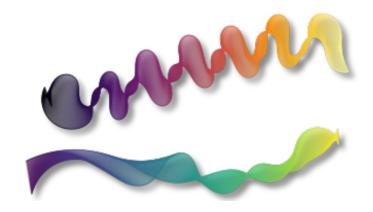
CSS: Frameworks and Tools

Introduction to CSS for beginner

for Personal Educational Purpose.



Jakarta, Indonesia 15 February, 2019

About Epsi



Yet, another underachiever. But hey, I have my own blog.



Frontend: HTML, CSS, JS

What is this rubbish?

A page is a document consist of:

Reference: [va_lesson4.pdf]





HTML Tag

Structure and Formatting

structure = elements in hierarcy fashioned



Stylesheet

Presentation

rule = selector + declaration box model, position layout: flex, grid, float+calc, table



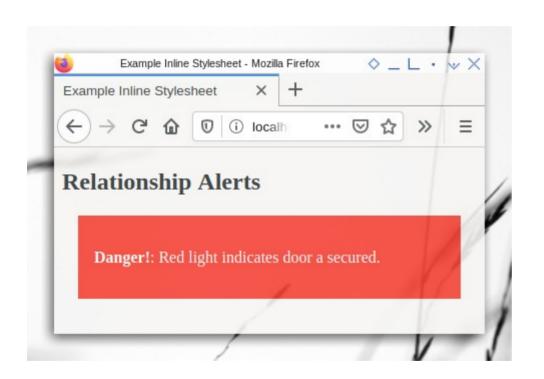
Javascript

Behaviour



Text and Image

Content



Where to Put?

Placement

- Inline, or
- Internal, or
- External.

Yet another humble oldschool case.

[HTML - Stylesheet]

CSS Frameworks

Issue in oldschool CSS Development



Reinvent the wheel

Different stylesheet for each project.

In need of code reuse.



Debugging

Most of the time, debugging.

The horror while testing in different browser.



No standard for teamwork

Waste of time, thinking of nice name for classes.



Can we have a generic one?

Why CSS Framework?



Save Man Hours

Deliver preview quickly.



Community Friendly

Known solution for recurring case.



Reduce Debugging and Test

Already well tested. Hence reduce bug.



Official Documentation

Ready to read.



Modularity

Built on top of CSS preprocessor: Sass, Less, or Stylus, Tailwind on top of PostCSS even more modular.

Direct Advantage to Developer







Grid system or such.



Ready to use

Reset, element, component, helper



Predefined Properties

color, and such

Disadvantage



Learning Time

Require More Cups of Caffeine.



Bloated

Unless utilize modular feature, exclude unneeded artefact.



Feels Like Witchery

This things work, and nobody knows why.



Disadvantage for Beginner

Basic Design Provided

Every site made, will have similar looks.

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When not Using CSS Framework?



You want to write your own

This is technically make sense, for custom design, to make something that suitable for your need.



Legacy Project

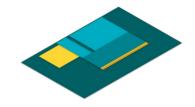
You step up into a team.



AMP

This require embedded stylesheet.

Step by Step Examples?





Bulma

[Bulma + SASS]

[Bulma + Custom SASS] (Material Design)



Materialize CSS

[Materialize CSS + SCSS]



Semantic UI

[Semantic UI + Custom LESS] (Material Design)



Bootstrap

[Bootstrap + Custom SASS] (Open Color)

Tool: Preprocessor!

What is this CSS preprocessor rubbish?

In short: CSS with superpowers!

Just the tool we desire.

The CSS Frustration



CSS code get ugly from time to time

- Nomore clean code.
- Hard to read.
- Hard to maintain.



Always rewrite, for any changes

No variables in old browser.



Modularization affect HTTP perforance.

Multiple files require more HTTP requests.

In short

Developing with CSS without tools is not scalable for large project.

Direct Advantage to Developer



Modify custom properties

Color, and such.



Ready to alter

Reset, element, component



You can claim yourself as a coder

This is a joke. Yes, there is a compilation process.

Why CSS Preprocessor?

Sass, Less or Stylus





Modularity

Let's get organized.

Cleaner code.



Stylesheet

Easier to Maintain Stylesheet



Basic Coding

import partials, variables, interpolation, mixins, function arguments



Made for Developer

Simplified declaration. While compiled css is made for machine (web browser).

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When not Using CSS Preprocessor?



You want to use unmodifed version of CSS Frameworks.

Such as using CDN.



Else

I'm still thinking...

Current 2019 State



Implementation

SASS has wide implementation in many language

Most common are: dart-sass, node-sass, and deprecated ruby-sass

Supported in both Gulp and Grunt.



Tailwind CSS

PostCSS with Tailwind CSS is a rising star.

PostCSS itself is more than just Preprocessor.



LESS is less used



Else

I do not know about this one: Stylus

Which One Should I Choose?



Choose what works for you!





I don't know. I'm just a blogger.

Just like you. I'm still learning.

Preprocessor Examples?





Custom SASS

[SASS: Loop - Spacing Class]



Custom LESS

[LESS: Loop - Spacing Class]

[LESS: Conditional - Color Class]



Custom PostCSS

[PostCSS: Loop - Spacing Class]

Respect!

Special thank you for the smart guys/girls, behind these CSS preprocessor project.

CSS supporting Technologies

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Task Runner and Bundler



Task Runner [Grunt], Gulp, Brunch, Broccolli.



Bundler

[Webpack], [Rollup], [Parcel].

Not Covered Yet?

More about CSS supporting Technologies



PostCSS

Along with their plugins.



Custom CSS

(Without Framework)

Along with repository example.



Tailwind

Along with repository example.

Notes:

This presentation will likely to change. Depend on the growth of my knowledge.

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Summary

Summary **Along with Local Communities**









CSS Framework

[Bulma], [Tailwind CSS], Semantic UI,

Materialize CSS, [Custom CSS].

Local Communities: [@belajarhtmlcss], Local Community: [@css_tools_id]. [@FrontEndID].

CSS Framework

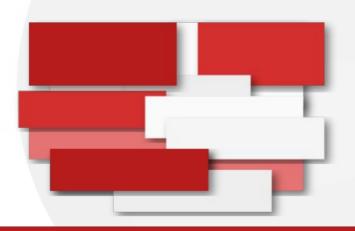
SASS, LESS, PreCSS (via PostCSS)

Useful Tools

Task Runner: Gulp, Grunt,

Bundler: Webpack, Parcel, Roller

Local Community: [@css_tools_id].



What is Next?

Leverage to SSG!

[Introduction to SSG for beginner]

Learn to make a fully mature website without the burden of complicated backend.

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Questions?

Don't be shy!

The End

Thank You for Your Time.