

A CHRONICLE OF THE NEBULOUS

HTML5

extracted from the annals of history by Brandon Keepers, a.k.a. @bkeepers.



bkeepers

1. OVERVIEW

2. HISTORY

3. CHANGES

OVERVIEW

why is EVERYTHING called HTML5?!?

HTML5

|,eɪtʃˌtiˌɛmˈɛl fɪv |

noun *Computing*

Hyper Trendy Marketing Lingo v5

What is HTML5, really?

good question.

whatwg.org/html

HTML Standard

www.whatwg.org/specs/web-apps/current-work/multipage/Reader

HTML Standard

HTML

Living Standard — Last Updated 5 May 2013

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Quick links

Web developer edition:
<http://developers.whatwg.org/>

Multiple-page version:
<http://whatwg.org/html>

One-page version:
<http://whatwg.org/c>

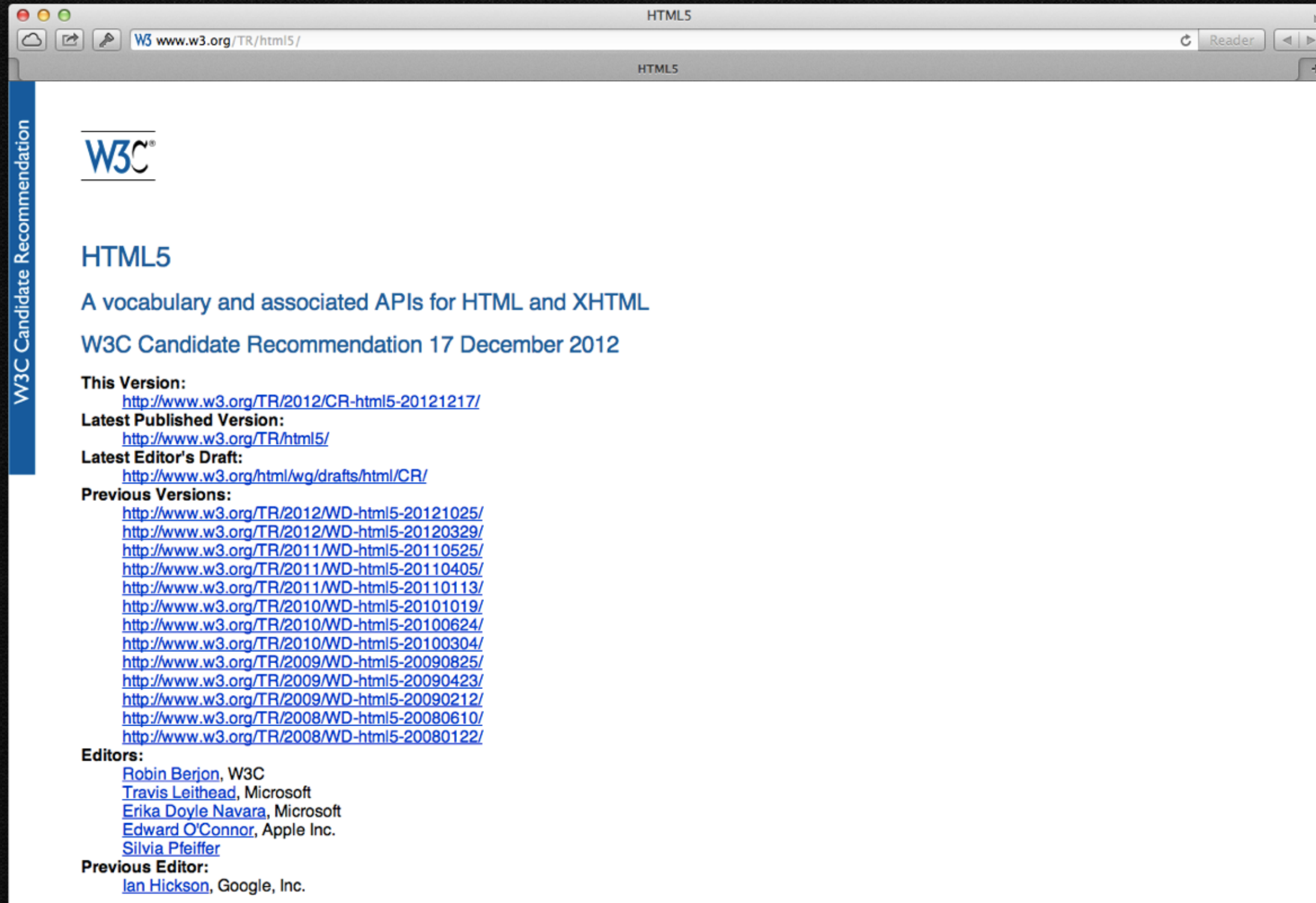
Participate:
[whatw](#) Click the location of the error to select it, then type your message here:



