

HTML5: The Making of the Modern Web Platform

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Where are we now?

The Web is 20 years old.

We are still in the very early years of the Web.

We are building a platform for the future.

This platform will remain a core part of the worlds of your children and your children's children.

We call this platform the Open Web Platform.

For convenience, we currently sometimes call this platform "HTML5".

"HTML5" is mostly about adding new programming features to the platform. The Web Platform is a runtime environment for Web applications.

The HTML5 work is about exposing more device features to Web applications.

Progress report?

What really matters?

New browser technologies
Implementation
Deployment
Interoperability

We currently have more than 50 specs in development that define new browser technologies.

Some sites with more info about "Where we are now?"...

w3.org/Mobile/mobileweb-app-state/

w3.org/brief/Mjkw

platform.html5.org

html5please.com

caniuse.com

html5accessibility.com

Where's the excitement?

Mobile.

New(est) features for mobile

- Device orientation
- Media capture (webcam +mic)
- Proximity events
- Network information API

DeviceOrientation demo http://goo.gl/UVNEJ

Other mobile features

Geolocation
Battery status
Vibration API
Touch events



New(est) features for gaming

Web Audio
Fullscreen
Pointer lock
Touch events

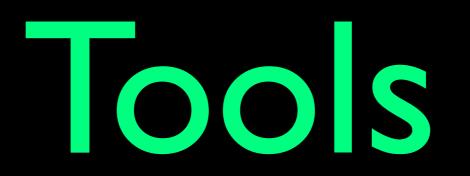
Other features for gaming

Device orientation
Screen orientation
Gamepad API
WebGL

Boring...

Boring to non-programmers

Web Workers
File API
Web Sockets
Typed Array



Better development tools. • Built-in browser Web-dev tools • Remote debugging for mobile • CodeMirror, Brackets, etc. • Adobe Edge Animate, etc. • Emscripten (C++ to JS) Flash-to-JavaScript (Swiffy)

Hot topics...

Hot topics

Adaptive streaming and DRM
Responsive images
Fixing HTML5 appcache
WebRTC and Web Audio
Indexed Database

Adaptive streaming and DRM...

Media Source Exts.: Allows JavaScript to generate media streams for playback; facilitates adaptive streaming and time shifting live streams. Encrypted Media Exts: Enables playback of protected content; that is, decryption using license/key exchange.

Responsive images

- o vs <picture>/<source>
- o <picture> proposal came from community
- Microsoft supporting <picture> proposal
- Other browser vendors like srcset better
- Convergence?

Fixing HTML5 appcache

- Facebook, Financial Times, others
- See Andrew Betts' writeup
- Web-platform work is iterative
- Deployment leads to refinements

WebRTC

A must-have, period.
Disagreement on API
No convergence yet :-(
Hard work to implement

Web Audio

A must-have for gaming
Disagreement on API
Convergence
Hard work to implement

Indexed Database

Convergence :-)
Complex to use :-(
Not in mobile yet.
Quotas...

The triumph of CSS...

The virtues of CSS

Declarative (vs procedural)
Make the easy things easy
Make the hard things easier
Turn designers into animators

The new rock stars of CSS

Transforms
Transitions
Animations
Filters, masks, more to come

You don't need to be a procedural programmer to make dynamic Web content.

The HTML WG is splitting the HTML spec into two branches:

HTML5 HTMLNext

HTML5

"Release" branch
Feature-frozen
Stable
Recommendation in 2014

HTML.Next

Development" branch Open to new features Unstable

The HTML WG will work on both branches in parallel.

New editors

• 4 new editors for HTML5 and HTML.Next

4 new editors from the Canvas 2D API spec
1 new "lead editor"

Increased resources

Funding from Adobe, Microsoft, Google
New editors
Move to Rec faster Thank you.

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