



Introducing Materialize

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I dedicate this to my mother and father for their endless support and words of encouragement. I also dedicate this to my many friends who have supported me throughout the process. I will always appreciate all they have done.

—Anirudh Prabhu

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About the Authors



Anirudh Prabhu is a UI Developer with more than seven years of experience. He specializes in HTML, CSS, JavaScript, jQuery, Sass, LESS, Twitter, and Bootstrap. Additionally, he has been associated with Packt and Apress books as a Tech Reviewer for several titles. He is the author of *Beginning CSS Preprocessors: With Sass, Compass, and Less* (Apress, 2015).

He has exposure to CoffeeScript and AngularJS. He's also been involved in building training material for HTML, CSS, and jQuery for twenty19 (www.twenty19.com), which is a portal for providing training for freshers/interns. In his free time, he enjoys listening to music and is also an avid photographer who likes taking unique photos.



Aravind Shenoy A senior technical writer by profession, Aravind's core interests are technical writing, content writing, content development, web design, and business analysis. Born and raised in Mumbai, he still resides there. A music buff, he loves listening to rock n' roll and rap. An engineering graduate from the Manipal Institute of Technology and an author of several books, he is a keen learner and believes that there is a steep learning curve, as Life is all about learning. In summary, as he quips, "The most important thing is to be happy."

About the Technical Reviewer

Phil Nash is a developer evangelist for Twilio, serving developer communities in London and all over the world. He is a Ruby, JavaScript, and Swift developer, a Google Developer Expert, a blogger, a speaker, and occasionally a brewer. He can be found hanging out at meetups and conferences, playing with new technologies and APIs, or writing open source code.

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I dedicate this book to my aunt Godavari, my uncle Satish Rao, my cousin Ashwin, and finally my niece Ajnya, who is the light of my life. I miss her a lot. She taught me to take it easy and to understand the Leonard Cohen quote “There is a crack in everything. That’s how the light gets in.” I would also like to thank the entire Apress team (and Springer) and the Reviewer for the effort and time they put into this book. I sincerely appreciate it! This is my ninth book, but this time as a co-author, so I would like to thank the main author, Anirudh, who had to tolerate my idiosyncrasies. Finally, as Carrie Hope said, “Happiness is always there. You just have to choose to see it. There’s no point dwelling in the dark and ignoring the light of the stars.” Thanks to everyone. I really appreciate it.

—Aravind Shenoy

CHAPTER 1



Introducing Materialize

Materialize is an intuitive framework along the lines of Bootstrap and Foundation. It adheres to the Material Design language launched by Google. Materialize has UI components baked in, which are easy to use and implement, and it provides styling and animations for constructing aesthetic and responsive web sites. It takes into consideration several aspects such as browser portability and responsiveness, all within a compact footprint.

This chapter is a quick start guide to help you get to a grip on the concept of Material Design and an overview of Materialize and how it fits in the paradigm of Material Design.

In this chapter, I will be discussing the following topics:

- What is Material Design?
- What is Materialize CSS?
- Downloading Materialize
- Setting up Materialize
- Third party add-ons
- Sass parts
- A showcase of websites

What Is Material Design?

Material Design, created by Google, is a design philosophy that is inspired by real materials and helps create sleek and interactive web sites. It follows the Google's device-agnostic paradigm and stresses the need for web sites to look the same irrespective of the platform; in other words, uniformity across all devices, such as a tablet or phone or laptop.

Material design competes with other innovative competition such as flat design and metro design. However, it is a distinct concept that helps create a consistent and unified experience that gives a real-world look and is aesthetically pleasing.

Electronic supplementary material The online version of this chapter (doi:[10.1007/978-1-4842-2349-9_1](https://doi.org/10.1007/978-1-4842-2349-9_1)) contains supplementary material, which is available to authorized users.

Material Is Analogy

Material Design and development is inspired by understanding tactile elements used in the real world. This innovative concept is grounded in reality and is actually influenced by paper and ink. It draws and extends from the real world in a selective way, meaning it takes into account only those elements that will result in an awesome user experience. In short, it tries to incorporate the way actual materials in the world look and behave, meaning it doesn't treat your device as a two-dimensional platform. It results in a uniform and visually appealing experience for the users.

Bold, Graphic, Intentional

Typography, space, imagery, and scale are prime when it comes to print media design. Material design is not focused on creating just a visually appealing web site; rather it provides meaning as well and enhances the focus, resulting in an immersive user experience wherein the character or functionality becomes clear and explicitly.

Motion Provides Meaning

This paradigm is focused on ensuring that motion should be meaningful and appropriate. Animation is key to Material Design, which stresses that the transition is effective and coherent and not for the sake of it. It should work meaningfully and naturally, where you can perceive the way an object moves akin to a real-world situation. The physicality of the real world movement must be retained to create a seamless user experience. More information on Material Design methodology can be found on Google's Material Design site at <https://material.google.com/>.

What Is Materialize CSS?



Materialize is an intuitive framework similar to Bootstrap and Foundation that offers ample UI components. However, the function differs because Bootstrap and Foundation are based on the mobile-first approach whereas Materialize adheres to Google's

Material Design philosophy.

Downloading Materialize CSS

Materialize is available in two variants: production-ready and Sass (Figure 1-1).

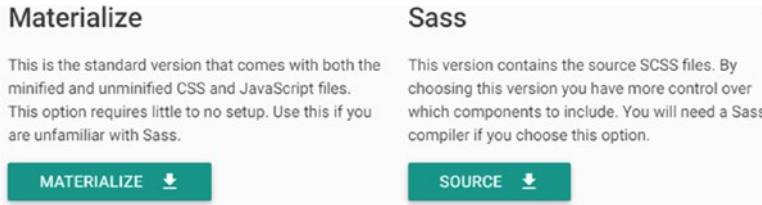


Figure 1-1. Materialize CSS and Sass versions

Production-Ready

The production-ready version is a no-frills one that includes minified as well as unminified CSS and JavaScript files. This version requires hardly any setup and can be included in your document. It doesn't include Sass and is for those users who are looking to use the framework and don't need to build and compile Sass code.

Sass Version

This version contains the SCSS files that are finally compiled to the final CSS files. Using this method, you can gain more control and decide which components to use. You can also customize the components as per the requirement. However, you need a Sass compiler if you use this method.

You can use any variant as per your requirement.

While the previous options (Materialize and Sass versions) required you to download, extract, and then include them in your web site directory, there is an alternative in which you can incorporate Materialize without any download. Here you do not need to download the Materialize locally. All you need to do is incorporate Materialize in your HTML file using a CDN (Content Delivery Network).

There are several advantages of using a CDN:

- It removes the load on your server by serving these scripts and assets from fast CDN servers that are available across the globe, dedicated for this task.
- CDN servers have high availability.
- Since the scripts files are on a CDN, which is a different server, you can achieve concurrency
- It offers enhanced control over asset delivery.

■ **Note** Using CDN requires an internet connection for the implementation to take place.

You can find the CDN at <https://cdnjs.com/libraries/materialize>. You can use Materialize in your design by including the specific link in your HTML document, as depicted in Listing 1-1.