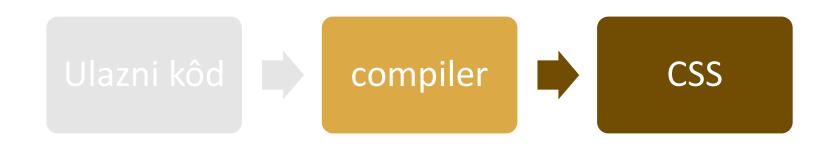


# **CSS Preprocesori**



# Što su preprocesori i kako rade?





## Prednosti korištenja

- više mogućnosti
- čišći i jednostavniji kôd
- veća fleksibilnost pri radu
- Snippets & Libraries
- štede vrijeme i trud
- ...

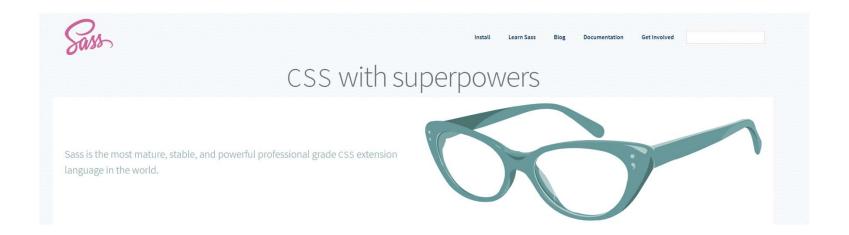


## Popularni preprocesori





#### Sass



https://sass-lang.com/



#### Sass vs. SCSS

```
/* CSS */
.content-navigation {
border-color: #3bbfce;
color: #2b9eab;
}
.border {
padding: 8px;
margin: 8px;
border-color: #3bbfce;
}
```

```
/* SASS */
$blue: #3bbfce
$margin: 16px

.content-navigation
border-color: $blue
color: darken($blue, 9%)

.border
padding: $margin / 2
margin: $margin / 2
border-color: $blue
```

```
/* SCSS */
$blue: #3bbfce;
$margin: 16px;

.content-navigation {
border-color: $blue;
color: darken($blue, 9%);
}

.border {
padding: $margin / 2;
margin: $margin / 2;
border-color: $blue;
}
```



# Mogućnosti

- Variables
- Nesting
- Mixins
- Imports
- Loops
- ...



# Varijable

```
$red: #833;
body {
color: $red;
}
```



# Nesting

```
.markdown-body {
p {
color: blue;
}

&:hover {
color: red;
}
}
```



## **Extend**

```
.button {
...
}
.push-button {
@extend .button;
}
```



# Composing

```
@import './other_sass_file';
```



### **Mixins**

```
@mixin heading-font {
font-family: sans-serif;
font-weight: bold;
}
h1 {
@include heading-font;
}
```



### **Mixins**

```
@mixin font-size($n) {
font-size: $n * 1.2em;
}
body {
@include font-size(2);
}
```



### **Mixins**

```
@mixin pad($n: 10px) {
padding: $n;
}
body {
@include pad(15px);
}
```



## For loops

```
@for $i from 1 through 4 {
.item-#{$i} { left: 20px * $i; }
}
mixin pad($n: 10px) {
padding: $n;
}
body {
@include pad(15px);
}
```



## Each loops

```
$menu-items: home about services contact;
@each $item in $menu-items {
   .photo-#{$item} {
   background: url('images/#{$item}.jpg');
}
}
```



#### **Conditionals**

```
@if $position == 'left' {
position: absolute;
left: 0;
}
@else {
position: static;
}
```



# Maps

```
$map: (key1: value1, key2: value2, key3: value3);
map-get($map, key1)
```



