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Surf’s Up: HTML Five-oh! (Part 1)

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By Michael Geraci

first of a two part series

HTML, the markup language used to create Web pages is getting close to an evolutionary threshold. If that sounds like an intentionally ambiguous way of saying “it’s about to be upgraded to a new version” then please bear with me, for not only is HTML slowly shedding its old skin and adding to its genetic profile, it’s going to be doing so for the next 13 years. That’s right; HTML 5 is coming to a Web browser near you in 2022 [1].

While the above statement is technically true, it fails to point out the fact that certain elements that are in the HTML 5 language can be implemented right now, assuming you’ve done your homework and are willing to accept some level of minor disappointment. The fact is that this upgrade can’t happen overnight, but we don’t have to wait until it’s “done” to begin using the parts of it that have begun to find their way onto the Web.

You see, upgrading HTML from its current version 4 status to the next iteration is a big deal and is nothing at all like installing the newest version of your tried and true software applications or operating system and here’s why:

1. A new version of HTML is going to bring with it all sorts of new page elements (tags) and APIs (functionality) that will have to be supported by all the major Web browsers to insure consistent user experiences with all Web content. There are five “major” Web browsers and according to Wikipedia about 65 others in circulation [2]. These will all have to be rewritten to render the new markup while being 100% backward compatible with every Web page in existence that is written in a previous version of HTML.

2. Older Web browsers, like Internet Explorer 6 and 7 that are still in use by 27% of Web surfing public (Yes, Mom, I’m talking to you!), need to be able to read and make sense out of pages written in the newest form of the language even if they don’t understand all the markup, otherwise the disincentive to adopt HTML is 5 is far greater than any advantages it may bring.
3. Every Web creation or Web savvy application, from site builders and content management systems to screen readers and other assistive technologies are going to have to be upgraded to understand all the new vocabulary in the language in order to be useful.

Another reason that upgrading HTML is infinitely tricky is a little harder to grasp. Unlike desktop software applications, no one industry or organization owns or has responsibility for the development of HTML. Nowhere was this more evident than during the first “browser war” [3] where Netscape and Microsoft fought for browser dominance by implementing their own versions of HTML that only worked in their products. An outcome from this dark period in Web history is the rise to prominence of the World Wide Web Consortium (W3C) which brought the myriad stakeholders together and pushed hard, along with the Web developer community, for a common set of standards by which sites could adhere to in order to render predictably on as many platforms as possible. The W3C does not create specifications as these are considered to be akin to “laws” in the software world, and the W3C does not pretend to have this authority over markup languages. Instead they make recommendations for markup languages and other associated technologies and, in the absence of real specifications, these hold a lot of weight in the Web development community.

It is the W3Cs involvement in the HTML 5 development that contributes to its pending availability as the standard for Web page markup, but not before almost leading to its demise.

When HTML 5 was proposed by a few of the major browser companies back in 2004 the W3C had no intention of working on it as they were focused on upgrading the current version of XHTML 1 that was quickly overshadowing the ten year-old HTML 4 standard as a more reliable and future-proof markup language. I realize that XHTML sounds a lot like HTML, but the addition of that X makes a world of difference. The languages are based on a different set of rules and are interpreted differently by browsers. In effect, we went from a very public browser war ten years ago to a somewhat low-key, and probably quite polite, language war in the more recent past. The good news: in 2007, the W3C joined with the WHATWG, the consortium developing the HTML 5 specification, and put XHTML 2 on the back burner, possibly forever [4]. With two very dedicated organizations carrying it forward, HTML 5 is quickly progressing to the point where Web developers can start to use it and end users may start to reap the benefits of the new language.

This newfound commitment to developing HTML 5 has yielded the following timeline [5]:

- **October 2007**: First W3C working draft. Translation: The W3C is saying “we’re on board, let’s develop an agreed upon draft version of the language and open it up to the community for comments and proposals.
- **October 2009**: Final call for the working draft Translation: no more comments or proposals will be accepted; it’s time to start finalizing the recommendation.
- **2011**: call for contributions to the test suite. Translation: the W3C doesn’t make anything, but browsers and the like have to be tested to insure they are fully compatible with the
new markup. The testing services that will be made available to Web applications
developers will essentially be in development until 2011 by various third party organizations
working through the W3C development protocols.

- **2012**: Candidate recommendation. *Translation: HTML 5 is available for implementation.*
- **2012 – 2019**: Test suite development. *Translation: Continue to create and test HTML 5
  aware applications and testing services for them.*
- **2020**: Last Call Working Draft. *Translation: Test suites for Web applications need to be
  finalized.*
- **2022 (after two years of testing)**: Proposed recommendation. *Translation: HTML5 is the
  official language of the Web and comes with some level of guarantee as to its
  interoperability and stability.*

Despite how official all that sounds, the fact remains that enough has already been developed in
HTML 5 that some of the major browsers have already started to support the more significant
enhancements made possible in the new version: most notably, support for audio and video on
Web pages without the need for third-party plug-ins. I realize that to most, this doesn’t appear
like an enhancement to our daily Web lives, but remember that we access audio and video
through the graces, and on-going maintenance of proprietary software from Adobe (Flash), Apple
(QuickTime), and Microsoft (Window’s Media, Silverlight), to name a few. HTML 5 treats audio
and video like it does text or images, it just works out of the box and Web page creators will be
able to add their own user interface elements (playback controls, for example) without the need
for authoring tools like Dreamweaver or Flash (some basic JavaScript will be required to create
custom controls).

As of this writing, Google Chrome and Apple’s Safari browsers have the most support for HTML
5 with Mozilla Firefox and Opera running just slightly behind. To be clear, these browsers are only
supporting a few of the dozens of enhancements promised under HTML 5, but each new update
brings further refinements and additions to the level of HTML 5 that’s possible.

Still wondering exactly why you should even care about HTML 5? Come back to this space in
the next edition of Interface and I’ll break it down for you, or if you can’t wait, check out the
WHATWG’s site.

See Part II

References:

[1] http://wiki.whatwg.org/wiki/FAQ#When_will_HTML5_be_finished.3F

Further reading on the development of HTML 5:
- W3C’s ongoing documentation site: http://dev.w3.org/html5/spec/Overview.html
- Preview of HTML 5 at A List Apart: http://www.alistapart.com/articles/previewofhtml5/

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