



Concept of Bootstrap Layout and Media object

What is Bootstrap?

- 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.

What is Responsive Web Design?

Responsive web design is about creating web sites which automatically adjust themselves to look good on all devices, from small phones to large desktops.

Where to Get Bootstrap?

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

Downloading Bootstrap

If you want to download and host Bootstrap yourself, go to getbootstrap.com, and follow the instructions there.

Bootstrap CDN

If you don't want to download and host Bootstrap yourself, you can include it from a CDN (Content Delivery Network).

MaxCDN provides CDN support for Bootstrap's CSS and JavaScript. You must also include jQuery:



```
<!doctype html>
<html lang="en">
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1">
    <title>Bootstrap demo</title>

    <link
href="https://cdn.jsdelivrivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.
min.css" rel="stylesheet" integrity="sha384-
T3c6CoIi6uLrA9TneNEoa7RxnatzjcDSCmG1MXxSR1GAsXEV/Dwwykc2MPK8M2HN"
crossorigin="anonymous">
  </head>

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

    <script
src="https://cdn.jsdelivrivr.net/npm/bootstrap@5.3.2/dist/js/bootstrap.bu
ndle.min.js" integrity="sha384-
C6RzsynM9kWDrMNeT87bh950GNyZPhcTNXj1NW7RuBCsyN/o0jlpcV8Qyq46cDfL"
crossorigin="anonymous"></script>
  </body>

</html>
```



Starter Template

Start with this basic HTML template, or modify these examples. We hope you'll customize our templates and examples, adapting them to suit your needs.

```
<!doctype html>
<html lang="ar" dir="rtl">
  <head>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1">

    <!-- Bootstrap CSS -->
    <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.
rtl.min.css" integrity="sha384-
nU14brUcp6StFntE00EBvcJm4huWjB00cIeQ3fltAfSmuZFrkAif0T+UtNGLKKQv"
crossorigin="anonymous">

    <title>Web Design</title>
  </head>
  <body>
    <h1>Hello All</h1>

    <!-- Optional JavaScript; choose one of the two! -->

    <!-- Option 1: Bootstrap Bundle with Popper -->
    <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/js/bootstrap.bu
ndle.min.js" integrity="sha384-
C6RzsynM9kWDrmMNeT87bh950GNyZPhcTNXj1NW7RuBCsyN/o0jlpcV8Qyq46cDfL"
crossorigin="anonymous"></script>

    <!-- Option 2: Separate Popper and Bootstrap JS -->
    <!--
    <script
src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.11.8/dist/umd/popper
r.min.js" integrity="sha384-
I7E8VVD/ismYTF4hNIPjVp/Zjvgyol6VFvRkX/vR+Vc4jQkC+hVqc2pM80Dewa9r"
crossorigin="anonymous"></script>
```



```
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/js/bootstrap.mi
n.js" integrity="sha384-
BBt1+eGJRgqQAUMxJ7pMwbEyER411g+015P+16Ep7Q9Q+zqX6gSbd85u4mG4QzX+"
crossorigin="anonymous"></script>
-->
</body>
</html>
```

HTML5 doctype

Bootstrap makes use of certain HTML elements and CSS properties that require the use of the HTML5 doctype. Include it at the beginning of all your projects.

```
<!doctype html>
<html lang="en">
...
</html>
```

Mobile first

With Bootstrap 2, we added optional mobile friendly styles for key aspects of the framework. With Bootstrap 3, we've rewritten the project to be mobile friendly from the start. Instead of adding on optional mobile styles, they're baked right into the core. In fact, **Bootstrap is mobile first**. Mobile first styles can be found throughout the entire library instead of in separate files.

To ensure proper rendering and touch zooming, **add the viewport meta tag** to your <head>.

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

You can disable zooming capabilities on mobile devices by adding user-scalable=no to the viewport meta tag. This disables zooming, meaning users are only able to scroll, and results in your site feeling a bit more like a native application. Overall, we don't recommend this on every site, so use caution!

```
<meta name="viewport" content="width=device-width, initial-
scale=1, maximum-scale=1, user-scalable=no">
```

Containers

Bootstrap requires a containing element to wrap site contents and house our grid system. You may choose one of two containers to use in your projects. Note that, due to padding and more, neither container is nestable.

