W3C CSS Checker

The Next Generation

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Question:

Why check your CSS?

Answer:

To catch mistakes.

Catch mistakes in your CSS

- Catch syntax errors

- Catch typos in CSS property names

- Catch values with the wrong datatype

Example…

There are three mistakes in the following example…

```css
.ok {
    color: green;
    font-size: bold;
.alert  {
    color: red
    background-color: white;
    font-size: bold;
}
```

```css
.ok {
    color: green;
    font-weight: bold;
}
.alert  {
    color: red;
    background-color: white;
    font-size: 150%;
}
```

How to catch mistakes

Now:

W3C CSS Validator

https://jigsaw.w3.org/css-validator

CSS Validation Service

Check Cascading Style Sheets (CSS) and (X)HTML documents with style sheets

By URI   **By file upload**   **By direct input**

Validate by URI

Enter the URI of a document (HTML with CSS or CSS only) you would like validated:

Address: [   ]

▶ More Options

Check

Problems with CSS Validator

- Very old; started in 2002

- Not actively maintained any more

- Written in Java

- Hard to extend with new CSS properties

More Problems with CSS Validator

- Uses ad-hoc parser that doesn't conform to CSS Syntax spec

So let's make a new CSS Checker!

https://csschecker.w3.org

That URL doesn't exist yet...

…but we are already at github

https://github.com/w3c/css-checker

W3C CSS Checker: The Next Generation — Edit

Branch: **master**   **css-checker** / +

Added some initial requirements

sideshowbarker authored 12 minutes ago   latest commit **4fd5ed76dd**

📄 README.md	Initial commit	25 minutes ago
📄 requirements.md	Added some initial requirements	12 minutes ago

📖 **README.md**

css-checker

W3C CSS Checker: The Next Generation

<> **Code**

① **Issues**   0

⑂ **Pull requests**   0

📖 **Wiki**

∿ **Pulse**

▥ **Graphs**

⚒ **Settings**

New CSS Checker requirements

- Use a CSS parser that conforms to the CSS Syntax spec.

- Use the right programming language.

- Make it easy to extend.

What language to use?

JavaScript + node.js?

Tab Atkins CSS parser written in JavaScript

https://github.com/tabatkins/parse-css

CSS Syntax Module Level 3

Editor's Draft, 16 July 2015

This version:

http://dev.w3.org/csswg/css-syntax/

Latest version:

http://www.w3.org/TR/css-syntax-3/

Previous Versions:

http://www.w3.org/TR/2014/CR-css-syntax-3-20140220/

http://www.w3.org/TR/2013/WD-css-syntax-3-20131105/

http://www.w3.org/TR/2013/WD-css-syntax-3-20130919/

Feedback:

www-style@w3.org with subject line "`[css-syntax]` … *message topic* …" (archives)

Test Suite:

http://test.csswg.org/suites/css-syntax-3_dev/nightly-unstable/

Issue Tracking:

GitHub

Editors:

Tab Atkins Jr. (Google)

Simon Sapin (Mozilla)

Simon Sapin CSS parser written in Rust

https://github.com/servo/rust-cssparser

What is Rust?

Rust is the language that Mozilla Servo is written in

What is Mozilla Servo?

Servo is Mozilla's next-generation
browser engine

Simon Sapin's rust-css-parser is the CSS parser used in Servo

For the CSS Checker, we could use the same CSS parser as a major browser engine

Next-generation browser engine, next-generation CSS Checker

Advantages of Rust

- New, modern language (2010~)

- Pure functional

- High-concurrency/parallelization (to take full advantage of multi-core CPUs)

Let me know what you think of using Rust for the next-generation CSS Checker!

Thanks!