

BOOT STRAP:

- Bootstrap is a free front-end framework for faster and easier web development
- Bootstrap includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels and many other, as well as optional JavaScript plugins
- Bootstrap also gives you the ability to easily create responsive designs
- Responsive web design is about creating web sites which automatically adjust themselves to look good on all devices, from small phones to large desktops.

There are two ways to start using Bootstrap on your own web site.

You can:

- Download Bootstrap from getbootstrap.com
- Include Bootstrap from a CDN

```
<!-- Latest compiled and minified CSS -->
```

```
<link rel="stylesheet"
      href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
```

```
<!-- jQuery library -->
```

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>
```

```
<!-- Latest compiled JavaScript -->
```

```
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>
```

1. Add the HTML5 doctype

- Bootstrap uses HTML elements and CSS properties that require the HTML5 doctype.
- Always include the HTML5 doctype at the beginning of the page, along with the lang attribute and the correct

character set:

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

</head>

</html>
```

2. Bootstrap 3 is mobile-first

Bootstrap 3 is designed to be responsive to mobile devices. Mobile-first styles are part of the core framework. To ensure proper rendering and touch zooming, add the following <meta> tag inside the <head> element:

```
<meta name="viewport" content="width=device-width, initial-scale=1">
```

The width=device-width part sets the width of the page to follow the screen-width of the device (which will vary depending on the device).

The initial-scale=1 part sets the initial zoom level when the page is first loaded by the browser.

3. Containers

Bootstrap also requires a containing element to wrap site contents.

There are two container classes to choose from:

1. The **.container** class provides a **responsive fixed width container**
2. The **.container-fluid** class provides a **full width container**, spanning the entire width of the viewport

Bootstrap's grid system allows up to 12 columns across the page.

If you do not want to use all 12 columns individually, you can group the columns together to create wider

columns:

Bootstrap's grid system is responsive, and the columns will re-arrange automatically depending on the screen size.

Grid Classes

The Bootstrap grid system has four classes:

- xs (for phones - screens less than 768px wide)
- sm (for tablets - screens equal to or greater than 768px wide)
- md (for small laptops - screens equal to or greater than 992px wide)
- lg (for laptops and desktops - screens equal to or greater than 1200px wide)

The classes above can be combined to create more dynamic and flexible layouts.

Example:

```
<div class="row">  
  
  <div class="col-sm-4">.col-sm-4</div>  
  
  <div class="col-sm-8">.col-sm-8</div>  
  
</div>
```

Generally, Bootstrap 4 is distributed using the repositories Bower (via Github) and NPM (node package manager). Moreover, you also can create your own distribution and use to the source code that connects/links directly to the website.¹ Bootstrap also utilizes the raw files of the cascading style sheets language SASS—this is a precompiler that translates into CSS (unlike its predecessor, Bootstrap 3, where the primary language was LESS).

You can load bootstrap from a CDN (content delivery network) or locally. The local version can be pulled from Bower, npm, Github, or the Bootstrap website respectively.

Once everything is ready, you can create the first page. This page should provide the basic layout of the entire application.

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

```
<meta http-equiv="x-ua-compatible" content="ie=edge">

<link rel="stylesheet"

href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/

bootstrap.min.css" crossorigin="anonymous">

</head>

<body>

<h1>Hello Bootstrap 4</h1>

<script

src="https://ajax.googleapis.com/ajax/libs/jquery/2.1.4/

jquery.min.js"></script>

<script

src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/js/

bootstrap.min.js" crossorigin="anonymous"></script>

</body>

</html>
```

Typography

Bootstrap's global default font-size is 14px, with a line-height of 1.428. This is applied to the <body> element and all paragraphs (<p>).

In addition, all <p> elements have a bottom margin that equals half their computed line-height (10px by default).

- <mark>
- <abbr>
- <blockquote>
- <dl>
- <code>

- <kbd>
- <pre>
- table
- table-striped
- table-bordered
- table-hover

Forms

Forms are fully supported in Bootstrap 4. Many of the components are mainly used to make the forms responsive and can be used with any screen width

Form elements automatically receive the correct formatting. The main class for controls is `.form-control`. Elements that have controllable horizontal extensions such as `<input>`, `<textarea>`, and `<select>` are set to a width of 100% of the parent container. Using `.form-group` the labels and inputs are grouped. They arrange themselves depending on the available width either side-by-side or above one another.

```
<form>

<div class="form-group">

<label for="txtMail">eMail</label>

<input type="email" class="form-control" id="txtMail"
placeholder="eMail">

</div>

<div class="form-group">

<label for="txtPassword">password</label>

<input type="password" class="form-control"
id="txtPassword" placeholder="Password">

</div>

<div class="form-group">

<label for="txtFile">File Selection</label>
```

```
<input type="file" id="txtFile">

<p class="form-text small">

Here is the help for uploading. </p>

</div>

<div class="checkbox">

<label>

<input type="checkbox"> Save

</label>

</div>

<button type="submit" class="btn btn-secondary"> Send

</button>

</form>
```

****Thank You****

And I'll keep on updating this file as per the requirements of the organizations