

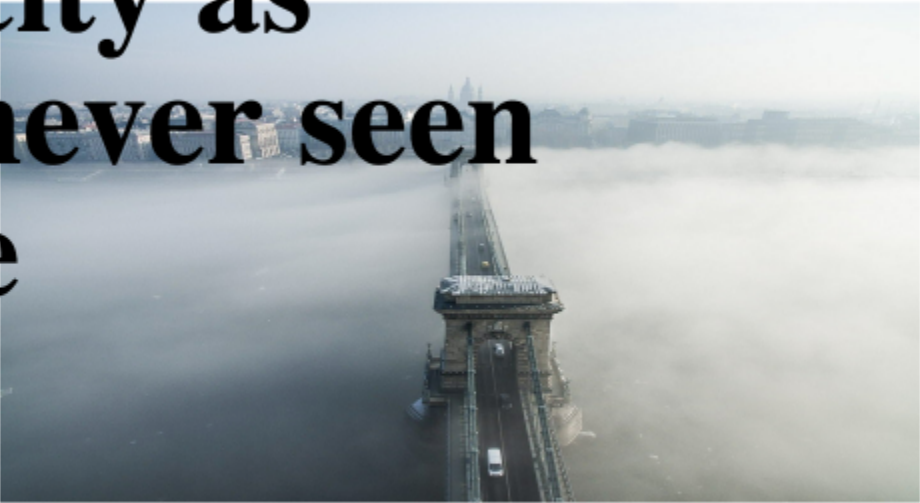
What's new in CSS?

Introduction to CSS Grid and CSS Custom Properties

by Tamás Hajas

DrupalCon Vienna 2017

A complicated hero



The city as you've never seen it before

Gallery

Phasellus consectetur
vestibulum elit. Curabitur ligula
sapien, tincidunt non, euismod
vitae,...

[More »](#)

Some requirements: Title may be one or more lines long. Title overlaps the image but teaser aligns to it. Text keeps the layout if there is no image. Image is content, not background. The height of this hero depends on its content length: may be dictated by the image or the texts. And this is just the desktop layout...

A complicated hero

The city as you've never seen it before

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More »



How to do it? Absolute positioning and z-index and margin / padding tricks and width declaration (using) calc(). OR...

