

HTML



Introduction and canvas

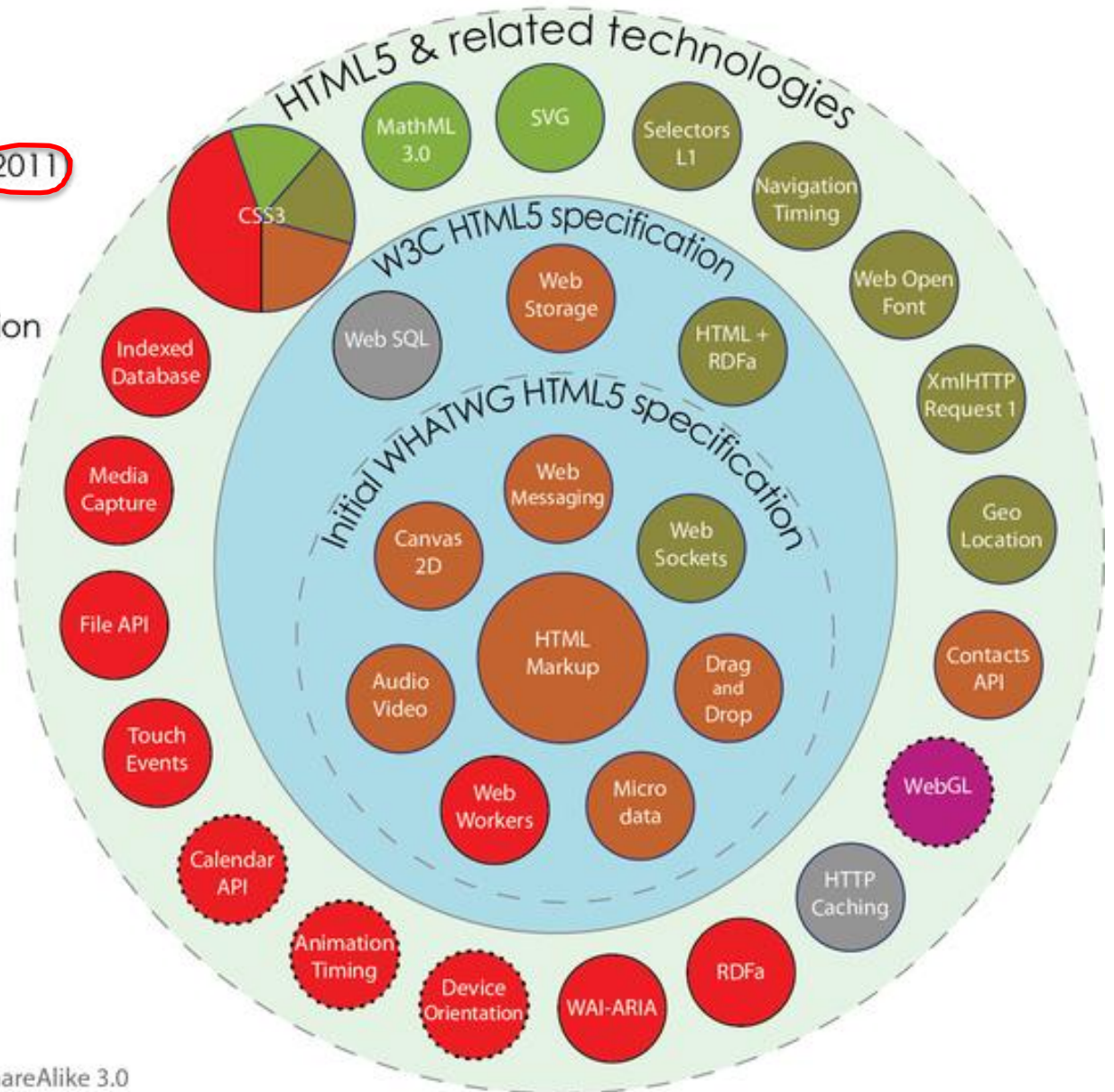
Overview

- HTML5
 - Feature overview
 - Browser support
 - Creating an HTML5 page
 - Canvas 2D
 - 2D drawing on the client
 - Can do many things that use to require Flash
 - e.g. web-based games
 - Bouncing image example

HTML5

Taxonomy & Status (December 2011)

