

Bootstrap

Agenda

- What is a framework
- What is Bootstrap
- Responsive design

[Bootstrap](#) is a CSS framework, which means that it has a lot of pre-written CSS code that you can use in your HTML project. Bootstrap was created by two software developers at Twitter and it soon became the most popular CSS framework.

Websites that use Bootstrap look [beautiful and modern](#) and are able to adapt to different screen sizes (even to small mobile screens). This ability is called [responsive design](#).

How to add Bootstrap to our project?

We can find Bootstrap here: <http://getbootstrap.com/>. There are many ways of how to include it to our project. One way is to download Bootstrap files and save them in our project folder. Another way is to use a link to a Bootstrap file that is hosted somewhere else on the Web. I will show you both ways and then it's up to you to decide which one to use.

Option 1 (saving to the project folder):

- Go to <http://getbootstrap.com/getting-started/#download> and click on Download Bootstrap. You'll get a ZIP file which you have to unzip.
- There will be a lot of sub-folders in the unzipped Bootstrap folder (css, img, js, fonts). Copy/paste them into your project folder.
- Add a path to Bootstrap CSS and JS file in your HTML file (see an example below).

Example:

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-
scale=1">
    <!-- The above 3 meta tags *must* come first in the head; any other
head content must come *after* these tags -->

    <title>My new website with Bootstrap</title>

    <!-- Bootstrap CSS -->
    <link href="css/bootstrap.css" rel="stylesheet">

    <!-- JavaScript files -->
    <script
src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></s
cript>
    <script src="js/bootstrap.js"></script>
  </head>
```

```

    <body>
      <h1>Hello, world!</h1>
    </body>
  </html>

```

Option 2 (remote Bootstrap files):

In this case you don't have to download anything, because you will use a path to Bootstrap files that are hosted somewhere else on the internet (see the example below).

```

<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <!-- The above 3 meta tags *must* come first in the head; any other
    head content must come *after* these tags -->

    <title>My new website with Bootstrap</title>

    <!-- Bootstrap CSS -->
    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.2/css/bootstrap.min.css
">

    <!-- JavaScript files -->
    <script
src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></s
cript>
    <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.2/js/bootstrap.min.js"><
/script>
  </head>

  <body>
    <h1>Hello, world!</h1>
  </body>
</html>

```

As you can see, we added some JavaScript files (in `<script>` tags). You can learn more about JavaScript in the **Web development 2** course.

How to use Bootstrap in our HTML?

As we said before - Bootstrap is just a bunch of pre-written CSS code that we can use in our HTML. That means that we can use classes from the Bootstrap CSS file and include them into our HTML elements. Let's see some examples:

Bootstrap buttons:

```

<button class="btn btn-default">Default</button>
<button class="btn btn-primary">Primary</button>
<button class="btn btn-info">Info</button>
<button class="btn btn-success">Success</button>
<button class="btn btn-danger">Danger</button>

```

Alert:

```

<div class="alert alert-success" role="alert">Well done!</div>
<div class="alert alert-info" role="alert">some info</div>
<div class="alert alert-warning" role="alert">Warning!!!</div>
<div class="alert alert-danger" role="alert">Alert!</div>

```

Progress bar:

```

<div class="progress">
  <div class="progress-bar" role="progressbar" aria-valuenow="60" aria-
valuemin="0" aria-valuemax="100" style="width: 60%;"> 60% </div>
</div>

```

Panel:

```

<div class="panel panel-primary">
  <div class="panel-heading">
    <h3 class="panel-title">Panel title</h3>
  </div>
  <div class="panel-body">
    Panel content
  </div>
</div>

```

Navigation bar (full example with head and html tags)

```

<!DOCTYPE html>

<html>
  <head>
    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-
scale=1">
    <!-- The above 3 meta tags *must* come first in the head; any other
head content must come *after* these tags -->

    <meta name="description" content="my first website written using
Bootstrap">
    <title>Hello Bootstrap</title>

    <!-- Bootstrap CSS -->
    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.2/css/bootstrap.min.css
">