Use .container for a responsive fixed width container.



```
<div class="container">
  ...
</div>
```

Use `.container-fluid` for a full width container, spanning the entire width of your viewport.

```
<div class="container-fluid">
  ...
</div>
```

	Extra small <576px	Small ≥576px	Medium ≥768px	Large ≥992px	X-Large ≥1200px	XX-Large ≥1400px
<code>.container</code>	100%	540px	720px	960px	1140px	1320px
<code>.container-sm</code>	100%	540px	720px	960px	1140px	1320px
<code>.container-md</code>	100%	100%	720px	960px	1140px	1320px
<code>.container-lg</code>	100%	100%	100%	960px	1140px	1320px
<code>.container-xl</code>	100%	100%	100%	100%	1140px	1320px
<code>.container-xxl</code>	100%	100%	100%	100%	100%	1320px
<code>.container-fluid</code>	100%	100%	100%	100%	100%	100%

Grid system

Bootstrap includes a responsive, mobile first fluid grid system that appropriately scales up to 12 columns as the device or viewport size increases. It includes predefined classes for easy layout options, as well as powerful mixins for generating more semantic layouts.



Grid systems are used for creating page layouts through a series of rows and columns that house your content. Here's how the Bootstrap grid system works:

- Rows must be placed within a `.container` (fixed-width) or `.container-fluid` (full-width) for proper alignment and padding.
- Use rows to create horizontal groups of columns.
- Content should be placed within columns, and only columns may be immediate children of rows.
- Predefined grid classes like `.row` and `.col-xs-4` are available for quickly making grid layouts. Less mixins can also be used for more semantic layouts.
- Columns create gutters (gaps between column content) via padding. That padding is offset in rows for the first and last column via negative margin on `.rows`.
- The negative margin is why the examples below are outdented. It's so that content within grid columns is lined up with non-grid content.
- Grid columns are created by specifying the number of twelve available columns you wish to span. For example, three equal columns would use three `.col-xs-4`.
- If more than 12 columns are placed within a single row, each group of extra columns will, as one unit, wrap onto a new line.
- Grid classes apply to devices with screen widths greater than or equal to the breakpoint sizes, and override grid classes targeted at smaller devices. Therefore, e.g. applying any `.col-md-*` class to an element will not only affect its styling on medium devices but also on large devices if a `.col-lg-*` class is not present.



Grid options

	xs <576px	sm ≥576px	md ≥768px	lg ≥992px	xl ≥1200px	xxl ≥1400px
Container max-width	None (auto)	540px	720px	960px	1140px	1320px
Class prefix	<code>.col-</code>	<code>.col-sm-</code>	<code>.col-md-</code>	<code>.col-lg-</code>	<code>.col-xl-</code>	<code>.col-xxl-</code>
# of columns	12					
Gutter width	1.5rem (.75rem on left and right)					
Custom gutters	Yes					
Nestable	Yes					
Column ordering	Yes					

Example: Stacked-to-horizontal

.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1
.col-md-8								.col-md-4			
.col-md-4				.col-md-4				.col-md-4			
.col-md-6						.col-md-6					

```
<div class="row">
  <div class="col-md-1">.col-md-1</div>
  <div class="col-md-1">.col-md-1</div>
  <div class="col-md-1">.col-md-1</div>
  <div class="col-md-1">.col-md-1</div>
  <div class="col-md-1">.col-md-1</div>
```



```
<div class="col-md-1">.col-md-1</div>
<div class="col-md-1">.col-md-1</div>
<div class="col-md-1">.col-md-1</div>
<div class="col-md-1">.col-md-1</div>
<div class="col-md-1">.col-md-1</div>
<div class="col-md-1">.col-md-1</div>
<div class="col-md-1">.col-md-1</div>
</div>
<div class="row">
  <div class="col-md-8">.col-md-8</div>
  <div class="col-md-4">.col-md-4</div>
</div>
<div class="row">
  <div class="col-md-4">.col-md-4</div>
  <div class="col-md-4">.col-md-4</div>
  <div class="col-md-4">.col-md-4</div>
</div>
<div class="row">
  <div class="col-md-6">.col-md-6</div>
  <div class="col-md-6">.col-md-6</div>
</div>
```

Example: Fluid container

Turn any fixed-width grid layout into a full-width layout by changing your outermost .container to .container-fluid.

```
<div class="container-fluid">
  <div class="row">
    ...
  </div>
</div>
```




