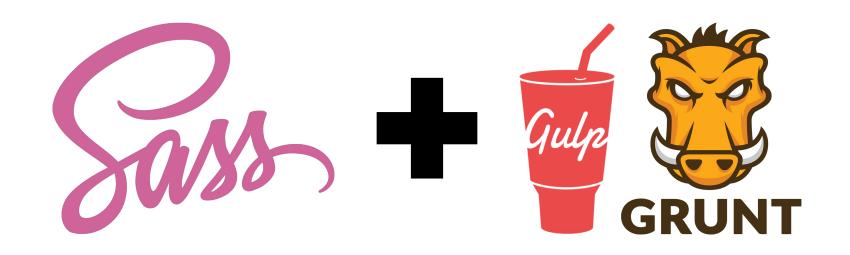
Nodejs 기반 업무 자동화

작성자: 김광염

소속팀 / 상위부서 : UI개발 4팀



















- npm을 이용하여 쉽게 동일한 환경 구축
- 대표적인 업무 자동화 툴인 Grunt와 Gulp의 기반 언어
- Javascript 기반으로 플러그인 개발 난이도가 낮은 편



Node-Sass

Node-sass is a library that provides binding for Node.js to libsass, the C version of the popular stylesheet preprocessor, Sass.

https://github.com/sass/node-sass

https://github.com/sindresorhus/grunt-sass

https://github.com/dlmanning/gulp-sass

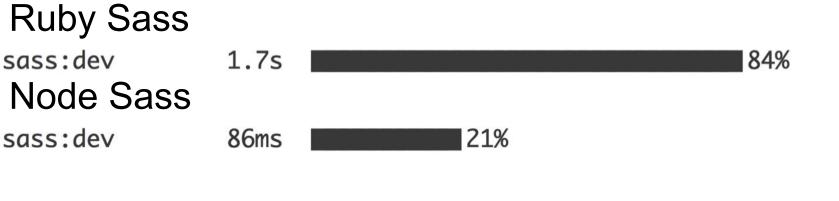
\$ npm install node-sass –D
\$ npm install grunt-sass –D
\$ npm install gulp-sass -D

Ruby Sass

```
Execution Time (2016-01-05 07:03:50 UTC)
loading tasks 323ms 16%
sass:dev 1.7s 84%
Total 2.1s
```

Node Sass

```
Execution Time (2016-01-05 07:00:09 UTC)
loading tasks 322ms 79%
sass:dev 86ms 21%
Total 408ms
```



But not include **compass

SpriteSmith

Convert images into spritesheets and coordinate maps.

https://github.com/Ensighten/spritesmith

```
$fork: (0px, 0px, 0px, 0px, 32px, 32px, 64px, 64px, 'spritesheet.
ス + 孝 + 🍑 = ス辛
                                        handlebarsInheritance.png', 'fork', );
                                        $github: (32px, 0px, -32px, 0px, 32px, 32px, 64px, 64px,
                                        'spritesheet.handlebarsInheritance.png', 'github', );
                                        $twitter: (0px, 32px, 0px, -32px, 32px, 32px, 64px, 64px,
                                        'spritesheet.handlebarsInheritance.png', 'twitter', );
                                        $spritesheet-sprites: ($fork, $github, $twitter, );
                                        $spritesheet: (64px, 64px, 'spritesheet.handlebarsInheritance.png',
                                        $spritesheet-sprites, );
                                        /* ... */
```

Compass SASS Stylesheets

This is a repository to pull SASS style sheets on Bower, and enjoy the compass mixins by using libsass for faster compilation. This project makes minimal modifications to the original stylesheets from the original repository, intented to improve libsass compatibility and not change output.

https://github.com/lgosuki/compass-mixins

```
.pipe(sass({
    outputStyle: 'expanded',
    indentType: 'tab',
    indentWidth: 1,
    includePaths: 'node_modules/compass-mixins/lib'
})
```

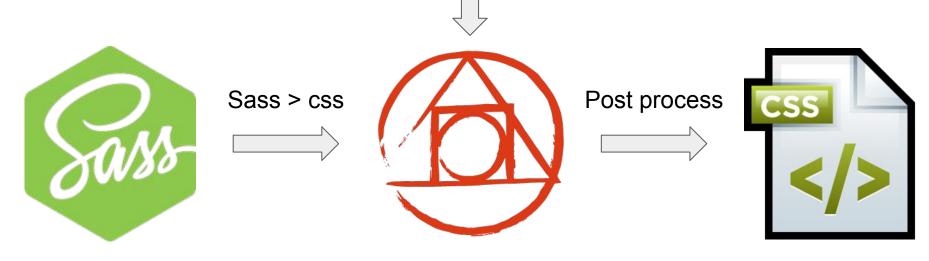


PostCSS

PostCSS is a tool for transforming styles with JS plugins. These plugins can lint your CSS, support variables and mixins, transpile future CSS syntax, inline images, and more.

https://github.com/postcss/postcss

PostCSS Plugins





Autoprefixer

PostCSS plugin to parse CSS and add vendor prefixes to CSS rules using values from Can I Use.

https://github.com/postcss/autoprefixer

```
:fullscreen a {
                                                      display: -webkit-box;
     display: flex
                                                      display: -webkit-flex;
                                                      display: flex
                                                  :-moz-full-screen a {
                                                      display: flex
                                                  :-ms-fullscreen a {
                                                      display: -ms-flexbox;
                                                      display: flex
                                                  :fullscreen a {
                                                      display: -webkit-box;
                                                      display: -webkit-flex;
                                                      display: -ms-flexbox;
                                                      display: flex
```

