

# **MODERN FRONT-END FOR BEGINNERS AND MIDDLES**

# PREPROCESSOR CSS



# HOW TO START

## GUI

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**PREPROS**  
**KOALA**

**NODE.JS POWER**

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**GULP**  
**BOWER**

**IDE POWER**

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**VISUAL STUDIO**  
**WEBSTORM**

# WHAT TO SELECT

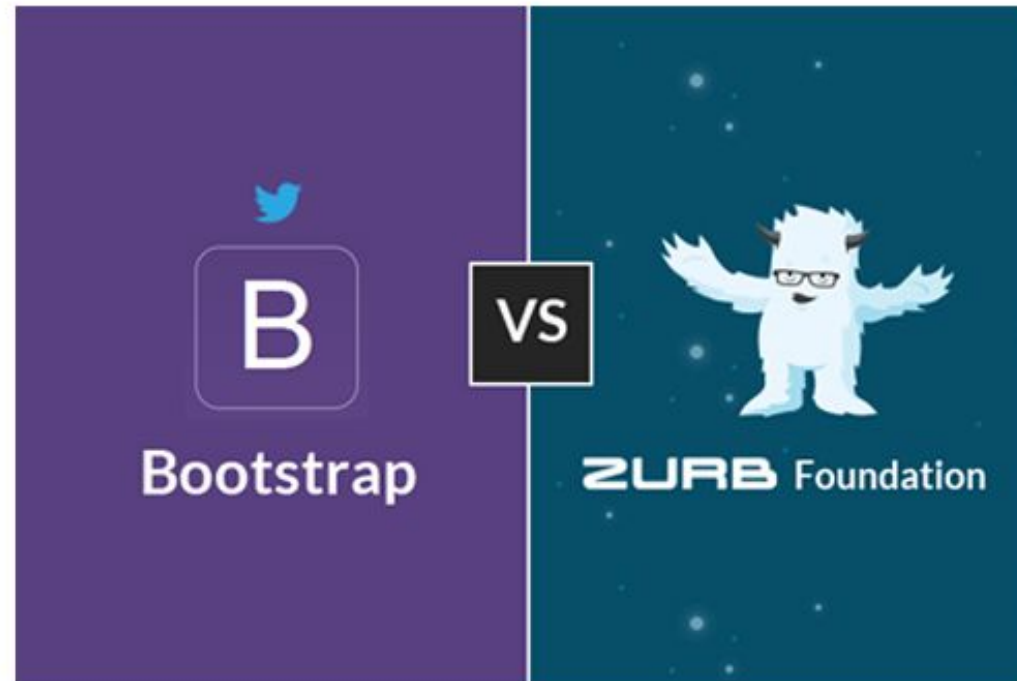


**ONLY CSS**



**ADD:  
LESS, SASS, STYLUS**

# WHO USE ?



## AND OTHERS ...

# WHY ?

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**VARIABLES**

**MIXINS**

**NESTED RULES**

**OPERATIONS**

**EXTEND**

**OTHERS FEATURES**



# VARIABLES

**SIZE**

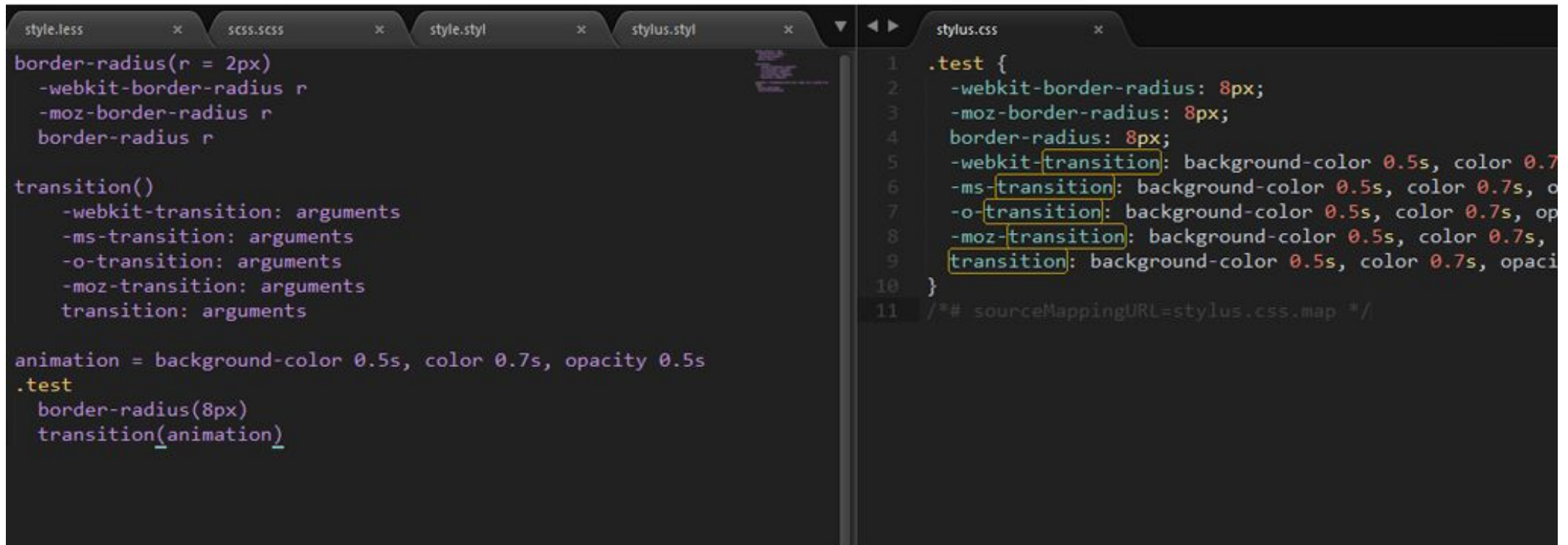
**COLOR**

**URL**

**OPERATION FUNCTION**

```
22 @phone-title:#333;
23 @phone-subtitle:@phone-title*3;
24
25 @button-bg:#3498db;
26 @nav:#3498db;
27
28
29 @fira:'Fira-Sans', sans-serif;
30 @lightFira:300;
31 @mediumFira:500;
32 @lightRoboto:300;
33 @mediumRoboto:500;
34 @boldRoboto:900;
35
36 @colorBase:#222;
37 @colorLink:#4183d7;
38
39 @img: "../img/";
40
41
```

# MIXIN



The image shows a code editor with two panels. The left panel contains Stylus files: `style.less`, `scss.scss`, `style.styl`, and `stylus.styl`. The right panel contains a `stylus.css` file. The `stylus.styl` file defines two mixins: `border-radius(r = 2px)` and `transition()`. The `stylus.css` file shows the compiled output for a `.test` class, including vendor-prefixed and standard CSS properties for border radius and transition, along with a source map comment.