CSS Grid

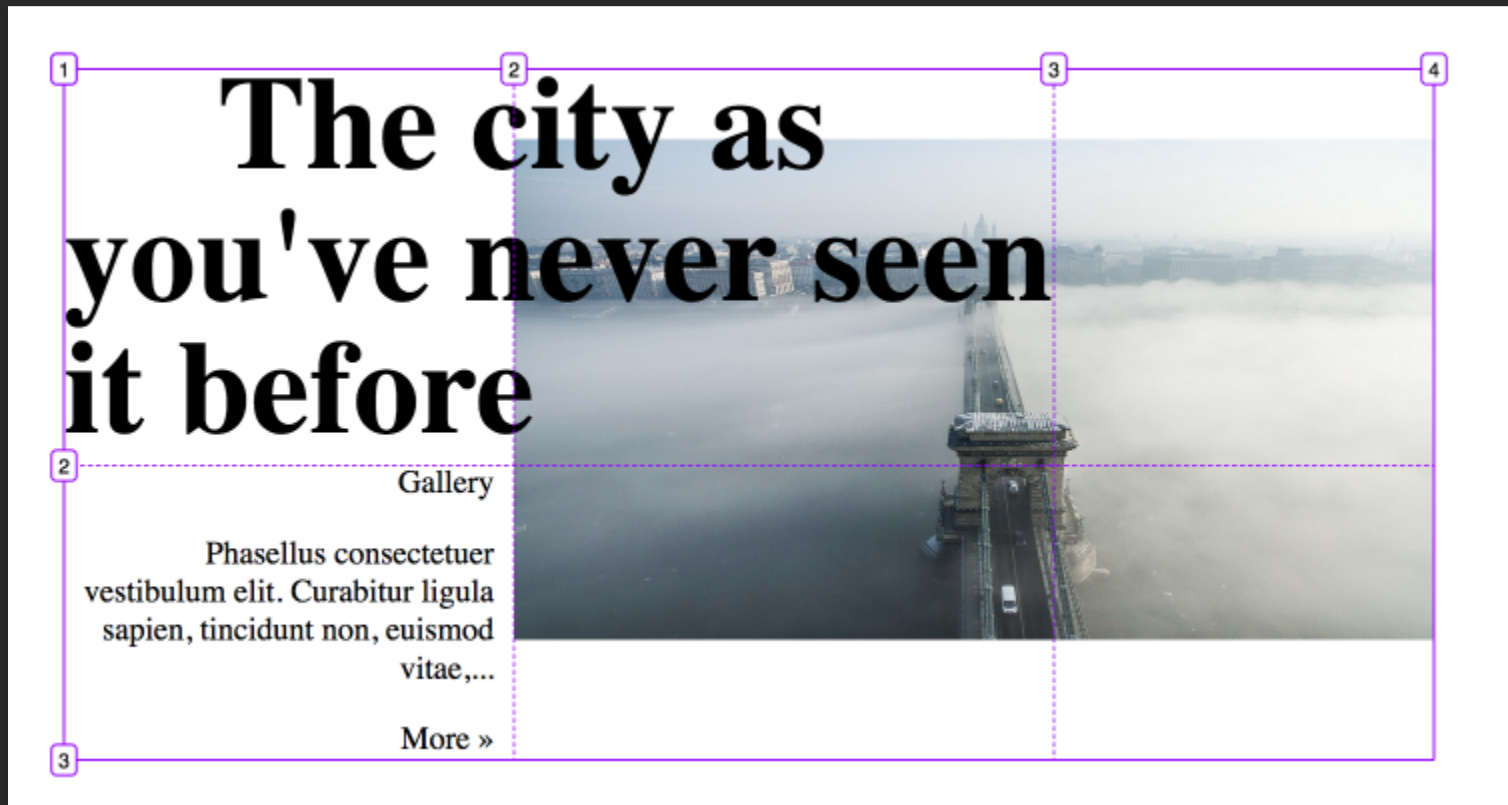
Tamás Hajas

Drupal / Web Project Manager &
Front-end Developer @
[Integral Vision Ltd](#)
thamas.github.io

Slides

<https://thamas.gitlab.io/css-grid-custom-props/>

A complicated hero: simplified with CSS Grid!



An ordinary page

```
<div class="container">  
  <header class="page-title">Page title</header>  
  <main class="page-main">Main content</main>  
  <aside class="page-aside">Aside</aside>  
  <footer class="page-footer">Footer</footer>  
</div>
```

Page title

Main content

Aside

Footer

Define grid container

```
.container {  
  display: grid;  
}
```

Page title

Main content

Aside

Footer

Define columns

```
.container {  
  display: grid;  
  grid-template-columns: 2fr 1fr;  
}
```

Page title

Main content

Aside

Footer

Place items by columns

```
.container {  
  display: grid;  
  grid-template-columns: 2fr 1fr;  
}  
.page-main {  
  grid-column: 1/2;  
}
```

Page title

Main content

Footer

Aside

Place items by rows

```
.container {  
  display: grid;  
  grid-template-columns: 2fr 1fr;  
  grid-template-rows: auto 3fr 1fr;  
}  
.page-main {  
  grid-column: 1/2;  
  grid-row: 2/4;  
}  
.page-aside {  
  grid-row: 1/3;  
}
```

Page title

Aside

Main content

Footer

Set grid gap

```
.container {  
  display: grid;  
  grid-template-columns: 2fr 1fr;  
  grid-template-rows: auto 3fr 1fr;  
  grid-gap: 10px 20px;  
}  
.page-main {  
  grid-column: 1/2;  
  grid-row: 2/4;  
}  
.page-aside {  
  grid-row: 1/3;  
}
```

Page title

Main content

Aside

Footer

Responsive "gallery" with CSS Grid

A

B

C

D

E

```
.container {  
  display: grid;  
  grid-template-columns: repeat(auto-fit, minmax(200px, 1fr));  
  grid-gap: 30px;  
}
```

CSS Grid and...

A

B

C

```
:root {  
  --gutter: 10px;  
}  
@media (min-width: 800px) {  
  :root {  
    --gutter: 60px;  
  }  
}  
.container {  
  display: grid;  
  grid-template-columns: repeat(3, 1fr);  
  
  grid-column-gap: var(--gutter);  
}
```

CSS Custom Properties for Cascading Variables

Syntax

```
:root {  
  --main-color: #055;  
}  
  
.box {  
  color: var(--main-color);  
}
```

Syntax

```
--foo:; /* Invalid! (No value.) */  
  
--foo: ; /* Valid. (Value is an empty space.) */  
  
--foo: var(--bar) /* Valid. (Value is another CP.) */  
  
--foo != --FOO /* Case sensitive. */
```

Fallbacks

```
var(--main-color, green);
```

```
var(--main-color, var(--sec-color, green));
```

```
var(--main-color, var(--sec-color, var(--third-color, green)));
```

```
etc... Don't go crazy! :)
```

