

***Internet
Society***



TM

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/mobile-web-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

Gaming

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

Tools

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

- `` vs `<picture>/<source>`
- `<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**
- **HTML.Next**

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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