

Bootstrap::

Twitter Bootstrap is the most popular front end framework in the recent time. It is sleek, intuitive, and powerful mobile first front-end framework for faster and easier web development. It uses HTML, CSS and Javascript.

Advantages of Bootstrap:

Easy to use: Anybody with just basic knowledge of HTML and CSS can start using Bootstrap

Responsive features: Bootstrap's responsive CSS adjusts to phones, tablets, and desktops

Mobile-first approach: In Bootstrap 3, mobile-first styles are part of the core framework

Browser compatibility: Bootstrap is compatible with all modern browsers (Chrome, Firefox, Internet Explorer, Safari, and Opera)

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:

MaxCDN:

```
<!-- Latest compiled and minified CSS -->
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">
```

```
<!-- jQuery library -->
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.1.1/jquery.min.js"></script>
```

```
<!-- Latest compiled JavaScript -->
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js"></script>
```

Create First Web Page With Bootstrap

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:

The .container class provides a responsive fixed width container

The .container-fluid class provides a full width container, spanning the entire width of the viewport

Note: Containers are not nestable (you cannot put a container inside another container)

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/
bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.1.1/jquery.min.js"></
script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/
```

```
bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <h1>My First Bootstrap Page</h1>
  <p>This is some text.</p>
</div>
</body>
</html>

<div class="container-fluid">
  <h1>My First Bootstrap Page</h1>
  <p>This is some text.</p>
</div>
```

Grid Classes

The Bootstrap grid system has four classes:

- xs (for phones)
- sm (for tablets)
- md (for desktops)
- lg (for larger desktops)

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

Bootstrap Table

A basic Bootstrap table has a light padding and only horizontal dividers.

The .table class adds basic styling to a table:

Striped Rows

The .table-striped class adds zebra-stripes to a table:

Bordered Table

The .table-bordered class adds borders on all sides of the table and cells:

Hover Rows

The .table-hover class adds a hover effect (grey background color) on table rows:

Condensed Table

The .table-condensed class makes a table more compact by cutting cell padding in half:

Contextual Classes

Contextual classes can be used to color table rows (<tr>) or table cells (<td>):

- .active Applies the hover color to the table row or table cell
- .success Indicates a successful or positive action
- .info Indicates a neutral informative change or action
- .warning Indicates a warning that might need attention
- .danger Indicates a dangerous or potentially negative action

Responsive Tables

The .table-responsive class creates a responsive table. The table will then scroll horizontally on small devices (under 768px). When viewing on anything larger than 768px wide, there is no difference:

Bootstrap Images

The .img-rounded class adds rounded corners to an image (IE8 does not support rounded corners):

Circle

The .img-circle class shapes the image to a circle (IE8 does not support rounded corners):

Thumbnail

The .img-thumbnail class shapes the image to a thumbnail:

Responsive Images

Images come in all sizes. So do screens. Responsive images automatically adjust to fit the size of the screen.

Create responsive images by adding an .img-responsive class to the tag. The image will then scale nicely to the parent element.

The .img-responsive class applies display: block; and max-width: 100%; and height: auto; to the image:

Creating a Jumbotron

A jumbotron indicates a big box for calling extra attention to some special content or information.

A jumbotron is displayed as a grey box with rounded corners. It also enlarges the font sizes of the text inside it.

Use a <div> element with class .jumbotron to create a jumbotron:

Page Header

Use a <div> element with class .page-header to create a page header:

Wells

The `.well` class adds a rounded border around an element with a gray background color and some padding:

Change the size of the well by adding the `.well-sm` class for small wells or `.well-lg` class for large wells:

By default, wells are medium in size.

Alerts

Bootstrap provides an easy way to create predefined alert messages:

Alerts are created with the `.alert` class, followed by one of the four contextual classes `.alert-success`, `.alert-info`, `.alert-warning` or `.alert-danger`:

To close the alert message, add a `.alert-dismissible` class to the alert container. Then add `class="close"` and `data-dismiss="alert"` to a link or a button element (when you click on this the alert box will disappear).

Example

