

# Mobile AJAX

short version

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web applications on (mobile) devices

# What is Mobile AJAX?

- == desktop AJAX, but in an aspect
- AJAX on the Mobile Web
- Mobile AJAX != Mobile Web 2.0
- “disruptive power” (Ajit Jaokar)
- J2ME / installable applications competition



# Why is it important?

- mobile web = huge market
- data plans get cheaper
- 1/4 of the iPhone is web access
- mobile phones are not the only devices

# What is it good for?

- better response times
- smaller traffic
- application-like feeling
- usability in general (scrolling)
- different use cases than on desktop



# What are the problems?

- lacking support in browsers
- target browsers?
- power drainage
- JS framework usage

# Browser Support

- Opera Mobile (not Opera mini)
- IE Mobile (Windows Mobile 2003, 5.0)
- Nokia S60 3rd (MiniMap)
- OpenWave ( $\geq$  Mercury)
- Netfront ( $\geq$  3.4)
- Minimo (Mozilla)
- ...



# Best Practices

- core method == desktop browsers
- AJAX is just a tool of many
- tool chain requires Windows
- extensive testing

# Best Practices

- go for your lowest common denominator
- simple, clean, semantically correct markup
- no CSS
- no JS



# Best Practices

- ...then inject whatever you want
- "graceful degradation" / robustness
- "unobtrusive JS" / layout vs. behavior
- “progressive enhancement”  
== Hixie == Behaviour etc.

# Best Practices

- avoid "looping" JS
- saves CPU cycles / power
- JS "on demand"
- trade-off: comfort vs. runtime



# Best Practices

- AJAX or AJAH  
either send XML or HTML
- XML: DOM manipulation == high CPU load
- HTML: pre-built on server, then send it
- web service access: wrap on server
- trade-off: traffic vs. CPU load

# Best Practices

- use AJAX where appropriate
- use AJAX where it makes sense
- don't use AJAX for the sake of it
- the bigger the page the better!  
...it is to use AJAX to load parts (scrolling)



# Best Practices

- detect phone/browser or not?
- lowest common denominator is too small
- true universality is hard
- detection is hard too
- WURFL / UAProfile

# Thanks, Q/A

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