

SCSS – Custom Properties

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About me :)



Martina Freundorfer

Lecturer Web Development

- 34 years old
- Originally from Munich
- 10 years experience at eBay, Bosch and 1&1
- Mother of 3 cats

Content

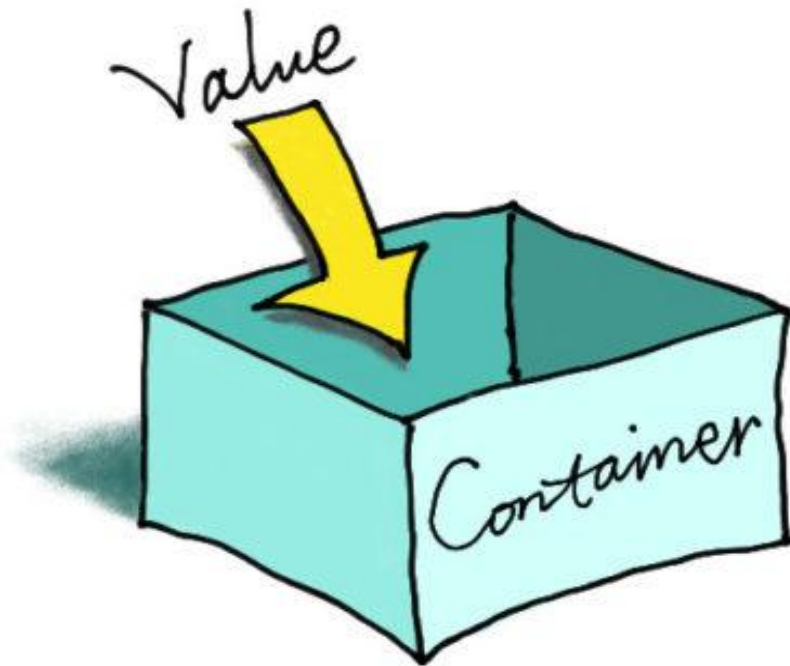
What we will cover today:

- Variable Concept
- CSS Variables
- SCSS Variables
- Bootstrap Theming Variables

Please ask, if any
questions come up!



Variable Concept



What's a variable?

Sometimes, you want to store values to use them later again or regularly.

So we define a container, which "holds" the value.

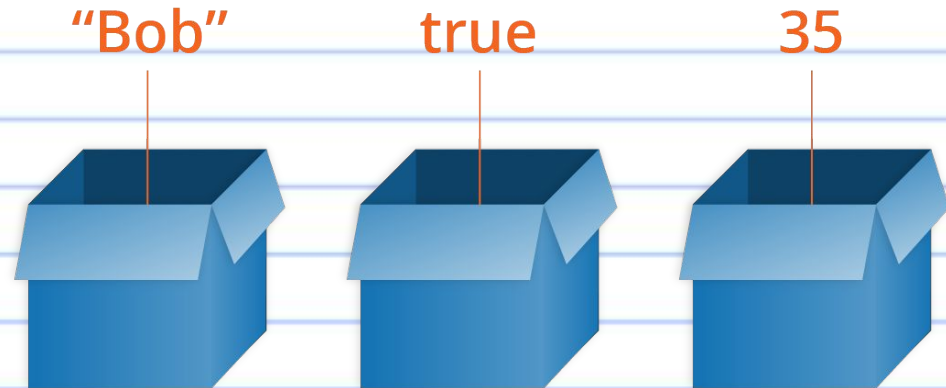
This container is called variable.

Variable Concept

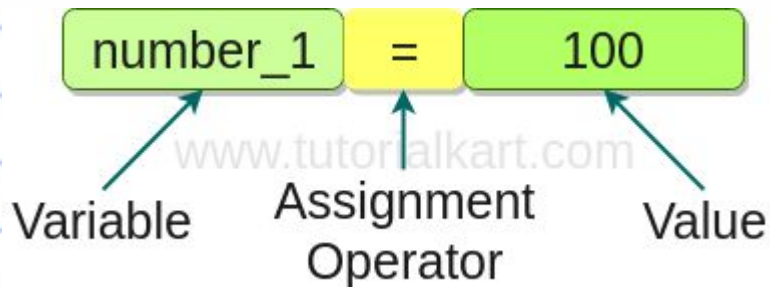
What can we store in variables?

To store, you can save your values into variables as are:

- Boolean true/false
- Numbers 123456789
- Strings "Hello World!"
- Objects and many more...



Variable Concept



How does it work?

Just assign the value to a **variable name**, which is unique:

Initializing with equals:

```
var showMenu = false;
```

- Left defines variable name
- Right value to be saved

Value can be changed:

```
showMenu = true;
```

CSS Variables

Differences to normal variables:

