



PostCSS

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POST PROCESSOR

JalaUniversity Bootcamp 23

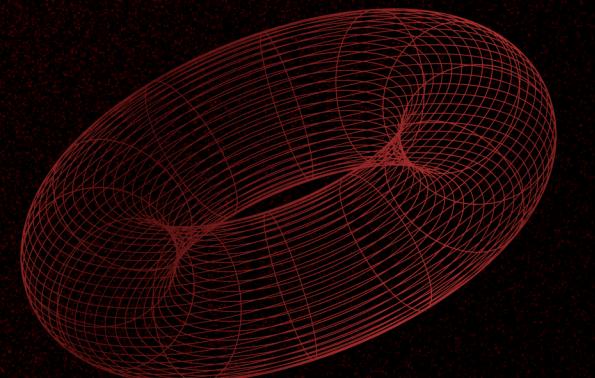
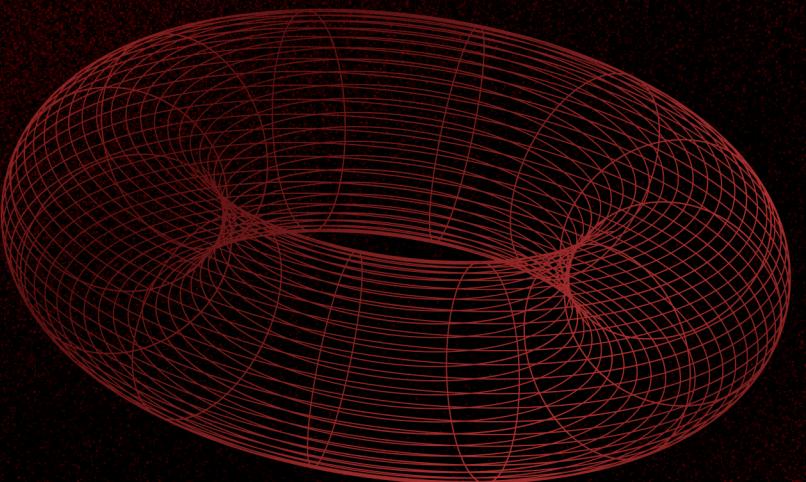
WHAT IS?

PostCSS is a JavaScript tool that transforms your CSS code into an abstract syntax tree (AST) and then provides an API (application programming interface) for analyzing and modifying it using JavaScript plugins.

THE TRUTH

Despite its name, it is neither a post-processor nor a pre-processor, it is just a transpiler that turns a special PostCSS plugin syntax into a Vanilla CSS. You can think of it as the Babel tool for CSS.

PostCSS provides a large ecosystem of plugins to perform different functionalities



What is PostCSS?



PostCSS

Plugins

PostCSS provides a large ecosystem of plugins to perform different functionalities

The screenshot shows a user interface for PostCSS Autoprefixer. On the left, under 'CSS input', is the following CSS code:

```
:fullscreen {  
}  
  -webkit-full-screen {  
  }  
  -ms-fullscreen {  
  }  
  :fullscreen {  
  }
```

On the right, under 'CSS output', is the resulting vendor-prefixed CSS code:

```
-A
```

A large red letter 'A' is displayed below the output box.

Increase code readability

Add vendor prefixes to CSS rules using values from Can I Use. Autoprefixer will use the data based on current browser popularity and property support to apply prefixes for you.

Use tomorrow's CSS today!

PostCSS Preset Env, lets you convert modern CSS into something most browsers can understand, determining the polyfills you need based on your targeted browsers or runtime environments, using cssdb.

The screenshot shows a user interface for PostCSS Preset Env. On the left, under 'CSS input', is the following CSS code:

```
body {  
  color: oklch(61% 0.2 29);  
}
```

On the right, under 'CSS output', is the resulting standard CSS code:

```
body {  
  color: rgb(225, 65, 52);  
}
```

A green box with the word 'CSS' is displayed below the output box.



PostCSS

Plugins

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```
.name {
  color: gray;
}

.Logo__name__SVK0g {
  color: gray;
}
```

CSS input

CSS output

CSS MODULES

The end of global CSS

CSS Modules means you never need to worry about your names being too generic, just use whatever makes the most sense.

Avoid errors in your CSS

Enforce consistent conventions and avoid errors in your stylesheets with stylelint, a modern CSS linter. It supports the latest CSS syntax, as well as CSS-like syntaxes, such as SCSS.

```
a {
  color: #d3;
}
```

css input

app.css
2:10 Invalid hex color

Console output





Benefits

- PostCSS is fully customizable so you can use only the plugins and features you need for your application.
- It also produces fast build times compared with other preprocessors.
- If you want, you can write your own custom plugins. And you can use it with regular CSS as well as alongside other preprocessors like Sass.

Rework:	33 ms	(1.2 times faster)
PostCSS sync:	36 ms	(1.1 times faster)
PostCSS:	38 ms	
Dart Sass sync:	66 ms	(1.7 times slower)
LibSass sync:	68 ms	(1.8 times slower)
LibSass:	69 ms	(1.8 times slower)
Dart Sass:	130 ms	(3.4 times slower)
Less:	256 ms	(6.7 times slower)



Problem

CSS
variables

problems with syntax

PostCSS core doesn't determine the syntax, plugins introducing similar functionality can be simultaneously used.

`/*postcss-custom-properties*/`

```
:root {  
  --mainColor: red;  
}  
  
a {  
  color: var(--mainColor);  
}
```

`/*postcss-simple-vars*/`

```
$mainColor: red;  
  
a {  
  color: $mainColor;  
}
```