Example: Mobile and desktop

.col-xs-12 .col-md-8		.col-xs-6 .col-md-4	
.col-xs-6 .col-md-4		.col-xs-6 .col-md-4	
.col-xs-6		.col-xs-6	

```
<!-- Stack the columns on mobile by making one full-
width and the other half-width -->
<div class="row">
  <div class="col-xs-12 col-md-8">.col-xs-12 .col-md-8</div>
  <div class="col-xs-6 col-md-4">.col-xs-6 .col-md-4</div>
</div>

<!--
Columns start at 50% wide on mobile and bump up to 33.3% wide on desktop
-->
<div class="row">
  <div class="col-xs-6 col-md-4">.col-xs-6 .col-md-4</div>
  <div class="col-xs-6 col-md-4">.col-xs-6 .col-md-4</div>
  <div class="col-xs-6 col-md-4">.col-xs-6 .col-md-4</div>
</div>

<!-- Columns are always 50% wide, on mobile and desktop -->
<div class="row">
  <div class="col-xs-6">.col-xs-6</div>
  <div class="col-xs-6">.col-xs-6</div>
</div>
```

Example: Mobile, tablet, desktop

.col-xs-12 .col-sm-6 .col-md-8		.col-xs-6 .col-md-4
.col-xs-6 .col-sm-4	.col-xs-6 .col-sm-4	.col-xs-6 .col-sm-4

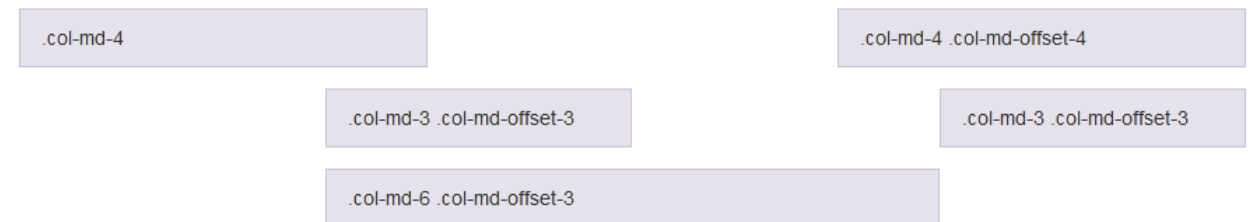
```
<div class="row">
  <div class="col-xs-12 col-sm-6 col-md-8">.col-xs-12 .col-sm-6 .col-md-
8</div>
```



```
<div class="col-xs-6 col-md-4">.col-xs-6 .col-md-4</div>
</div>
<div class="row">
  <div class="col-xs-6 col-sm-4">.col-xs-6 .col-sm-4</div>
  <div class="col-xs-6 col-sm-4">.col-xs-6 .col-sm-4</div>
  <!--
Optional: clear the XS cols if their content doesn't match in height -->
  <div class="clearfix visible-xs-block"></div>
  <div class="col-xs-6 col-sm-4">.col-xs-6 .col-sm-4</div>
</div>
```

Offsetting columns

Move columns to the right using `.col-md-offset-*` classes. These classes increase the left margin of a column by * columns. For example, `.col-md-offset-4` moves `.col-md-4` over four columns.



```
<div class="row">
  <div class="col-md-4">.col-md-4</div>
  <div class="col-md-4 col-md-offset-4">.col-md-4 .col-md-offset-4</div>
</div>
<div class="row">
  <div class="col-md-3 col-md-offset-3">.col-md-3 .col-md-offset-3</div>
  <div class="col-md-3 col-md-offset-3">.col-md-3 .col-md-offset-3</div>
</div>
<div class="row">
  <div class="col-md-6 col-md-offset-3">.col-md-6 .col-md-offset-3</div>
</div>
```

Typography



Headings

All HTML headings, <h1> through <h6>, are available. .h1 through .h6 classes are also available, for when you want to match the font styling of a heading but still want your text to be displayed inline.

h1. Bootstrap heading

Semibold 36px

h2. Bootstrap heading

Semibold 30px

h3. Bootstrap heading

Semibold 24px

h4. Bootstrap heading

Semibold 18px

h5. Bootstrap heading

Semibold 14px

h6. Bootstrap heading

Semibold 12px

```
<h1>h1. Bootstrap heading</h1>
<h2>h2. Bootstrap heading</h2>
<h3>h3. Bootstrap heading</h3>
<h4>h4. Bootstrap heading</h4>
<h5>h5. Bootstrap heading</h5>
<h6>h6. Bootstrap heading</h6>
```

Body copy

Bootstrap's global default font-size is **14px**, with a line-height of **1.428**. This is applied to the <body> and all paragraphs. In addition, <p> (paragraphs) receive a bottom margin of half their computed line-height (10px by default).

```
<p>...</p>
```

Marked text

For highlighting a run of text due to its relevance in another context, use the <mark> tag.

