

WebGL Power for your "Web Design"

Presented by Akihiro Oyamada (@yomotsu)

Feb 3, 2016

Akihiro Oyamada

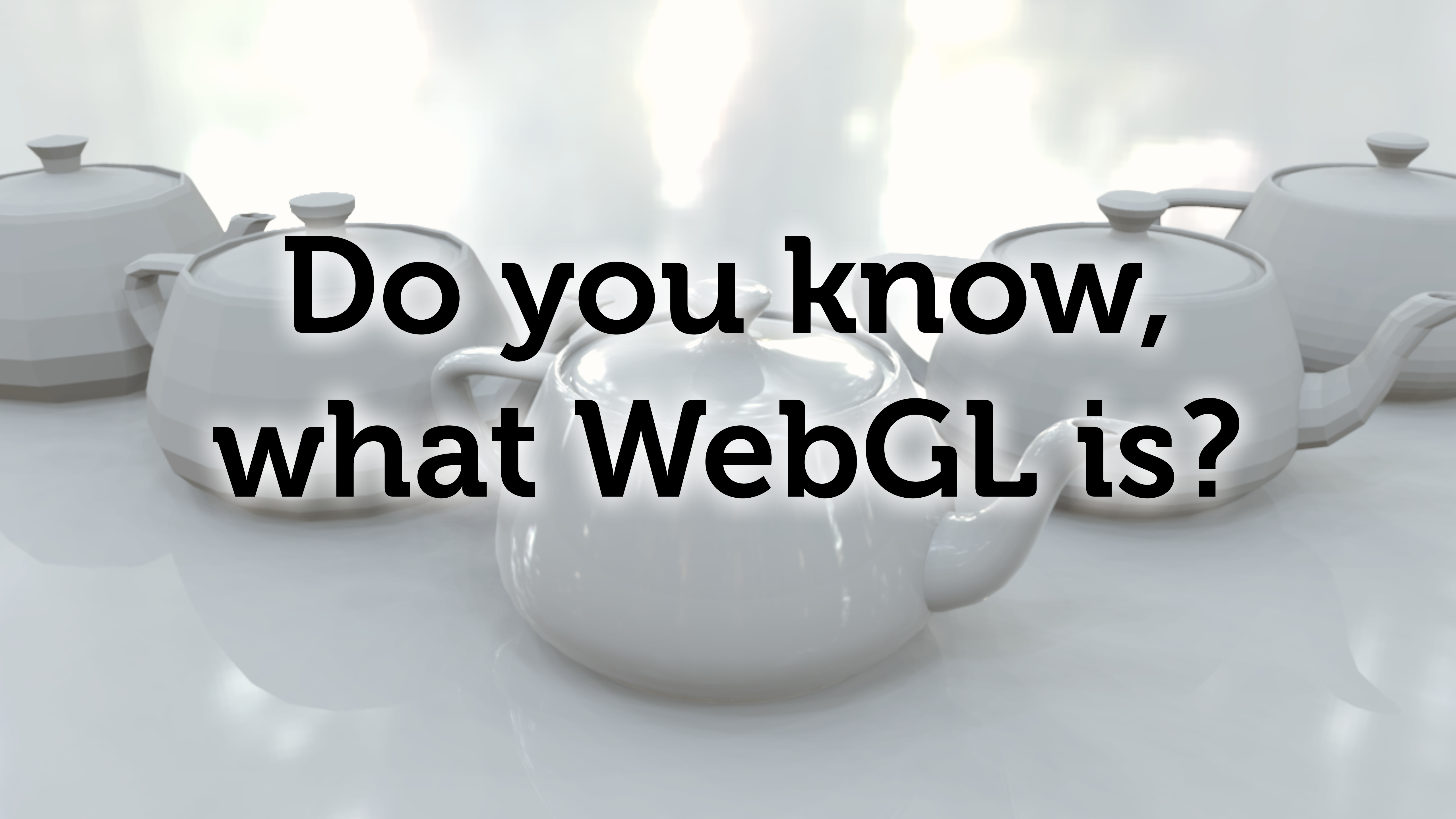
  @ayomotsu

Frontend Engineer
at PixelGrid, Inc.

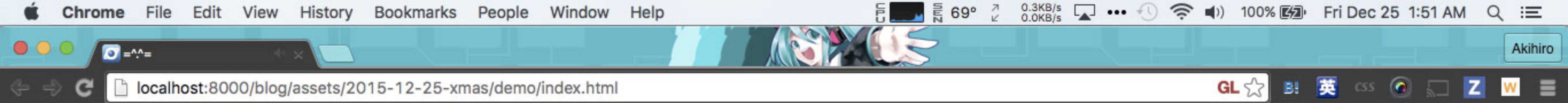


Microsoft®
Most Valuable
Professional



A collection of white ceramic teapots of various shapes and sizes are arranged on a highly reflective, glossy white surface. In the background, a bright, out-of-focus light source, possibly a window or a lamp, creates a strong lens flare and illuminates the scene. The teapots are rendered with soft shadows and highlights, emphasizing their smooth, glossy texture. The overall composition is clean and minimalist, with a focus on the interplay of light and reflection.

