

HTML5

and related standards

Petr Kunc

Contents

- History
- HTML5
- CSS3
- JavaScript (Pavel Smolka)
- And more (if we have time)

History

- 1991 – HTML: 18 tags
- Direction towards SGML application
- , <marquee>, <blink>
- Arrival of DHTML: (late 90s)
- <http://www.angelfire.com/super/badwebs/>
- XHTML (is dead)
- HTML5

XHTML

- Strict rules
- Should solve inconsistency of handling errors
- XML advantages (interoperability, automatization, portability, extensibility)
- BUT nobody really needed it...
- Quirk modes!

XHTML2 and HTML5

- Even more strict
- Slow changes
- WHATWG – for developers

XHTML vs HTML5

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html;
charset=utf-8" />
<title>Title of the document</title>
</head>
<body>
<p>The content of the document.</p>
</body>
</html>
```

XHTML vs HTML5

```
<!DOCTYPE html>
```

```
<tiTLe>Title of the document</TitlE>
```

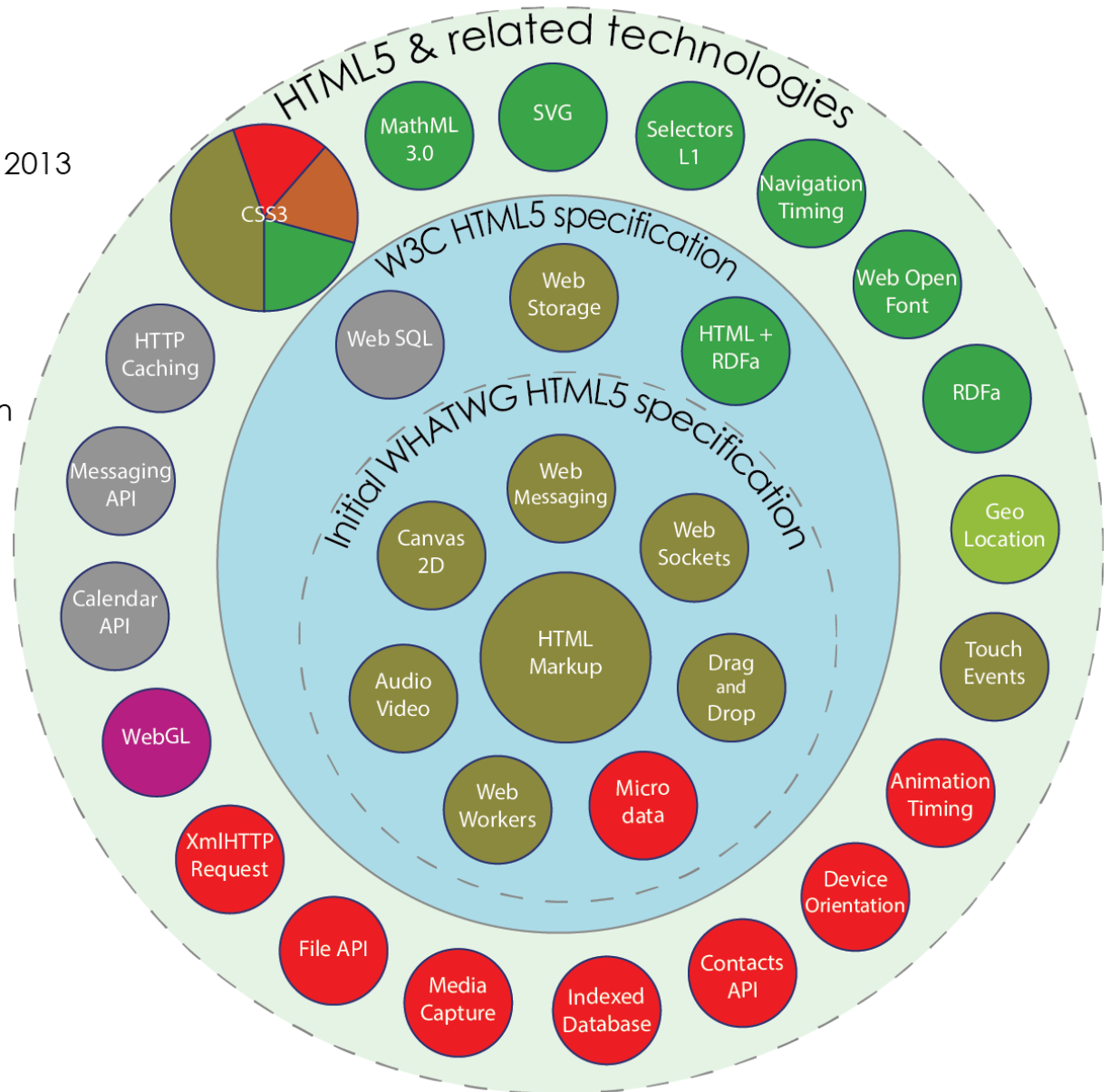
```
<meta charset=utf-8>
```

```
<p>The content of the document.
```

HTML5

Taxonomy & Status on January 20, 2013

- W3C Recommendation
- Proposed Recommendation
- Candidate Recommendation
- Last Call
- Working Draft
- Non-W3C Specifications
- Deprecated



Browser support

- <http://caniuse.com>
- Fallbacks
- Modernizr
- Polyfills

Semantic tags

- `<div>`, ``
- `<article>`, `<section>`, `<nav>`, `<header>`,
`<footer>`, ...
- `<figure>`, `<mark>`
- `<time>`, `<date>`
- `<output>`

Other semantics

- ARIA (roles)
- RDFa
- Microformats
- Snippets
- Inline SVGs!

Forms

- Placeholders
- Autofocus, Required
- Pattern
- Spellcheck, autocomplete, ...
- New types (email, url, tel, number, color, range, date, time, datalist) – great for mobiles
- contentEditable

Audio and Video

- Problems with formats
- Flash fallbacks

Canvas

- <http://wolf3d.atw.hu>
- Game APIs
- Collisions, ...
- Maybe next time ;)

CSS

- Triumvirate of web apps (HTML, CSS, JS)
- CSS – presentation
- CSS 2.1 – too long
- CSS 3 – modules (50, 4 core)
- Inline
- page does not have to look the same!

Horror of prefixes

- webkit-transform: rotate(1deg)//Safari+Chrome
- moz-transform: rotate(1deg)// FF 3.5-15
- ms-transform: rotate(1deg)// IE 9+
- o-transform: rotate(1deg)//Opera 10.5-12
- transform: rotate(1deg)// FF 16+, O >12

Media queries

- Linkage to type (screen, print)
- Max-width, Max-screen-width

```
@media (min-width: 400px) and (...) {  
  – Styles  
}
```

Web Fonts

- Format problems (ttf, otf, woff, svg, ...)
- @font-face

Formatting boxes

- Examples:
 - Ellipsis
 - Columns
 - Opacity
 - Corners
 - Gradients
 - Shadows
 - Reflection
 - Multiple backgrounds
 - Borders
 - Box model
 - Transitions
 - Transforms
 - Animating