☐ Watch for updates

Specification
annotation system:

w3.org/TR/html5



The image is a screenshot of a web browser window. The title bar at the top says "HTML5". The address bar shows the URL "www.w3.org/TR/html5/". The browser interface includes standard navigation buttons (back, forward, home, search) and a "Reader" button. On the left side of the browser window, there is a vertical blue sidebar with the text "W3C Candidate Recommendation" written vertically. The main content area of the browser displays the W3C logo at the top, followed by the heading "HTML5". Below this, it states "A vocabulary and associated APIs for HTML and XHTML" and "W3C Candidate Recommendation 17 December 2012". There are sections for "This Version:", "Latest Published Version:", "Latest Editor's Draft:", and "Previous Versions:", each followed by a list of URLs. The "Editors:" section lists Robin Berjon, Travis Leithead, Erika Doyle Navara, Edward O'Connor, and Silvia Pfeiffer. The "Previous Editor:" section lists Ian Hickson.

W3C

HTML5

A vocabulary and associated APIs for HTML and XHTML

W3C Candidate Recommendation 17 December 2012

This Version:
<http://www.w3.org/TR/2012/CR-html5-20121217/>

Latest Published Version:
<http://www.w3.org/TR/html5/>

Latest Editor's Draft:
<http://www.w3.org/html/wg/drafts/html/CR/>

Previous Versions:
<http://www.w3.org/TR/2012/WD-html5-20121025/>
<http://www.w3.org/TR/2012/WD-html5-20120329/>
<http://www.w3.org/TR/2011/WD-html5-20110525/>
<http://www.w3.org/TR/2011/WD-html5-20110405/>
<http://www.w3.org/TR/2011/WD-html5-20110113/>
<http://www.w3.org/TR/2010/WD-html5-20101019/>
<http://www.w3.org/TR/2010/WD-html5-20100624/>
<http://www.w3.org/TR/2010/WD-html5-20100304/>
<http://www.w3.org/TR/2009/WD-html5-20090825/>
<http://www.w3.org/TR/2009/WD-html5-20090423/>
<http://www.w3.org/TR/2009/WD-html5-20090212/>
<http://www.w3.org/TR/2008/WD-html5-20080610/>
<http://www.w3.org/TR/2008/WD-html5-20080122/>

Editors:
[Robin Berjon](#), W3C
[Travis Leithead](#), Microsoft
[Erika Doyle Navara](#), Microsoft
[Edward O'Connor](#), Apple Inc.
[Silvia Pfeiffer](#)

Previous Editor:
[Ian Hickson](#), Google, Inc.

According to W3C:

1. Defines a single language called HTML5
2. Defines detailed processing models
3. Improves markup for documents
4. Introduces markup and APIs for emerging idioms

HTML5 is technically not...

Web Workers

Web Storage

Web Messaging

Web SQL Database

Web Audio API

WebRTC

WebSocket

Geolocation

Indexed Database

File API

[other web standard...]

*"[HTML5] is now basically
being used to mean anything
Web-standards-related..."*

Ian Hickson

<http://blog.whatwg.org/html-is-the-new-html5>

it's complicated,

let me explain...

HISTORY

how did we even get here?

December 1997

HTML 4.0 published

December 1997

HTML 4.0 published

...working group shut downText

February 1998

XML 1.0

February 1998

XML 1.0

```
<cough>lemmings</cough>
```

December 1998

XHTML draft

December 1998

XHTML draft

application/xhtml+xml with the
“Appendix C” loophole

May 2001

XHTML 1.1

May 2001

XHTML 1.1

“Appendix C” loophole removed.

May 2001

XHTML 1.1

“Appendix C” loophole removed.

99% estimated error rate on
existing pages.

June 2004

Workshop on Web Applications and Compound Documents

June 2004

Workshop on Web Applications and Compound Documents

Competing vision to evolve HTML4

June 2004

Workshop on Web Applications and Compound Documents

Competing vision to evolve HTML4

voted 14:8 against

June 2004

WHATWG

June 2004

WHATWG

Web Hypertext Application
Technology Working Group

June 2004

WHATWG

Web Hypertext Application

Technology ~~Working Group~~

TASK FORCE!

FAILED OPPORTUNITY

WHATWG

WHATWG

Document how browsers parse
HTML

WHATWG

Document how browsers parse
HTML

Web Applications 1.0

October 2006

W3C ♥ WHATWG

October 2006

W3C ♥ WHATWG

“Some things are clearer with hindsight of several years. It is necessary to evolve HTML incrementally.”

January 2008

HTML5 working draft

January 2008

HTML5 working draft

end of story?

January 2008

HTML5 working draft

end of story?