You can use the mark tag to <mark>highlight</mark> text.

Deleted text

For indicating blocks of text that have been deleted use the tag.



```
<del>This line of text is meant to be treated as deleted text.</del>
```

Strikethrough text

For indicating blocks of text that are no longer relevant use the `<s>` tag.

```
<s>This line of text is meant to be treated as no longer accurate.</s>
```

Inserted text

For indicating additions to the document use the `<ins>` tag.

```
<ins>This line of text is meant to be treated as an addition to the document.</ins>
```

Alignment classes

Easily realign text to components with text alignment classes.

```
<p class="text-left">Left aligned text.</p>
<p class="text-center">Center aligned text.</p>
<p class="text-right">Right aligned text.</p>
<p class="text-justify">Justified text.</p>
<p class="text-nowrap">No wrap text.</p>
```

Transformation classes

Transform text in components with text capitalization classes.

```
<p class="text-lowercase">Lowercased text.</p>
<p class="text-uppercase">Uppercased text.</p>
<p class="text-capitalize">Capitalized text.</p>
```

Addresses

Present contact information for the nearest ancestor or the entire body of work. Preserve formatting by ending all lines with `
`.

```
<address>
  <strong>Twitter, Inc.</strong><br>
  1355 Market Street, Suite 900<br>
  San Francisco, CA 94103<br>
  <abbr title="Phone">P:</abbr> (123) 456-7890
</address>

<address>
```



```
<strong>Full Name</strong><br>
<a href="mailto:#">first.last@example.com</a>
</address>
```

Blockquotes

Wrap `<blockquote>` around any HTML as the quote. For straight quotes, we recommend a `<p>`.

```
<blockquote>
  <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Integer po-
  suere erat a ante.</p>
</blockquote>
```

Lists

A list of items in which the order does *not* explicitly matter.

```
<ul>
  <li>...</li>
</ul>
```

Tables

For basic styling—light padding and only horizontal dividers—add the base class `.table` to any `<table>`. It may seem super redundant, but given the widespread use of tables for other plugins like calendars and date pickers, we've opted to isolate our custom table styles.

```
<table class="table">
  ...
</table>
```

Striped rows

Use `.table-striped` to add zebra-striping to any table row within the `<tbody>`.

```
<table class="table table-striped">
  ...
</table>
```



Bordered table

Add `.table-bordered` for borders on all sides of the table and cells.

```
<table class="table table-bordered">
  ...
</table>
```

Hover rows

Add `.table-hover` to enable a hover state on table rows within a `<tbody>`.

```
<table class="table table-hover">
  ...
</table>
```

Contextual classes

Use contextual classes to color table rows or individual cells.

Class	Description
<code>.active</code>	Applies the hover color to a particular row or cell
<code>.success</code>	Indicates a successful or positive action
<code>.info</code>	Indicates a neutral informative change or action
<code>.warning</code>	Indicates a warning that might need attention
<code>.danger</code>	Indicates a dangerous or potentially negative action

```
<!-- On rows -->
<tr class="active">...</tr>
<tr class="success">...</tr>
<tr class="warning">...</tr>
<tr class="danger">...</tr>
<tr class="info">...</tr>
<!-- On cells (`td` or `th`) -->
<tr>
  <td class="active">...</td>
  <td class="success">...</td>
  <td class="warning">...</td>
  <td class="danger">...</td>
  <td class="info">...</td>
</tr>
```



Responsive tables

Create responsive tables by wrapping any `.table` in `.table-responsive` to make them scroll horizontally on small devices (under 768px). When viewing on anything larger than 768px wide, you will not see any difference in these tables.

```
<div class="table-responsive">
  <table class="table">
    ...
  </table>
</div>
```

Images

Responsive images

Images in Bootstrap 3 can be made responsive-friendly via the addition of the `.img-responsive` class. This applies `max-width: 100%;`, `height: auto;` and `display: block;` to the image so that it scales nicely to the parent element.

To center images which use the `.img-responsive` class, use `.center-block` instead of `.text-center`.

```

```

Image shapes

Add classes to an `` element to easily style images in any project.

```



```