

# **ONE STEP IN THE FUTURE: CSS VARIABLES**

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**FRONTEND MILANO MEETUP**

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# LET'S GO



# **CSS CUSTOM PROPERTIES FOR CASCADING VARIABLES**

**MODULE LEVEL 1**

# WAT



## ONE STEP BEYOND...

# CSS NAMING

```
div, section {  
  margin: 5px;  
  padding: 10px;  
  color: red;  
}
```

1 rule(set) -

2 selectors - `div`, `section`

3 declarations:

3 properties - `margin`, `padding`, `color`

3 values - `5px`, `10px`, `red`

Thanks to [StyleStats](#) for the image

# CSS VERSIONING

## WHAT IS CSS3?

Everything after [CSS 2.1](#) [7 June 2011]

## CSS4 EXISTS?

No, it's time to talk about modules

# **CSS CUSTOM PROPERTIES FOR CASCADING VARIABLES**

**MODULE LEVEL 1**



# CUSTOM PROPERTIES

Possibility to define new properties with the -- prefix

```
--custom-property: value;
```

They are case sensitive!

# CASCADING VARIABLES

A new primitive value type

```
property: var(--custom-property);
```

And you can set a default

```
var(--custom-property, default-value)
```

**SOME EXAMPLES**

# THEMING TODAY

```
.box {  
  background-color: white;  
}  
.button {  
  color: black;  
}  
  
.theme .box {  
  background-color: blue;  
}  
.theme .button {  
  color: yellow;  
}
```

# THEMING TODAY V2

```
// Deafult css
.box {
    background-color: white;
}
.button {
    color: black;
}

// Theme file
.box {
    background-color: blue !important;
}
.button {
    color: yellow !important;
}
```

# THEMING TOMORROW

```
.theme {  
  --color-bg: blue;  
  --color-button: yellow;  
}  
  
.box {  
  background-color: var(--color-bg, white);  
}  
  
.button {  
  color: var(--color-button, black);  
}
```

# RESPONSIVE TODAY

```
body.class {  
    font-size: 14px;  
}  
  
@media (min-width: 960px) {  
    body {  
        font-size: 16px;  
    }  
}
```

# RESPONSIVE TOMORROW

```
body {  
  font-size: var(--base-font, 14px);  
}  
  
@media (min-width: 960px) {  
  --base-font: 16px;  
}
```



# CONTEXTUALIZATION TODAY

```
.button {  
    color: red;  
}  
  
footer .button {  
    color: white;  
}  
  
footer .highlight .button {  
    color: yellow;  
}
```

# CONTEXTUALIZATION TOMORROW

```
footer {  
    --button-color: white;  
}  
  
.highlight {  
    --button-color: yellow;  
}  
  
.button {  
    color: var(--button-color, red);  
}
```

**TODAY**

# COMPATIBILITY

W3C [Candidate Recommendation](#), 03 December 2015

- Firefox  $\geq 31$
- Chrome  $\geq 49$
- Safari  $\geq 9.1$
- Edge: Under Consideration

Global support 8.08%, data from [Can I Use...](#)

# PROGRESSIVE ENHANCEMENT

## USE DOUBLE DECLARATION

```
.Box {  
  // Default value for all browsers  
  color: blue;  
  
  // Override default with variable for new browsers  
  color: var(--color-accent, blue);  
}
```

A small example on [Codepen](#)

# CUSTOM PROPERTIES MEDIA QUERY

```
.hide\@cp {  
    // Ignored by old browsers  
    display: var(--fake-unset-custom-prop, none);  
}  
  
.show\@cp {  
    // Hidden for all browsers  
    display: none;  
    // And set visible just for new browsers  
    display: var(--fake-unset-custom-prop, initial);  
}
```

**BONUS TRACK**

# ROOT SCOPE

```
:root {  
  --custom-prop: value;  
}
```



# TRANSITION AND ANIMATION

```
.box {  
  --color: red;  
  background-color: var(--color);  
  transition: all ease 500ms;  
}  
  
.box:hover {  
  --color: blue;  
}
```

# CSS VS PREPROCESSORS

Preprocessor variables don't inherit

```
$button-color: red;  
.header { $button-color: blue; }  
.button { color: $button-color; }
```

```
:root { --button-color: red; }  
.header { --button-color: blue; }  
.button { color: var(--button-color); }
```

Even CSSNext

# LINKS

- [Giko.it](#): Try the color picker
- [W3C Specification](#)
- [Can I Use... CSS Variables](#)
- [StyleStats](#): tool for css statistics
- My [custom properties playground](#) on Codepen
- This slides: [goo.gl/cltM4J](https://goo.gl/cltM4J)

# THANK YOU

#webperf

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