Nope.

January 2012

WHATWG drops "5"

January 2012

WHATWG drops "5"

HTML is a living standard

February 2012

W3C

February 2012

W3C

advances to "Last call" status

July 2012

WHATWG <> W3C

July 2012

WHATWG <> W3C

decided on a “*degree of separation*”

Current Status

W3C

Current Status

W3C

hopes to release stable HTML5
standard by end of 2014

Current Status

WHATWG

Current Status

WHATWG

living standard is never complete and
is always being updated and improved.

CHANGES

what does it really offer me?

Syntax

doctype

```
<!DOCTYPE html  
PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"  
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
```

doctype

```
<!DOCTYPE html  
PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"  
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
```

doctype

```
<!DOCTYPE html>
```

The Root Element

```
<html xmlns="http://www.w3.org/1999/xhtml"  
      lang="en"  
      xml:lang="en">
```

The Root Element

```
<html xmlns="http://www.w3.org/1999/xhtml"  
      lang="en"  
      xml:lang="en">
```

The Root Element

```
<html lang="en">
```

Character Encoding

```
Content-Type: text/html; charset="utf-8"
```

```
<meta http-equiv="Content-Type"  
      content="text/html; charset=utf-8">
```

Character Encoding

```
Content-Type: text/html; charset="utf-8"
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<meta http-equiv="Content-Type"  
      content="text/html; charset=utf-8">
```

Character Encoding

```
Content-Type: text/html; charset="utf-8"
```

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

Implicit Type

```
<script type="text/javascript" src="/js/site.js"></script>
```

```
<link type="text/css" href="/css/site.css">
```

Implicit Type

```
<script type="text/javascript" src="/js/site.js"></script>
```

```
<link type="text/css" href="/css/site.css">
```

Implicit Type

```
<script src="/js/site.js"></script>
```

```
<link href="/css/site.css">
```

XML Compatible

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <title>Example document</title>
  </head>
  <body>
    <p>Example paragraph</p>
  </body>
</html>
```

***New* Attributes**

Semantic Input Types

```
<input type="tel">  
<input type="search">  
<input type="url">  
<input type="email">  
<input type="datetime">  
<input type="date">
```

```
<input type="month">  
<input type="week">  
<input type="time">  
<input type="number">  
<input type="range">  
<input type="color">
```

Form Element Attributes

```
<input placeholder="Search...">
```

```
<input required>
```

```
<input autofocus>
```

```
<fieldset disabled>
```

Data Attributes

```
<input data-href="/api/users" class="users" type="search">
```

```
// JS API  
var input = document.querySelector('.users');  
var url = input.dataset['href'];
```

Deprecated

<basefont>

<big>

<center>

<strike>

<tt>

<u>

<frame>

<frameset>

<noframes>

New Elements

Structural Elements

<section>
<nav>
<article>
<aside>
<hgroup>

<header>
<footer>
<figure>
<figcaption>

Ineractive Elements

<details>

<summary>

<command>

<menu>

<dialog>

Inline Elements

`<time>`

`<mark>`

`<meter>`

`<progress>`

`<ruby>`

`<rt>`

`<rp>`

`<bdi>`

`<wbr>`

Multimedia Elements

```
<video width="320" height="240" controls>  
  <source src="pr6.mp4" type='video/mp4; codecs="mp4a.40.2"'>  
  <source src="pr6.webm" type='video/webm; codecs="vp8, vorbis"'>  
  <source src="pr6.ogv" type='video/ogg; codecs="theora, vorbis"'>  
</video>
```

```
<audio src="/audio.ogg">
```

Canvas

```
<canvas id="a"></canvas>
```

```
canvas#a { height: 200px; width: 200px; }
```

***New* APIs**

Canvas

```
var a = document.getElementById("a");  
var context = a.getContext("2d");  
context.fillRect(0, 0, 150, 150);
```

2D Context

Rectangles

```
c.fillRect(x, y, w, h);  
c.strokeRect(x, y, w, h);
```

Transformations

```
c.scale(x, y);  
c.rotate(angle);  
c.translate(x, y);  
c.transform(a, b, c, d, e, f);  
c.setTransform(a, b, c, d, e, f);
```

Colors and Styles

```
c.strokeStyle = color;  
c.fillStyle = color;
```

Text

```
c.fillText(text, x, y, maxWidth);
```

Paths

```
c.moveTo(x, y);  
c.lineTo(x, y);  
c.arcTo(x1, y1, x2, y2, radius);  
c.rect(x, y, w, h);  
c.fill();  
c.stroke();
```

State

