cssnano

modular minifier

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Why write another minifier?

Other projects exist, do we need to reinvent the wheel?

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Performance considerations?

If a file can be made smaller, without breaking its syntax, then it should be. Let us consider places where Internet connectivity is less reliable than ours.

Existing tools lack consistency.

Why should it be that CSS run through different tools produces different results?

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(demo)

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Tools should be smart.

cssnano uses the PostCSS parser, written in JavaScript, which is 3 times faster than libsass, written in C++. No huge regular expressions.

Minifying is too broad a scope.

Many existing tools are very opinionated, and are responsible for too many tasks.

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Modularity is king.

npm taught us to extract functionality into separate modules, and publish at will.

Why should a minifier be excluded from this philosophy?

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postcss-merge-rules
postcss-discard-font-face
postcss-calc
postcss-single-charset
postcss-zindex
postcss-convert-values
postcss-discard-duplicates
postcss-reduce-idents
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postcss-normalize-url
postcss-discard-comments
postcss-font-family
postcss-minify-selectors
postcss-minify-font-weight
postcss-pseudoelements
postcss-discard-empty
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What can it compress?

cssnano covers many optimisations – this is a breakdown of the more unconventional approaches.

postcss-merge-rules

```
a {
  color: black;
  font-weight: bold
}

h1 {
  color: black;
  font-weight: bold
}
```

```
a, h1 {
  color: black;
  font-weight: bold
}
```

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postcss-normalize-url

```
.one {
  background: url("http://site.com:80/css/../image.jpg")
}
```

```
.one {
  background: url(http://site.com/image.jpg)
}
```

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postcss-reduce-idents

```
@keyframes whiteToBlack {
  0% {
    color: #fff
  }
  to {
    color: #000
  }
}
.one {
  animation-name: whiteToBlack
}
```

```
@keyframes a {
  0% {
    color: #fff
  }
  to {
    color: #000
  }
}
.one {
  animation-name: a
}
```

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postcss-zindex

```
.one {
  z-index: 1000
}

.two {
  z-index: 500
}

.three {
  z-index: 2500
}
```

```
.one {
  z-index: 2
}

.two {
  z-index: 1
}

.three {
  z-index: 3
}
```

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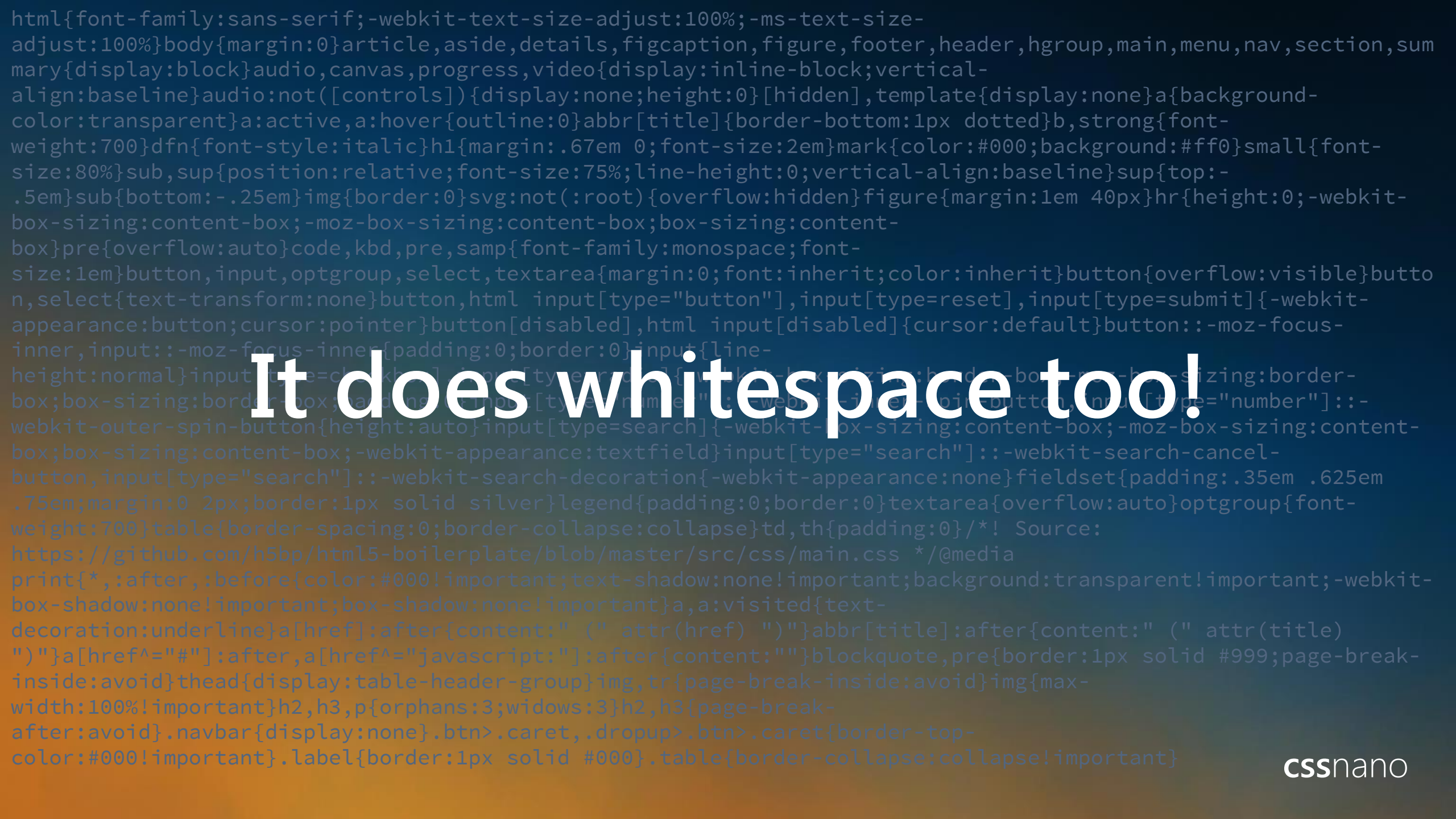
It does whitespace too!
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Built for collaboration.

There are optimisations that are not covered. It is important to get feedback from the community to progress the state of the art of CSS compression.

Project Links

- **css**nano **homepage** https://github.com/ben-eb/cssnano
- **css-minifier-tests** https://github.com/ben-eb/css-minifier-tests
- **broccoli-css**nano https://github.com/sindresorhus/broccoli-cssnano
- **gulp-css**nano https://github.com/ben-eb/gulp-cssnano
- **grunt-css**nano https://github.com/sindresorhus/grunt-cssnano

- **postcss** https://github.com/postcss/postcss

Any Questions?

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