

# Bootstrap 4

## 10. Using Basic Styles in Bootstrap 4

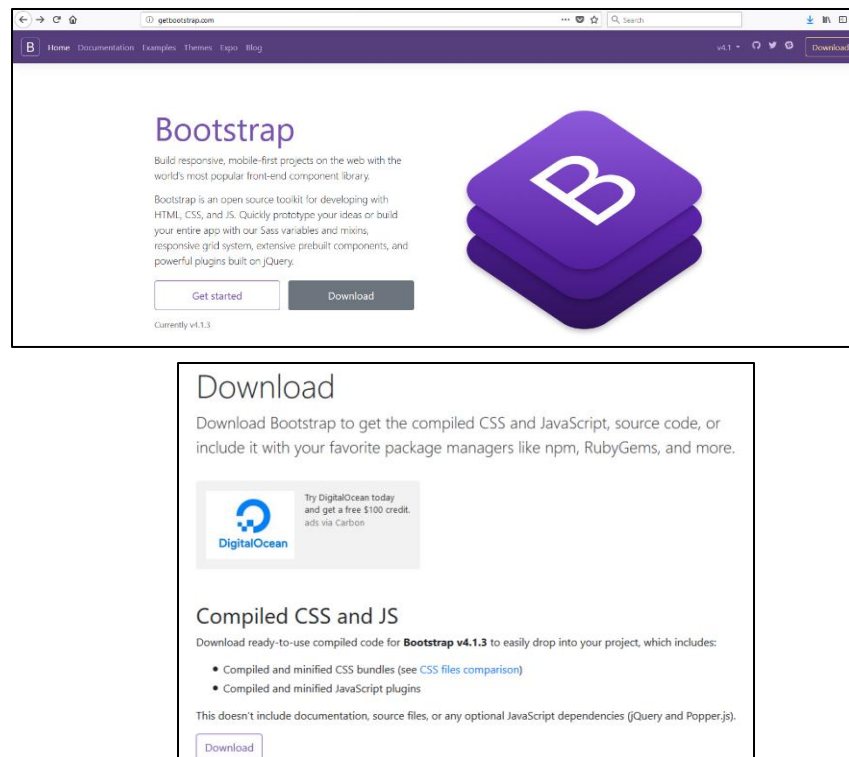
### *Installing Bootstrap 4*

**Bootstrap** is a free and open-source front-end framework (library) for designing websites and web applications. It contains HTML- and CSS-based design templates for typography, forms, buttons, navigation and other interface components, as well as optional JavaScript extensions.

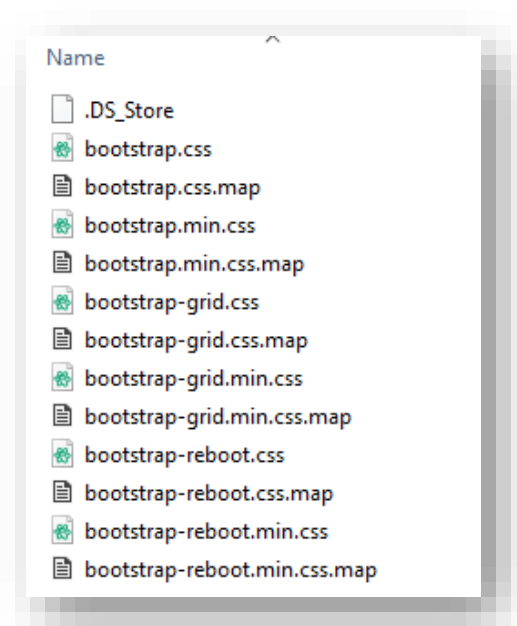
### Installation

This version of Bootstrap has a lot of different installation options. So let's take a quick look at what we have available. Now you can install Bootstrap in one of four ways. The first way is to simply download the pre compiled Bootstrap CSS and JavaScript files. It works really well if you need to install a copy of Bootstrap that will work even without an internet connection. Another way is to use CDNs. A CDN is a content delivery network, which needs a place that hosts common libraries like Bootstrap. You can also download the source files. This way, you download not just the CSS and JavaScript, but all the files that the developers use to create Bootstrap.

Now to get instructions and to download a copy of Bootstrap manually, first go to the [getbootstrap.com](https://getbootstrap.com) website right here and then click on this Download button.

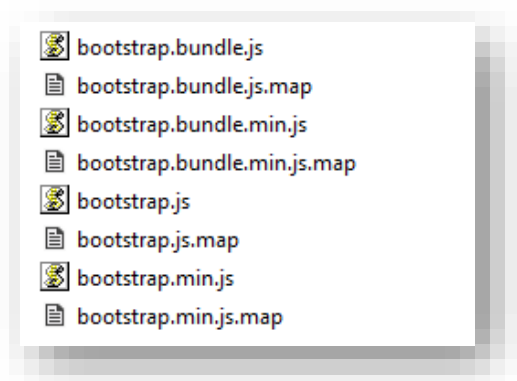


Now this is not going to download anything. It's going to take you to another page where it shows all the different download options. If you scroll down you can see the first option is Compiled CSS and JavaScript. Let's go ahead and click on this button because we want decompiled and minified CSS versions of the library.



