

Skill Training

Frontend Foundation

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Week3 - Schedule

Day11 : Bootstrap

Day12 : Bootstrap

Day13 : SASS

Day14 : LESS

Day15 : Practice Day / Doubts Clarifications

Day-13

SASS



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Index – Day13

1. SASS

- a. SASS Overview, setup,
- b. variables, partials, mixins, imports
- c. media queries, operators
- d. functions, inheritance
- e. conditional directives, loops

SASS



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SASS Overview

What is SASS?

- SASS (Syntactically Awesome Stylesheet)
- Sass is a CSS pre-processor.
- Sass reduces repetition of CSS and therefore saves time.
- It is more stable and powerful **CSS extension language** that describes the style of document structurally.
- It was initially designed by **Hampton Catlin** and developed by **Natalie Weizenbaum** in 2006.

Features of SASS

- It is more stable, powerful, and compatible
- It makes easier way to read/express the things more clearly.
- It uses its own syntax and compiles to readable CSS.
- You can easily write CSS in less code within less time.
- It is an open source pre-processor, which is interpreted into CSS.

Advantages of SASS

- Writing clean CSS in a programming approach.
- Helps in writing CSS quickly.
- It is a superset of CSS, which helps designers and developers work more efficiently.
- As Sass is compatible with all versions of CSS, we can use any available CSS libraries.

Black Lives Matter

Sass stands with the protesters against police violence. We encourage our users to **get in the streets and join them if you can.**

[Install](#)[Learn Sass](#)[Blog](#)[Documentation](#)[Get Involved](#) CTRL K

CSS with superpowers

Sass is the most mature, stable, and powerful professional grade CSS extension language in the world.



Current Releases: [Dart Sass 1.55.0](#) [LibSass 3.6.5](#) [Ruby Sass](#) 🍷 [Implementation Guide](#)

Environment Setup

VS Code extension for SASS Compiler

The screenshot shows the Visual Studio Code interface with the 'Live Sass Compiler' extension page open. The left sidebar displays the 'EXTENSIONS: MARKETPLACE' view with a search bar containing 'sass compiler'. Below the search bar, a list of extensions is shown, with 'Live Sass Compiler' by Glenn Marks highlighted. The main panel displays the details for the 'Live Sass Compiler' extension, including its icon, author name, download count, and a list of tabs for 'Details', 'Feature Contributions', and 'Changelog'. The 'Details' tab is active, showing the extension's version (v5.5.1), download count (735k), rating (4.9/5), and license (MIT). A blue button labeled 'Install' is visible. The bottom status bar shows the extension is installed and active.

File Edit Selection View Go Run Terminal Help

Extension: Live Sass Compiler - Visual Studio Code

EXTENSIONS: MARKETPLACE

saas compiler

Live Sass Compiler 2.3M ★ 4.5
Compile Sass or Scss to CSS at realtime with...
Ritwick Dey

Live Sass Compiler 377K ★ 5
Compile Sass or Scss to CSS at realtime.
Glenn Marks [Install](#)

C Compiler 257K ★ 4.5
Compile and execute C files from VSCode
brapifra [Install](#)

AIO Compiler for C, C++ & Java 70K ★ 4
Simple one click compiler for C, C++, JAVA a...
AztechCorps [Install](#)

C/C++ Compiler explorer 40K ★ 3.5
Show Disassembly output to source relations
Harikrishnan [Install](#)

DartJS Sass Compiler and Sass... 20K ★ 5
Compile Sass and Scss files using DartSass C...

Live Sass Compile
Glenn Marks | 377,377
Compile Sass or Scss to CSS at r...

[Install](#) ⚙️

[Details](#) [Feature Contributions](#) [Changelog](#)

Live Sass Compiler

VSCode Marketplace **v5.5.1** downloads **735k**
rating **4.9/5 (47)** license **MIT**