**Do you know,
what WebGL is?**



<http://yomotsu.net/blog/assets/2015-12-25-xmas/demo/index.html>
<http://yomotsu.net/blog/assets/2015-12-25-xmas/demo/index2.html>

WebGL - 3D Canvas graphics - OTHER

Global

55.76% + 28.24% = 84.01%

Japan

64.75% + 21.48% = 86.23%

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

Current aligned

Usage relative

Show all

IE	Edge *	Firefox	Chrome	Safari	Opera	iOS Safari *	Opera Mini *	Android Browser *	Chrome for Android
8			45					4.3	
9		42	46					4.4	
10	¹ 12	43	47			8.4		4.4.4	
¹ 11	¹ 13	44	48	9	34	9.2	8	46	47
	¹ 14	45	49	9.1	35	9.3			
		46	50		36				
		47	51						

Notes

Known issues (1)

Resources (10)

Feedback

Support listed as "partial" refers to the fact that not all users with these browsers have WebGL access. This is due to the additional requirement for users to have **up to date video drivers**. This problem was **solved in Chrome on Windows** as of version 18.

<http://caniuse.com/#feat=webgl>

#

WebGL - 3D Canvas graphics - OTHER

Global

55.76% + 28.24% = 84.01%

Japan

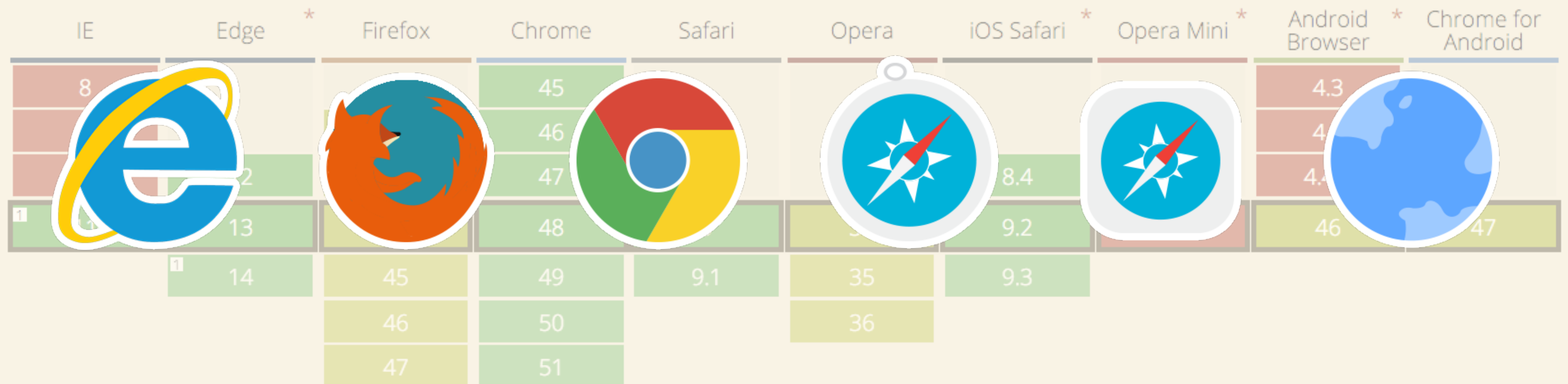
64.75% + 21.48% = 86.23%

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

Current aligned

Usage relative

Show all



Notes

Known issues (1)

Resources (10)

Feedback

runs everywhere!

Support listed as "partial" refers to the fact that not all users with these browsers have WebGL access. This is due to the additional requirement for users to have **up to date video drivers**. This problem was **solved in Chrome on Windows** as of version 18.

Note that WebGL is part of the **Khronos Group**, not the W3C.

¹ WebGL context is accessed from "experimental-webgl" rather than "webgl"

- A JavaScript API
- 3D Graphic
- 2D Graphic
- Vector Graphic

Worth Using!

even 2D Web Designing



[GitHub repo](#)

```
instance.pause();
```

run

```
instance.play();
```

run

```
instance.getCurrent();
```

run

```
instance.getPrev();
```

<http://yomotsu.github.io/GLSlideshow.js/examples/apis.html>


```
<div id="slideshow-placeholder"></div>
```



```
<div id="slideshow-placeholder"></div>
```

```
<script>
```

```
</script>
```

```
<div id="slideshow-placeholder"></div>
```

```
<script>
```

```
var slideshow = GLSlideshow.autoDetectRenderer();
```

```
</script>
```



```
<div id="slideshow-placeholder"></div>
```

```
<script>
```

```
var slideshow = GLSlideshow.autoDetectRenderer(  
  [ './img/1.jpg', './img/2.jpg', './img/3.jpg', './img/4.jpg' ]  
);
```

```
</script>
```

```
<div id="slideshow-placeholder"></div>
```

```
<script>
```

```
var slideshow = GLSlideshow.autoDetectRenderer(  
  [ './img/1.jpg', './img/2.jpg', './img/3.jpg', './img/4.jpg' ],  
  {  
    width      : 1024,      // optional  
    height     : 576,      // optional  
    duration   : 1000,     // optional  
    interval   : 5000,     // optional  
    effect     : 'crossZoom' // optional  
  }  
);
```

```
</script>
```



```
<div id="slideshow-placeholder"></div>
```

```
<script>
```

```
var slideshow = GLSlideshow.autoDetectRenderer(  
  [ './img/1.jpg', './img/2.jpg', './img/3.jpg', './img/4.jpg' ],  
  {  
    width      : 1024,          // optional  
    height     : 576,          // optional  
    duration   : 1000,         // optional  
    interval   : 5000,         // optional  
    effect     : 'crossZoom'   // optional  
  }  
);  
$( '#slideshow-placeholder' ).append( slideshow.domElement );
```

```
</script>
```

The lib is
Available on GitHub
with some docs

<https://github.com/yomotsu/GLSlideshow.js>

Ask a engineer
to make your idea possible

gl.finish();



@ayomotsu