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

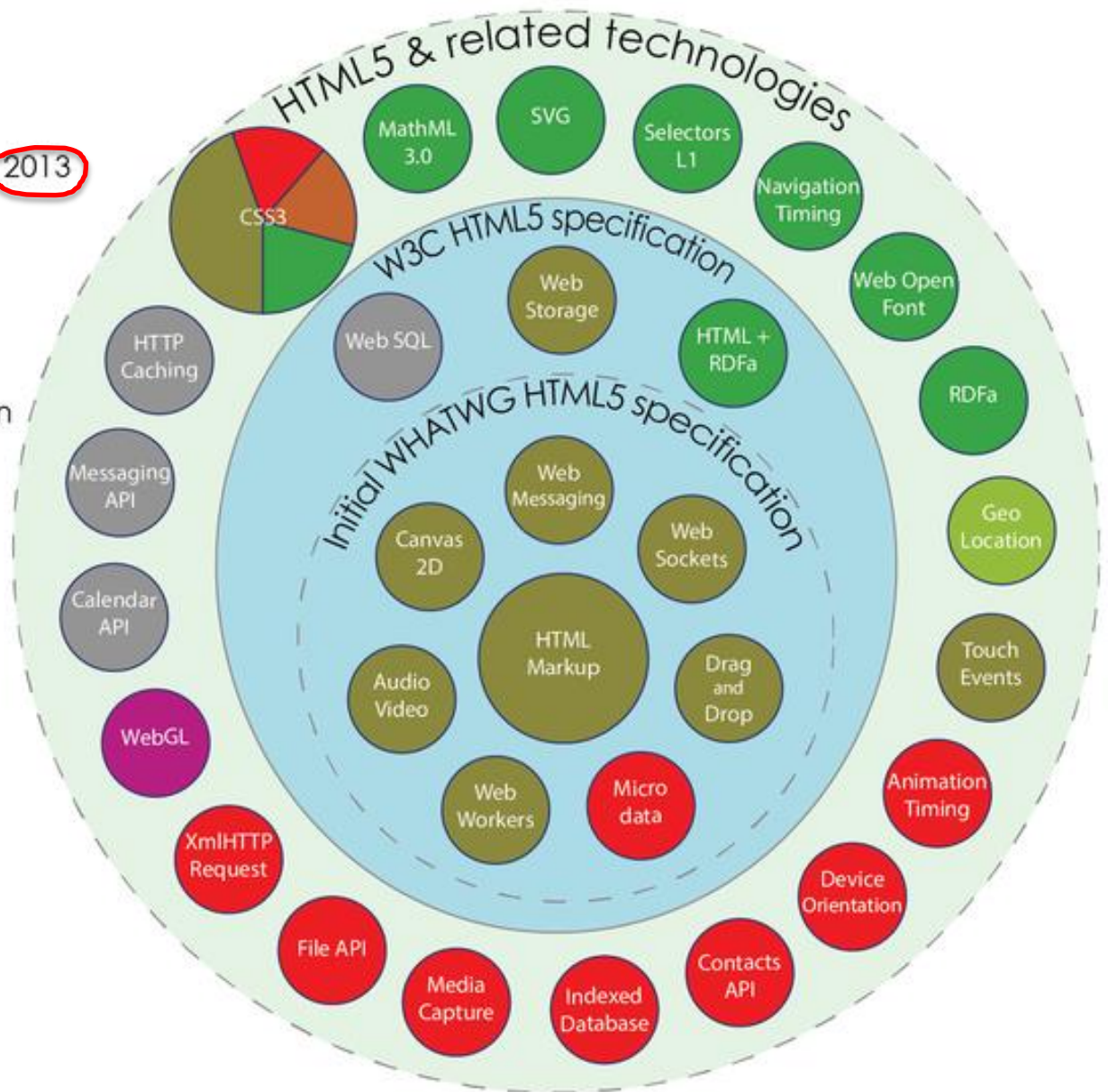


By Sergey Mavrody 2011 | CC Attribution-ShareAlike 3.0

HTML5

Taxonomy & Status on January 20, 2013

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



by Sergey Mavrody (CC) BY · SA

your browser scores

374

AND 13 BONUS POINTS

out of a total of 475 points

You are using Chrome 17 on Windows 7 Correct? ✓ X

your browser scores

141

AND 5 BONUS POINTS

out of a total of 475 points

You are using Internet Explorer 9.0 on Windows 7 Correct? ✓ X

your browser scores

183

AND 4 BONUS POINTS

out of a total of 475 points

You are using Firefox 3.6.27 on Windows 7 Correct? ✓ X

your browser scores

187

AND 4 BONUS POINTS

out of a total of 475 points

You are using Opera 10.51 on Windows 7 Correct? ✓ X

2013

YOUR BROWSER SCORES

505

OUT OF 555 POINTS

You are using Chrome 33 on Windows 7

Correct? ✓ ✕

YOUR BROWSER SCORES

369

OUT OF 555 POINTS

You are using Internet Explorer 11.0 on Windows 7

Correct? ✓ ✕

YOUR BROWSER SCORES

448

OUT OF 555 POINTS

You are using Firefox 27.0 on Windows 7

Correct? ✓ ✕

YOUR BROWSER SCORES

392

OUT OF 555 POINTS

You are using Opera 12.16 on Windows 7

Correct? ✓ ✕

Canvas (basic support) - Candidate Recommendation

Method of generating fast, dynamic graphics using JavaScript

*Usage stats:	Global
Support:	82.56%
Partial support:	4.67%
Total:	87.23%

Show all versions	IE	Firefox	Chrome	Safari	Opera	iOS Safari	Opera Mini	Android Browser	Blackberry Browser	IE Mobile
								2.1		
								2.2		
						3.2		2.3		
						4.0-4.1		3.0		
	8.0					4.2-4.3		4.0		