:-webkit-full-screen a {

CSS MQPacker

Pack same CSS media query rules into one media query rule. Written with PostCSS.

https://github.com/hail2u/node-css-mqpacker

```
.foo::before {
                                         .bar::before {
 content: "foo on small";
                                          content: "bar on small";
@media screen and (min-width: 769px) {
                                        @media screen and (min-width: 769px) {
  .foo::before {
                                           .bar::before {
    content: "foo on medium";
                                            content: "bar on medium";
```

```
.foo::before {
                              @media screen and (min-width: 769px) {
 content: "foo on small";
                                .foo::before {
                                  content: "foo on medium";
.bar::before {
                                .bar::before {
 content: "bar on small";
                                 content: "bar on medium";
```

doiuse

Lint CSS for browser support against caniuse database.

https://github.com/anandthakker/doiuse

```
doiuse({
    browsers: ['ie >= 8','> 1%'],
    ignore: ['rem'], // an optional array of features to ignore
    ignoreFiles: ['**/normalize.css'], // an optional array of file globs to match against original source
file path, to ignore
    onFeatureUsage: function (usageInfo) {
      console.log(usageInfo.message)
  })
```

.pipe(gulp.postcss([

```
(8,7.1), Opera (24,25), iOS Safari (8,7.1,8.1), Android Browser (4.1,4.4,4.4.4), IE Mobile (10,11)
/projects/website/main.css:6:3: CSS3 Box-sizing not supported by: IE (8,9,10,11), Chrome (36,37,38), Safari
(8,7.1), Opera (24,25), iOS Safari (8,7.1,8.1), Android Browser (4.1,4.4,4.4.4), IE Mobile (10,11)
/projects/website/main.css:8:3: CSS user-select: none not supported by: IE (8,9)
/projects/website/main.css:9:3: CSS user-select: none not supported by: IE (8,9)
/projects/website/main.css:10:3: CSS user-select: none not supported by: IE (8,9)
/projects/website/main.css:11:3: CSS user-select: none not supported by: IE (8,9)
/projects/website/main.css:12:3: CSS user-select: none not supported by: IE (8,9)
/projects/website/main.css:13:3: Pointer events not supported by: IE (8,9,10), Firefox (32,33), Chrome
(36,37,38), Safari (8,7.1), Opera (24,25), iOS Safari (8,7.1,8.1), Android Browser (4.1,4.4,4.4.4), IE
Mobile (10)
/projects/website/main.css:14:3: Pointer events not supported by: IE (8,9,10), Firefox (32,33), Chrome
(36,37,38), Safari (8,7.1), Opera (24,25), iOS Safari (8,7.1,8.1), Android Browser (4.1,4.4,4.4.4), IE
Mobile (10)
```

/projects/website/main.css:32:3: CSS3 Transforms not supported by: IE (8)

/projects/website/main.css:5:3: CSS3 Box-sizing not supported by: IE (8,9,10,11), Chrome (36,37,38), Safari

https://github.com/postcss/postcss/blob/master/docs/plugins.md

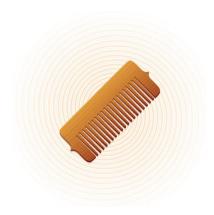
Packs

- atcss contains plugins that transform your CSS according to special annotation comments.
- cssnano contains plugins that optimize CSS size for use in production.
- cssnext contains plugins that allow you to use future CSS features today.
- oldie contains plugins that transform your CSS for older Internet Explorer compatibility.
- precss contains plugins that allow you to use Sass-like CSS.
- rucksack contains plugins to speed up CSS development with new features and shortcuts.
- level4 contains only plugins that let you write CSS4 without the IE9 fallbacks.
- short adds and extends numerous shorthand properties.
- stylelint contains plugins that lint your stylesheets.

Future CSS Syntax

- postcss-color-function supports functions to transform colors.
- postcss-color-gray supports the gray() function.
- postcss-color-hex-alpha supports #rrggbbaa and #rgba notation.
- postcss-color-hwb transforms hwb() to widely compatible rgb().
- postcss-color-rebeccapurple supports the rebeccapurple color.
- postcss-conic-gradient supports the conic-gradient background.
- postcss-custom-media supports custom aliases for media queries.
- postcss-custom-properties supports variables, using syntax from the W3C Custom Properties.
- postcss-custom-selectors adds custom aliases for selectors. postcss-extend supports spec-approximate @extend for rules and placeholders, recursively.
- postcss-font-variant transpiles human-readable font-variant to more widely supported CSS.
- postcss-host makes the Shadow DOM's :host selector work properly with pseudo-classes.
- postcss-initial supports initial keyword and all: initial to clean inherit styles.
- postcss-logical-properties transforms start and end properties to left and right depending on the writing direction of the document.
- nostcss-media-minmay adds <= and => statements to media queries





CSScomb is a coding style formatter for CSS. You can easily write your own configuration to make your style sheets beautiful and consistent.

https://github.com/csscomb/csscomb.js

Build your own config

Choose the code sample you like more:

```
Remove empty rulesets

.a {
    color: tomato;
}
```

```
Leave code untouched

.a {
    color: tomato;
}
.b{}
```

Option 1 of 24

Build your own config

Copy the config from here \(\) and save it as \(\).csscomb.json in your project's dir:

```
"block-indent": "\t",
"color-shorthand": true,
"quotes": "double",
"space-before-colon": "",
"space-after-colon": " ",
"space-before-opening-brace": " ",
"space-after-opening-brace": "\n",
"space-after-selector-delimiter": " ",
"space-before-selector-delimiter": "",
"space-before-closing-brace": "\n",
"strip-spaces": true,
"tab-size": true,
"unitless-zero": true
```

Thank You.