

## **Sass and Less Preprocessing**

#### **Audience Course Sass and Less Preprocessing**

The course Sass and Less Preprocessing is intended for Web Designers and Developers who want to use Sass and Less Preprocessing in the development of Web Applications.

#### **Prerequisites Course Sass and Less Preprocessing**

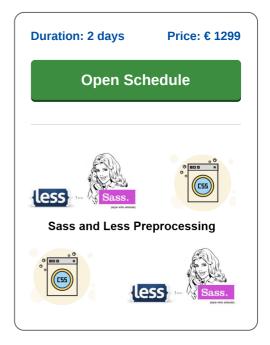
Knowledge and experience with HTML and the basic principles of Cascading Style Sheets (CSS) are required.

#### **Realization Training Sass and Less Preprocessing**

The concepts are discussed on the basis of presentation slides. Demo projects are used to clarify the concepts. The theory and the demos are interchanged with hands-on exercises. Course times are from 9.30 to 16.30.

#### **Certification Sass and Less Preprocessing**

After successful completion of the course participants receive an official certificate Sass and Less Preprocessing.



### **Content Course Sass and Less Preprocessing**

In the course Sass and Less Preprocessing participants learn the functionalities of the CSS Preprocessors Sass and Less. Preprocessors are script languages that extend the default capabilities of CSS. This makes it possible to use logic in CSS code with variables, nesting, inheritance, mixins, functions and mathematical operations. CSS preprocessors make it easy to automate repetitive tasks and reduce errors.

#### **Syntax Sass and Less**

The course starts with a discussion of the basic characteristics of Sass and Less. The Sass syntax with the .scss file extension is discussed. Sass uses standard CSS syntax with braces and semicolons. It is also explained how Less is actually a JavaScript library that requires either NodeJS or compilation using .less files.

#### **Sass Variables and Types**

Subsequently the variables and types of Sass are discussed and the scope of variables, nested rules and nested properties is explained. And also Sass Plugins are treated.

#### **Less Variables and Types**

Attention is paid as well to Less variables and types and the syntax of variable interpolation is discussed. The use of mixin's and the parameterization thereof is also part of the program of the course.

#### **Directives**

A number of directives can be used in Sass such as @import, @mixin, @include and @extend. The meaning and application of these directives is treated. There is also attention for various Sass functions such as Map, Selector and Introspection.

#### **Testing Sass and Less**

The course concludes with the subject of testing Sass and Less. This includes the Less Hat, Clearless and 3L libraries.



# **Modules Course Sass and Less Preprocessing**

Module 1 : CSS Preprocessors	Module 2 : Sass Variables	Module 3 : Less Variables
What is Sass?	Variable Syntax	Naming Variables
Installing Sass	Strings	Variable Types
CSS Extensions	Numbers	Using Variables
Sass Transpilation	Colors	Variable Interpolation
What is Less?	Booleans	Non Staticness
CSS3 for Styling	Lists	Declaration Order
CSS Inheritance	Nulls	Escaping Values
CSS Cascading	SCSS Syntax	Detached Rulesets
Compiling Less	Variable Scope	Lazy Loading
CSS Resets	Sass !global	Mixins
Layout in Less	Plugins	Basic Mixins
Autoprefixing	Nested Rules	Parametric Mixins
BEM Methodology	Nested Properties	Default Values
Module 4 : Sass Directives	Module 5 : Sass Functions	Module 6 : Testing Sass and Less
Importing Files	String Functions	Using Developer Tools
Sass @import	Numeric Functions	Understanding TDD
Partials	List Functions	Test Cycle
Sass Mixins	join and append	Using Style Guides
@mixin	Map Functions	Building Style Guides
Defining Mixins	Selector Functions	Prebuilt Mixins
Passing Parameters	Introspection Functions	Less Hat Library
Vendor Prefixes Mixin	feature-exists	SEO Debugging
@include	function-exists	HTML Debugging
@extend Directive	type-of	Clearless Library
Inheritance	Color Functions	3L Library