```
c.save();  
c.restore();
```

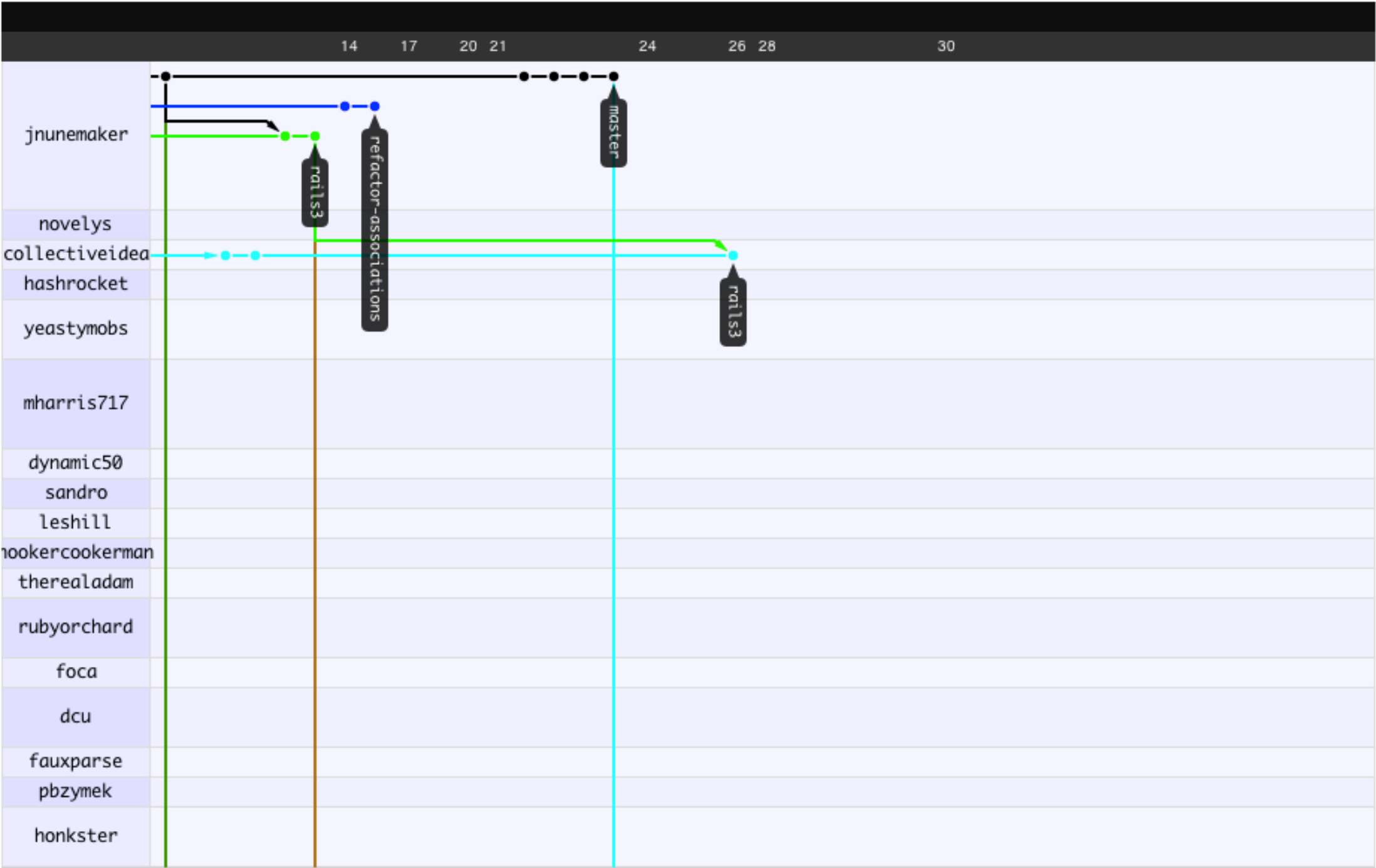
The mongomapper network graph

Keyboard shortcuts available 

All branches in the network using `jnunemaker/mongomapper` as the reference point. [Read our blog post about how it works.](#)

[Show Help](#)

Last updated: about 18 hours ago



Drag & Drop

<http://www.w3.org/TR/html5/editing.html#dnd>

Offline

History API

...and so much more!

Let's review, HTML[5] is important because:

1. Defines a single language called HTML5
2. Defines detailed processing models
3. Improves markup for documents
4. Introduces markup and APIs for emerging idioms

References

Dive Into HTML5

<http://diveintohtml5.info/past.html>

HTML5 differences from HTML4

<http://www.w3.org/TR/2011/WD-html5-diff-20110405/>

HTML5 gets the splits

<http://www.netmagazine.com/news/html5-gets-splits-122102>

Wikipedia

<http://en.wikipedia.org/wiki/HTML5>

Questions?

@bkeepers

bit.ly/nebulous-html5