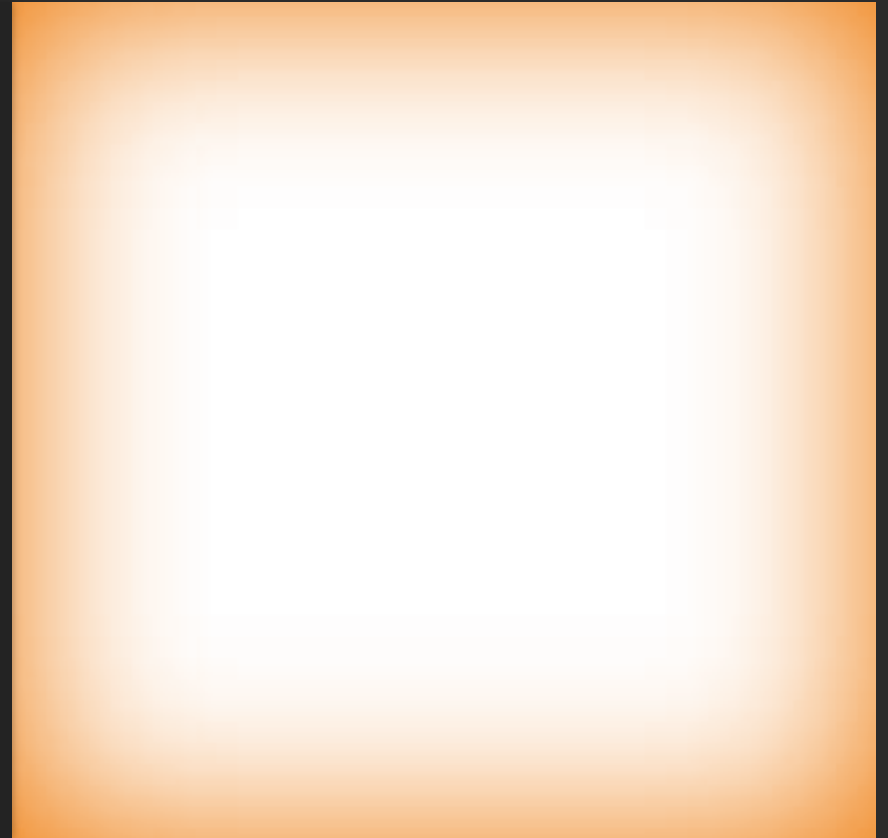
Set just what you want...

```
* {
  --box-shadow-x: initial;
  /* y, blur, spread, color, inset */

  box-shadow:
    var(--box-shadow-x, 0)
    /* y, blur, spread, color, inset */;
}

.box {
  --box-shadow-blur: 5em;
  --box-shadow-color: #ee7600;
  --box-shadow-inset: inset;
}

.box:hover {
  --box-shadow-color: black;
}
```



CP and JavaScript: follow!



```
const eyesList = document.getElementsByClassName('eyes');
const root = eyesList[0];
```

```
document.addEventListener("mousemove", evt=> {
  let x = evt.clientX / innerWidth;
  let y = evt.clientY / innerHeight;

  root.style.setProperty('--mouse-x', x);
  root.style.setProperty('--mouse-y', y);
});
```

```
.iris {
  position: absolute;
  top: calc(2px + 100px * var(--mouse-y) );
  left: calc(2px + 130px * var(--mouse-x));
}
```

Eyes forked from: <https://codepen.io/flashingmoose/pen/eNGRXN>

Performance

Do not use just because it's "modern"!

<https://codepen.io/stowball/post/css-variables-are-a-sometimes-food>

Credits

- Rachel Andrew: presentations, articles, gridbyexample.com
- Lea Verou: CSS Variables: `var(--subtitle);`

Join us for contribution sprint!

Friday, 29. September 2017.

- **Mentored Core Sprint**
9:00–18:00
Room: Stolz 2
- **First Time Sprinter Workshop**
9:00–12:00
Room: Lehar 1 –
Lehar 2
- **General Sprint**
9:00–18:00
Room: Mall

#drupalsprints

What did you think?

Locate this session at the DrupalCon Vienna website:

<https://vienna2017.drupal.org/sessions/whats-new-css-introduction-css-grid-and-css-custom-properties>

Take the survey!

<https://www.surveymonkey.com/r/drupalconvienna>

Thank you!

Thanks for your attention!

Tamás Hajas

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thamas.github.io

Browser support of CSS Grid

CSS Grid Layout - CR

Global 68.14% + 4.35% = 72.49%
 unprefixed: 68.14%

Method of using a grid concept to lay out content, providing a mechanism for authors to divide available space for layout into columns and rows using a set of predictable sizing behaviors

Current aligned
Usage relative
Date relative
Show all

IE	Edge *	Firefox	Chrome	Safari	Opera	iOS Safari *	Opera Mini *	Android Browser *	Chrome for Android
			¹ 49						
			59			10.2		4.4	
	² 14	54	60	10.1		10.3		4.4.4	
² 11	² 15	55	61	11	47	11	all	56	61
	16	56	62	TP	48				
		57	63		49				
		58	64						

[Notes](#)
[Known issues \(2\)](#)
[Resources \(12\)](#)
[Feedback](#)

¹ Enabled in Chrome through the "experimental Web Platform features" flag in chrome://flags

² Partial support in IE refers to supporting an **older version** of the specification.

Browser support of CP

CSS Variables (Custom Properties) - CR

Global

75.66%

Permits the declaration and usage of cascading variables in stylesheets.

Current aligned Usage relative Date relative Show all

IE	Edge *	Firefox	Chrome	Safari	Opera	iOS Safari *	Opera Mini *	Android Browser *	Chrome for Android
			49						
			59			10.2		4.4	
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	16	56	62	TP	48				
		57	63		49				
		58	64						

Notes Known issues (3) Resources (8) Feedback

² Partial support is due to bugs present (see known issues)