    <!-- JavaScript files -->
    <script
src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></s
cript>
    <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.2/js/bootstrap.min.js"><
/script>
  </head>

  <body>
    <nav class="navbar navbar-default">
      <div class="container-fluid">
        <!-- Brand and toggle get grouped for better mobile display -->
        <div class="navbar-header">

```

```

        <button type="button" class="navbar-toggle collapsed" data-
toggle="collapse" data-target="#bs-example-navbar-collapse-1">
        <span class="sr-only">Toggle navigation</span>
        <span class="icon-bar"></span>
        <span class="icon-bar"></span>
        <span class="icon-bar"></span>
    </button>
    <a class="navbar-brand" href="#">Brand</a>
</div>

<!-- Collect the nav links, forms, and other content for
toggling -->
<div class="collapse navbar-collapse" id="bs-example-navbar-
collapse-1">
    <ul class="nav navbar-nav navbar-right">
        <li><a href="#">Link</a></li>
        <li class="dropdown">
            <a href="#" class="dropdown-toggle" data-
toggle="dropdown" role="button" aria-expanded="false">Dropdown <span
class="caret"></span></a>
            <ul class="dropdown-menu" role="menu">
                <li><a href="#">Action</a></li>
                <li><a href="#">Another action</a></li>
                <li><a href="#">Something else here</a></li>
                <li class="divider"></li>
                <li><a href="#">Separated link</a></li>
            </ul>
        </li>
    </ul>
</div><!-- /.navbar-collapse -->
</div><!-- /.container-fluid -->
</nav>
</body>
</html>

```

Responsive images

Responsive images are images that can adapt to the screen size. We can achieve this by adding an `img-responsive` class to the `` element:

```

```

Now try resizing your browser screen window ;)

Even more examples

Here you can find even more Bootstrap examples: <http://getbootstrap.com/components/>.

Sites like this are called "documentation". So whenever someone tells you to look into Bootstrap documentation (or "docs"), this is where you look at :)

Exercise 5.1: Bootstrap tutorials

Go through these Bootstrap tutorials:

- Bootstrap on Codecademy: <http://www.codecademy.com/en/skills/make-a-website>

- 10 basic Bootstrap tutorials: https://www.youtube.com/playlist?list=PLMvLDJ7usmZB-Mu4kNB-Qtr_1serQifti
- 4 advanced tutorials:
 - <https://www.youtube.com/watch?v=bytcqPo1XCc>
 - <https://www.youtube.com/watch?v=PKhPcdVdluw>
 - https://www.youtube.com/watch?v=CC7b3_IAs9E
 - <https://www.youtube.com/watch?v=R0nkkXkrby0>

Exercise 5.2: Friseur salon

Our company just got a new client - a friseur salon. We have to build them a new website. They will pay us with free haircuts for the whole year :)

Here are the sketches for the website:

- [Website sketch](#)
- [Website sketch with a modal window](#)

Useful tip: Whenever you start building a website, make a sketch of it first. It can be a simple sketch on paper. This way you create a plan for yourself of what you have to build.

Your assignment is to make a website for this hair salon. You can use Bootstrap to do this (or not - as you wish). You can also find some already made HTML&CSS template on the internet and tweak it according to your needs - it's up to you. Use your imagination! :)

The final product doesn't have to look exactly like the sketches. Use these resources for help:

- [Bootstrap components](#)
- [Bootstrap JavaScript components](#) (Modal, Accordion)
- [W3schools](#)

When you finish, push your code on [GitHub](#) and share it on the forum.

See a possible solution here: <https://github.com/smartninja/wd1-exercises/tree/master/lesson-5>.

Exercise 5.3: Final HTML&CSS quiz

- HTML quiz: <http://www.afterhoursprogramming.com/tests/practice/HTML/>
- CSS quiz: <http://www.afterhoursprogramming.com/tests/practice/CSS/>

Bonus:

- Website with free Bootstrap templates: <http://startbootstrap.com/>
- Web service where you can host your website for free: <https://www.bitballoon.com/>