```
style.less
scss.scss
style.styl
stylus.styl
stylus.css

border-radius(r = 2px)
  -webkit-border-radius r
  -moz-border-radius r
  border-radius r

transition()
  -webkit-transition: arguments
  -ms-transition: arguments
  -o-transition: arguments
  -moz-transition: arguments
  transition: arguments

animation = background-color 0.5s, color 0.7s, opacity 0.5s

.test
  border-radius(8px)
  transition(animation)

1 .test {
2   -webkit-border-radius: 8px;
3   -moz-border-radius: 8px;
4   border-radius: 8px;
5   -webkit-transition: background-color 0.5s, color 0.7s, opacity 0.5s;
6   -ms-transition: background-color 0.5s, color 0.7s, opacity 0.5s;
7   -o-transition: background-color 0.5s, color 0.7s, opacity 0.5s;
8   -moz-transition: background-color 0.5s, color 0.7s, opacity 0.5s;
9   transition: background-color 0.5s, color 0.7s, opacity 0.5s;
10 }
11 /*# sourceMappingURL=stylus.css.map */
```



# NESTED RULES



# OPERATIONS

```
20 // Operation
21
22 .em-font-size(@px) {
23     font-size: (@px/16) + 0em;
24 }
25 .myclass {
26     .em-font-size(32);
27 }
28
29 @firstColor: #333;
30 @secondColor: @firstColor*3;
31 .color1{
32     color:@firstColor;
33 }
34 {color2{
35     color:@secondColor;
36 }
```

# **GULP GET START**



# GETTING STARTED



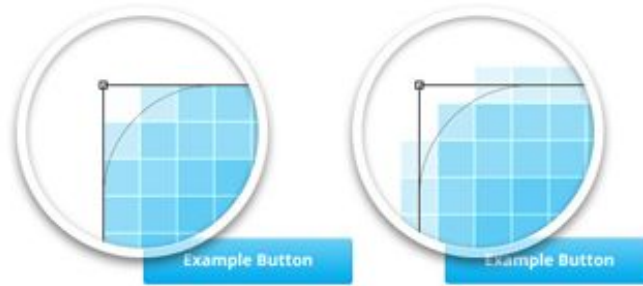
**NPM RM --GLOBAL GULP**

**NPM INSTALL --GLOBAL GULP-CLI**

**NPM INSTALL --SAVE-DEV GULP**

**CREATE A GULPFILE.JS**

# TESTING



**PIXELPERFECT**  
+  
**W3C VALIDATOR**

**W3C** ✓

**YOUR QUESTIONS**