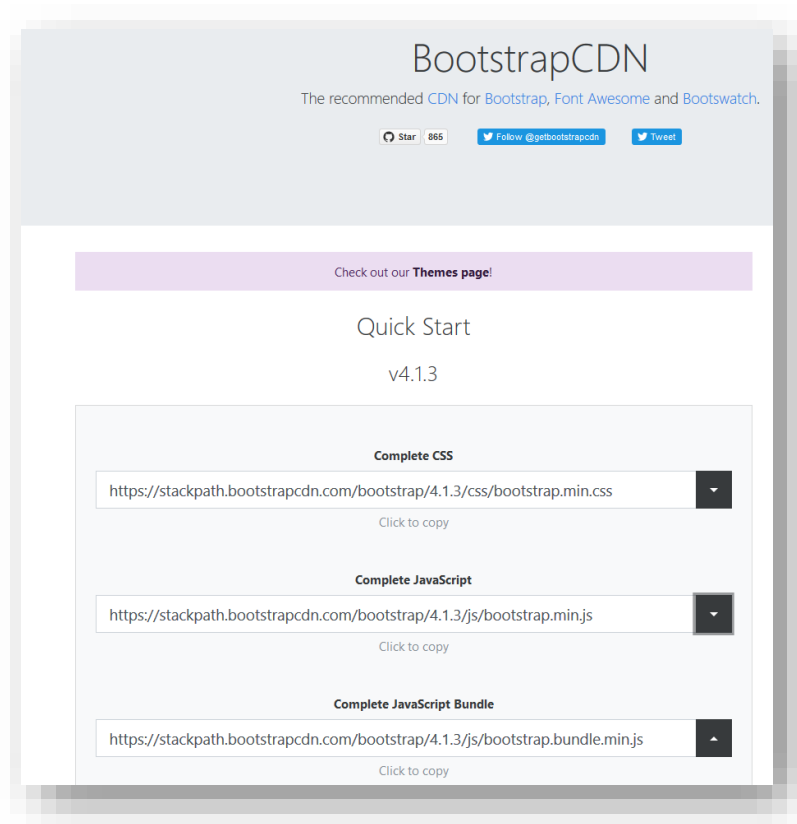
If you open up the folder, you see a CSS folder plus a JavaScript folder. The CSS folder has a number of different versions of the CSS use for the Bootstrap framework. Now if you look at this folder, you'll notice that there are three types of files: regular css files, minimized version, and map files. Map files are files that are useful if you're using Bootstrap in development mode so that they could point you not to the CSS, but to the original SAS code that was used to create the CSS. Some people like to use only the grid features of Bootstrap for a layout so you can get just that if you want to. There's also a Bootstrap reboot file. The reboot files are the special Bootstrap code that resets the CSS and browsers so that they work more consistently in different platforms.

The regular version of Bootstrap contains the grid, the reset, and everything else in Bootstrap. You can choose the regular version if you're going to customize Bootstrap, or just choose Bootstrap.min.css if you just want to use that file.



In the JavaScript folder, you'll also find several files as well. JavaScript also has maps. Since most people write in a version of JavaScript, it gets translated so that it works with older browsers. There are regular and minimized versions of the JavaScript as well. Other than that, there are two types of files: the regular Bootstrap and the Bootstrap bundle. The Bootstrap bundle has all the Bootstrap code plus an additional library called 'popper.js'. **Popper.js** is a positioning engine, its purpose is to calculate the position of an element to make it possible to position it near a given reference element.

Most of time you're going to need just the regular Bootstrap file, however you also use the minimized version since you don't want to edit any of the Bootstrap JavaScript yourself.



When someone visits a site that uses a CDN link, their browser will check its cache or memory to see if the visitor has been to a similar site that's also using the same link. If that's the case, then the browser will load the cached version of the library. Since it's already stored in memory, that makes the new site load faster since the browser will not have to request the file. You can download the CDN version of bootstrap at <https://www.bootstrapcdn.com/>

### **All together**

In order to get start a project using bootstrap, you will need the following file links to your project document:

- Bootstrap
- jQuery
- popper.js
- basic HTML document

To get all the templates at once, you can go to: <http://getbootstrap.com/docs/4.0/getting-started/introduction/> and get a preset code.

## Starter template

Be sure to have your pages set up with the latest design and development standards. That means using an HTML5 doctype and including a viewport meta tag for proper responsive behaviors. Put it all together and your pages should look like this:

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```
<!doctype html>
<html lang="en">
  <head>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

    <!-- Bootstrap CSS -->
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css" integrity="sha384-Gn5"

    <title>Hello, world!</title>
  </head>
  <body>
    <h1>Hello, world!</h1>

    <!-- Optional JavaScript -->
    <!-- jQuery first, then Popper.js, then Bootstrap JS -->
    <script src="https://code.jquery.com/jquery-3.2.1.slim.min.js" integrity="sha384-KJ3o2DKtIkvYIK3UENzmM7KCKRr/rE9/Qpg6aAZG
    <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.9/umd/popper.min.js" integrity="sha384-ApNbgh9B+Y1QKtv
    <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.min.js" integrity="sha384-JZR6Spejh4U02d8jOt6vL
  </body>
</html>
```