- Declare with two dashes

```
--my-green
```

- Assign with double point

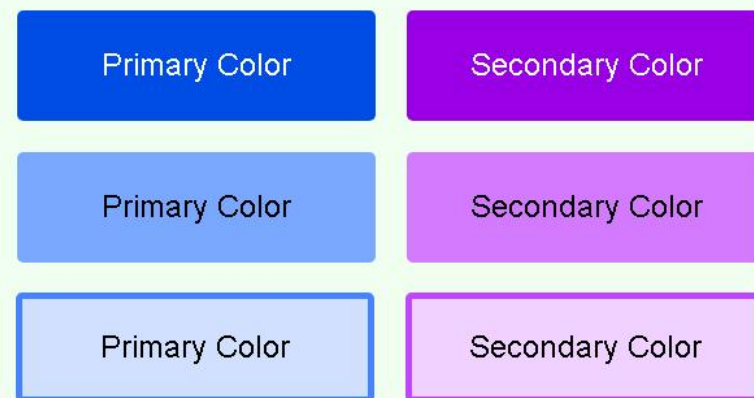
```
--my-green: green;
```

- Access to DOM elements

```
:root {  
  --my-green: green;  
}
```

- Get value via function `var()`

```
background: var(--my-green);
```



CSS Variables



Advantages:

`--text-color` is easier to read and understand for humans than cryptic fonts and colors like `#0000FF`.

You can base your future variables and CSS rules on the already existing ones.

Dream Goal:

Ideally you have just one "single point of truth", where you have to change your style, to change everything all in once.

CSS Variables

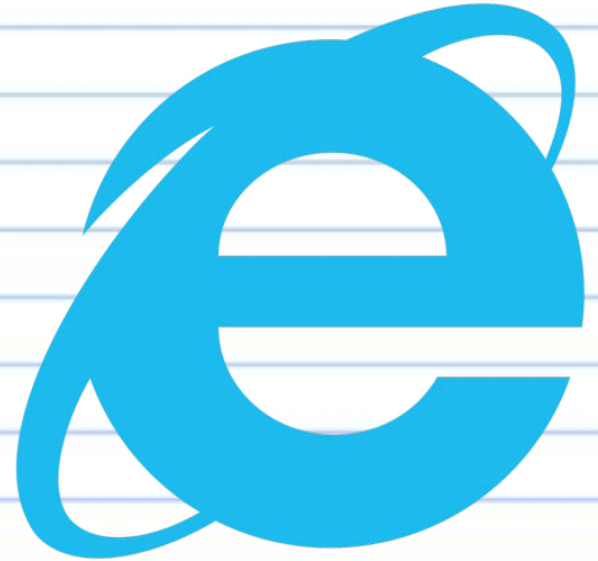
Browser Support?

Every modern browser except IE 11 has very good support.

Also, if you want to make sure, you can use polyfills and fallbacks for this cases.

For current feedback, look at

<https://caniuse.com/#search=CSS%20Variables>



CSS Exercise

You can do it, too!

Your task is now...

1. Pick two (or more) favorite colors.
2. Store them as CSS variables.
3. Use them as linear gradients background on your page.

If you have any questions, please ask me!



SCSS Variables

What is SCSS?

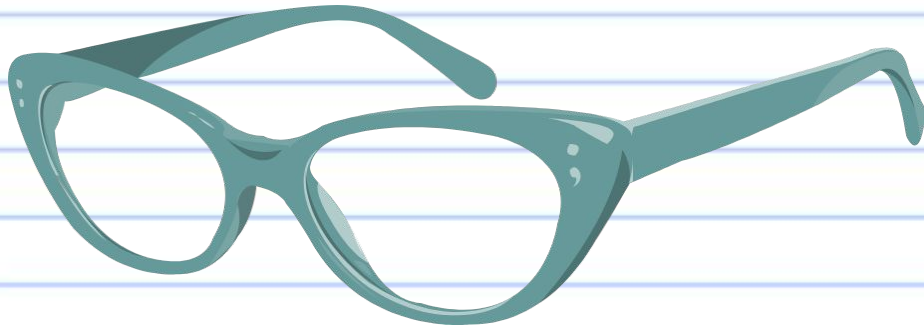
Similar concepts are called Dart Sass or Less, it's another tool for the same thing.

It means "Syntactically Awesome Cascading Stylesheets".

It is a preprocessor, so you can write less SCSS, which will be automatically converted to normal CSS at the end.



SCSS Variables



Differences to CSS vars:

- No access to DOM
(:root)
- Declaration with Dollar
`$my-green: green;`
- Easy calling
`background: $my-green;`
- You can also define
functions (called
Mixins) and so on...

SCSS Exercise

You can do it, too!

Your task is now...

1. Go back to your CSS exercise.
2. Change the variables to SCSS variables.
3. Make it work again :)

If you have any questions, please ask me!



Demonstration



Extra: Bootstrap Theming Variables



Create a custom.scss file:

Import the bootstrap scss

```
@import  
"../node_modules/bootstrap  
/scss/bootstrap"
```

Overwrite the parts you
want to change

```
$theme-colors: {  
  "primary": red  
}
```

Credits & Further Readings



Sass @ Wikipedia

[https://en.wikipedia.org/wiki/Sass_\(stylesheet_language\)](https://en.wikipedia.org/wiki/Sass_(stylesheet_language))

SELFHTML-Wiki (in German)

[https://wiki.selfhtml.org/wiki/CSS/Custom_properties_\(CSS-Variablen\)](https://wiki.selfhtml.org/wiki/CSS/Custom_properties_(CSS-Variablen))

Lea Verou - CSS Variables var(--subtitle)

https://www.youtube.com/watch?time_continue=4&v=2an6-WVPuJU

Bootstrap Documentation

<https://getbootstrap.com/docs/4.0/getting-started/theming/>

Thank you for your attention!