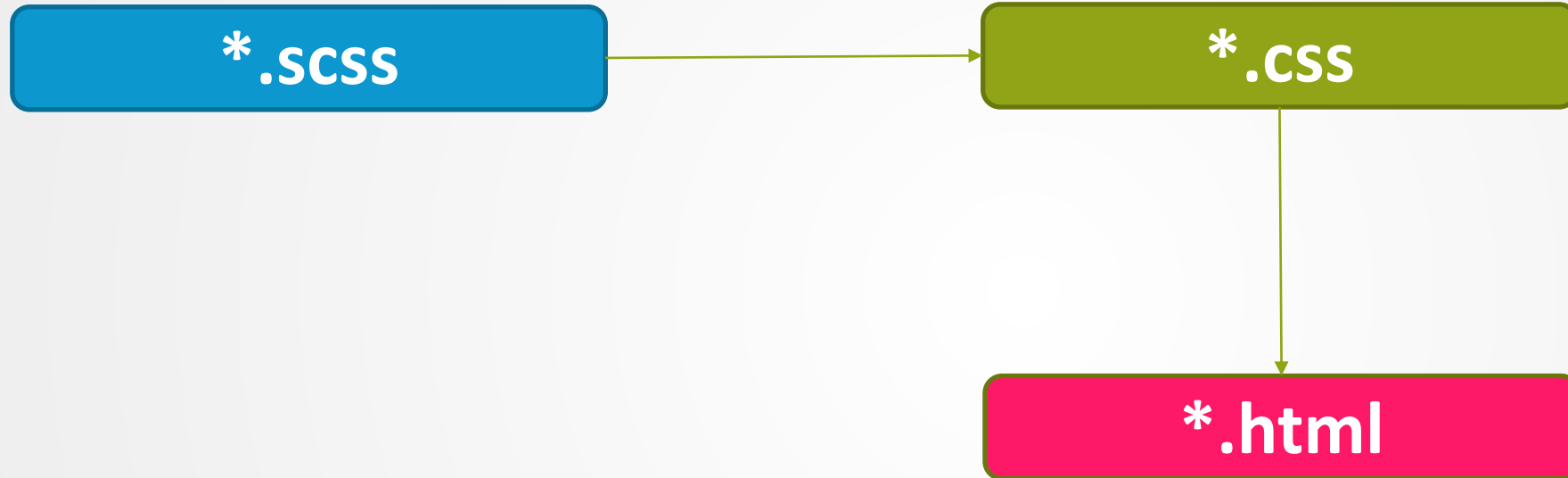
[Like it? Please leave a review. Found something wrong?](#)
[Report an issue](#)

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Steps to Implement

1. Create SASS styles file (*.scss)
2. Compile the *.scss file to generate *.css file
3. Import the *.css file in the web page (*.html)

Steps to Implement



Variables

Variables

- Sass variables are used to store style values so that we can reuse in other selectors.
- Sass uses the \$ symbol to create variable
- Syntax: `$variable-name : value;`
- Example:
 - `$font-stack: Helvetica, sans-serif;`
 - `$primary-color: #333;`

Variables -- Usage

\$font-stack: Helvetica, sans-serif;

\$primary-color: #333;

body {

 font: \$font-stack;

 color: \$primary-color;

}

Partials , Imports,

Partials in SASS

_header.scss

```
header{  
  display: flex;  
  justify-content: center;  
  align-items: center;  
  height: 50vh;  
  background-color: skyblue;  
}
```

MyStyles.scss

```
@use 'header';  
  
...
```

@use vs @import

- @use is the latest option to import the partials
- @use and @import do similar actions.
- As @import is having practical issues for developers, the Sass team discourages the continued use of the @import rule.
- Prefer the @use rule instead.

Mixins

Mixins

- A mixin lets you make groups of CSS declarations that you want to reuse throughout your site.
- Mixins are like functions in javascript
- Mixins can be parameterized.
- Usage:

```
@mixin theme($theme: DarkGray) {  
    background-color: $theme;  
}
```

Operators, Loops & Conditional directives

Operators, Conditional Directives

- Operators: `+`, `-`, `*`, `/`, `%`, `<`,
- Conditional Directives:
 - `@if`, `@else`, `@for`, etc..

For loop

```
@for $i from start to end
{
    // use $i define styles
}
```

```
@for $i from 1 to 6
{
    // use $i define styles
}
```


Media queries

Media Queries

```
$small: 300px;
$medium: 500px;

.card {
  //other styles

  @media screen and (min-width: $small) {
    column-count: 1;
    background-color: lightblue;
  }
  @media screen and (min-width: $medium) {
    column-count: 2;
    background-color: lightyellow;
  }
}
```

Inheritance

Inheritance

- In Sass, `@extend` is used to share a set of CSS properties from one selector to another.
- The `@extend` feature of Sass allows classes to share a set of properties with one another.

```
.message {  
    border: 1px solid #ccc;  
    padding: 10px;  
    color: #333;  
}
```

```
.success {  
    @extend .message;  
    border-color: green;  
}
```

Hands-Ons

Practice Hands-Ons

Q & A