	9.0		31.0			5.0-5.1		4.1		
	10.0	26.0	32.0			6.0-6.1		4.2-4.3	7.0	
Current	11.0	27.0	33.0	7.0	19.0	7.0	5.0-7.0	4.4	10.0	10.0
Near future		28.0	34.0		20.0					
Farther future		29.0	35.0		21.0					
3 versions ahead		30.0	36.0							

WebGL - 3D Canvas graphics - other

Method of generating dynamic 3D graphics using JavaScript, accelerated through hardware

*Usage stats:	Global
Support:	41.39%
Partial support:	22.74%
Total:	64.13%

Show all versions	IE	Firefox	Chrome	Safari	Opera	iOS Safari	Opera Mini	Android Browser	Blackberry Browser	IE Mobile
								2.1		
								2.2		
						3.2		2.3		
						4.0-4.1		3.0		
	8.0					4.2-4.3		4.0		
	9.0		31.0			5.0-5.1		4.1		
	10.0	26.0	32.0			6.0-6.1		4.2-4.3	7.0	
Current	11.0	27.0	33.0	7.0	19.0	7.0	5.0-7.0	4.4	10.0	10.0
Near future		28.0	34.0		20.0					
Farther future		29.0	35.0		21.0					
3 versions ahead		30.0	36.0							

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01//EN"
```

```
"http://www.w3.org/TR/html4/strict.dtd">
```

```
<html>
```

```
<head>
```

```
<title>My test page</title>
```

```
<meta http-equiv="content-type" content="text/html; charset=UTF-8">
```

```
<link type="text/css" rel="stylesheet" href="stylin.css">
```

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

```
</head>
```

```
<body>
```

```
<h1>Welcome to my home page!</h1>
```

```
<p></p>
```

```
</body>
```

```
</html>
```

HTML
4.01

```
<!doctype html>
```

```
<html>
```

```
<head>
```

```
<title>My test page</title>
```

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

```
<link rel="stylesheet" href="stylin.css">
```

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

