible, but expensive for some
and besides it takes a while to set up



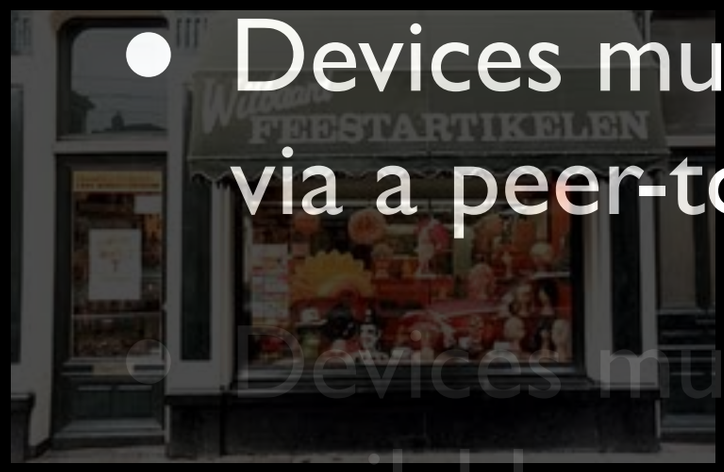
Bluetooth?
Seems the best choice
(Or any other peer-to-peer connection)

Three requirements





- Due to variety of devices the data must be web data.



- Devices must be able to retrieve web data via a peer-to-peer connection

- Devices must be alerted that data is available

please?

Do

you

me

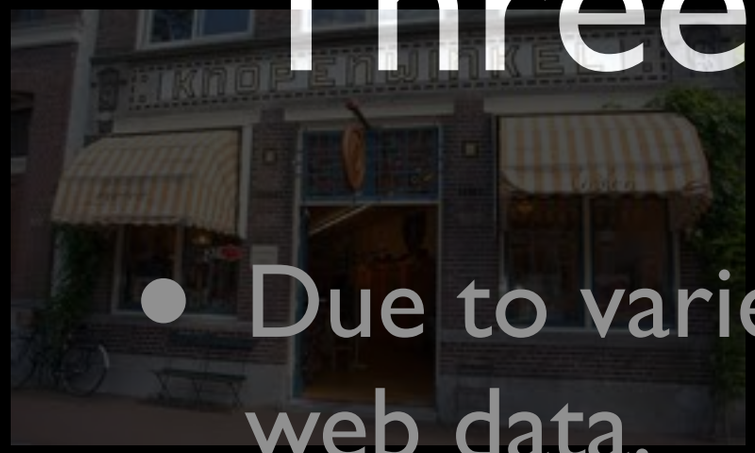
have

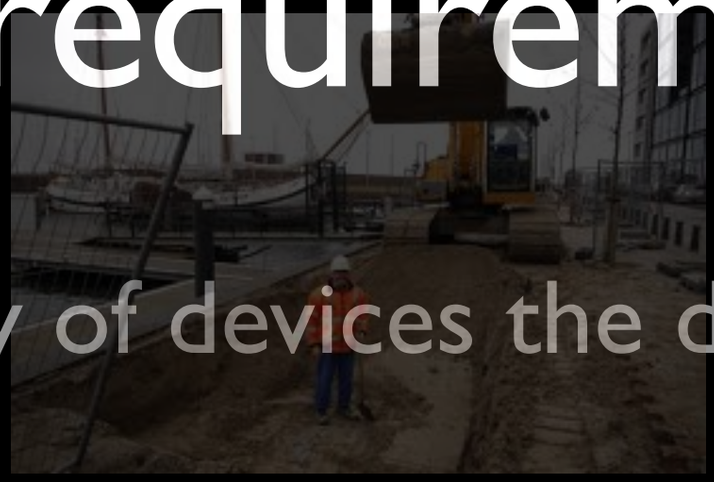
for

data

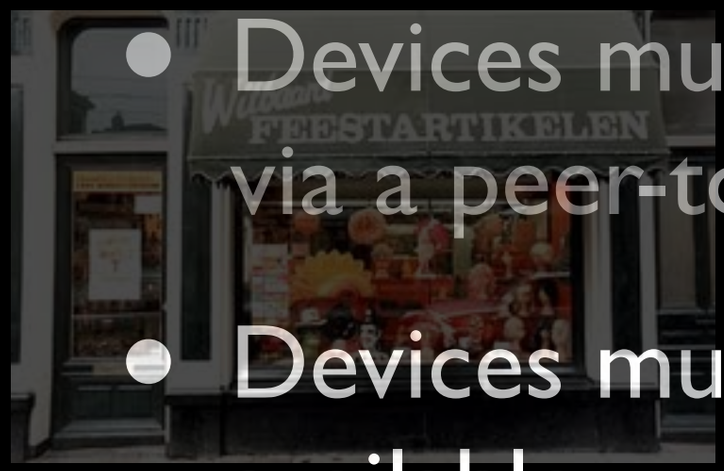
any

Three requirements

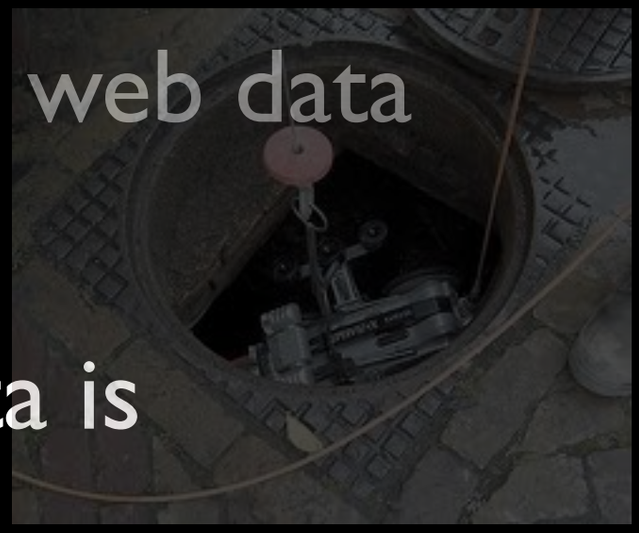




- Due to variety of devices the data must be web data.



- Devices must be able to retrieve web data via a peer-to-peer connection



- Devices must be alerted that data is available

Three requirements

- Due to variety of devices the data must be web data.
- Devices must be able to retrieve web data via a peer-to-peer connection
- Devices must be alerted that data is available

Three requirements

- Due to variety of devices the data must be web data.

This is no problem.

Just tell us what you want, and we'll build a website for you.

Three requirements

- Devices must be able to retrieve web data via a peer-to-peer connection

This is more of a problem.

Right now HTTP doesn't work over Bluetooth, NFC, or any other peer-to-peer connection.

There's no reason it wouldn't work, though. It just needs some care and attention.

Three requirements

- Devices must be alerted that data is available

This is the biggest problem of all.

The web is pull, not push.

And if we make it push,

spam will appear approximately 27 milliseconds later

Native after all?

Should we go native after all?

Native apps don't have instant solutions to our problems

And you have to write an iPhone app

and an Android app

and a BlackBerry app

and a Windows Phone app

etc. etc. etc.

and even then you're ignoring feature phones

Three requirements

- Due to variety of devices the data must be web data.
- Devices must be able to retrieve web data via a peer-to-peer connection
- Devices must be alerted that data is available

Thank you

I'll put these slides online

Questions?

Peter-Paul Koch
http://quirksmode.org
http://twitter.com/ppk
Apps for smart cities, 29 March 2012