```
</head>
```

```
<body>
```

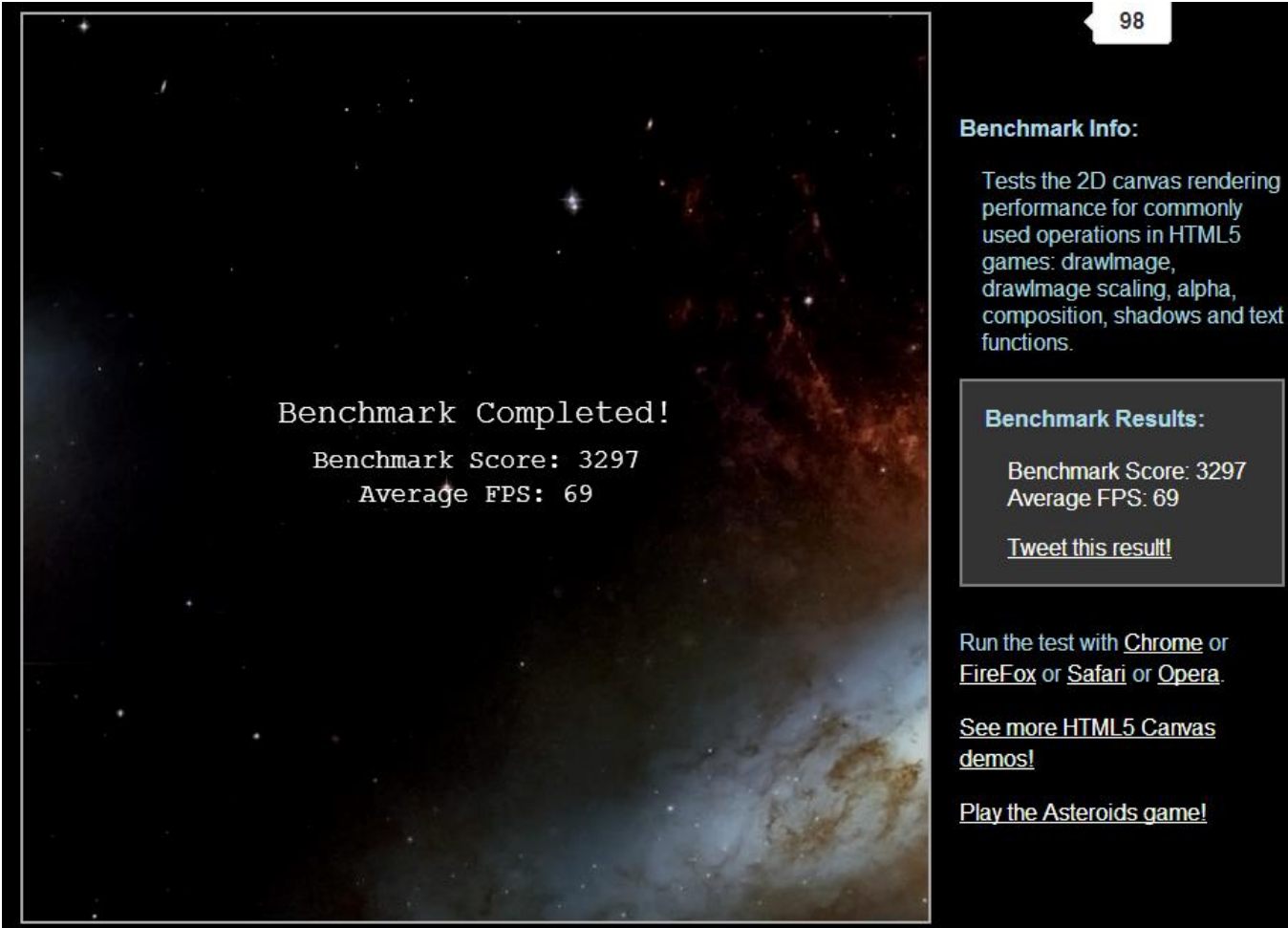
```
<h1>Welcome to my home page!</h1>
```

```
<p></p>
```

```
</body>
```

```
</html>
```

HTML 5



Benchmark Info:

Tests the 2D canvas rendering performance for commonly used operations in HTML5 games: drawImage, drawImage scaling, alpha, composition, shadows and text functions.

Benchmark Results:

Benchmark Score: 3297
Average FPS: 69

[Tweet this result!](#)

Run the test with [Chrome](#) or [FireFox](#) or [Safari](#) or [Opera](#).

[See more HTML5 Canvas demos!](#)

[Play the Asteroids game!](#)

<http://www.kevs3d.co.uk/dev/asteroidsbench/>

	Benchmark	FPS
Chrome 24.0.1312.57 m (Win7)	3297	69
Firefox 11.0 (Win7)	1832	39
Opera 12.02 (Win 7)	1662	35



CANVASMARK 2013 - HTML5 CANVAS 2D RENDERING AND JAVASCRIPT BENCHMARK

Tests the HTML5 <canvas> rendering performance for commonly used operations in HTML5 games: bitmaps, canvas drawing, alpha blending, polygon fills, shadows and text functions.

Run benchmark using HTML5 compatible browser: Chrome | FireFox | Safari | Opera | IE9/10.

This benchmark suite uses a number of elements from my HTML5 games including Asteroids and Arena5. See more HTML5 Canvas experiments.

Important notes for Windows + Chrome users! [+]

How to interpret the results [+]

How does it work [+]

Benchmark version 1.1 [25-03-2013]

Source code now available on GitHub.

<http://www.kevs3d.co.uk/dev/canvasmark/>

	Benchmark
Chrome 33 on Windows	7241
Firefox 27 on Windows	5220
Opera 12.16 on Windows	6658
IE11, Mozilla 11 on Windows	5930