```
<div class="alert alert-success alert-dismissible">
  <a href="#" class="close" data-dismiss="alert" aria-label="close">&times;</a>
  <strong>Success!</strong> Indicates a successful or positive action.
</div>
```

Button Styles

Bootstrap provides seven styles of buttons:

To achieve the button styles above, Bootstrap has the following classes:

- `.btn-default`
- `.btn-primary`
- `.btn-success`
- `.btn-info`
- `.btn-warning`
- `.btn-danger`
- `.btn-link`

The classes that define the different sizes are:

- `.btn-lg`
- `.btn-md`
- `.btn-sm`
- `.btn-xs`

The following example shows the code for different button sizes:

Example

```
<button type="button" class="btn btn-primary btn-lg">Large</button>
<button type="button" class="btn btn-primary btn-md">Medium</button>
<button type="button" class="btn btn-primary btn-sm">Small</button>
<button type="button" class="btn btn-primary btn-xs">XSmall</button>
```

Add class .btn-block to create a block level button:

Example

```
<button type="button" class="btn btn-primary btn-block">Button 1</button>
```

Active/Disabled Buttons

A button can be set to an active (appear pressed) or a disabled (unclickable) state:

The class .active makes a button appear pressed, and the class .disabled makes a button unclickable:

Example

```
<button type="button" class="btn btn-primary active">Active Primary</button>
```

```
<button type="button" class="btn btn-primary disabled">Disabled Primary</button>
```

Tip: Instead of applying button sizes to every button in a group, use class .btn-group-lg|sm|xs to size all buttons in the group:

Example

```
<div class="btn-group btn-group-lg">
```

```
  <button type="button" class="btn btn-primary">Apple</button>
```

```
  <button type="button" class="btn btn-primary">Samsung</button>
```

```
  <button type="button" class="btn btn-primary">Sony</button>
```

```
</div>
```

Use the class .btn-group-vertical to create a vertical button group:

Example

```
<div class="btn-group-vertical">
```

```
  <button type="button" class="btn btn-primary">Apple</button>
```

```
  <button type="button" class="btn btn-primary">Samsung</button>
```

```
  <button type="button" class="btn btn-primary">Sony</button>
```

```
</div>
```

Justified Button Groups

To span the entire width of the screen, use the .btn-group-justified class:

Example with <a> elements:

Example

```
<div class="btn-group btn-group-justified">
```

```
  <a href="#" class="btn btn-primary">Apple</a>
```

```
  <a href="#" class="btn btn-primary">Samsung</a>
```

```
  <a href="#" class="btn btn-primary">Sony</a>
```

```
</div>
```

Nesting Button Groups & Dropdown Menus

Nest button groups to create dropdown menus:

Example

```
<div class="btn-group">
```

```
  <button type="button" class="btn btn-primary">Apple</button>
```

```
  <button type="button" class="btn btn-primary">Samsung</button>
```

```
  <div class="btn-group">
```

```
    <button type="button" class="btn btn-primary dropdown-toggle" data-
```

```

toggle="dropdown">
  Sony <span class="caret"></span></button>
  <ul class="dropdown-menu" role="menu">
    <li><a href="#">Tablet</a></li>
    <li><a href="#">Smartphone</a></li>
  </ul>
</div>
</div>

```

Split Button Dropdowns

Example

```

<div class="btn-group">
  <button type="button" class="btn btn-primary">Sony</button>
  <button type="button" class="btn btn-primary dropdown-toggle" data-
toggle="dropdown">
    <span class="caret"></span>
  </button>
  <ul class="dropdown-menu" role="menu">
    <li><a href="#">Tablet</a></li>
    <li><a href="#">Smartphone</a></li>
  </ul>
</div>

```

Pagination::

```

<div class="container">

  <ul class="pagination">
    <li><a href="#">&laquo;</a></li>
    <li><a href="#">1</a></li>
    <li><a href="#">2</a></li>
    <li><a href="#">3</a></li>
    <li><a href="#">4</a></li>
    <li><a href="#">5</a></li>
    <li><a href="#">&raquo;</a></li>
  </ul>

</div>

```

Alerts:

```

<div class="container">

  <div class="alert alert-success alert-dismissable">
    <button type="button" class="close" data-dismiss="alert">
      &times;
    </button>
    Success! Well done its submitted.
  </div>

  <div class="alert alert-info ">

```

```
        Info! take this info.
    </div>
```

```
<div class="alert alert-warning alert-dismissible">
    <button type="button" class="close" data-dismiss="alert">
        &times;
    </button>
    Warning ! Dont submit this.
</div>
```

```
<div class="alert alert-danger alert-dismissible">
    <button type="button" class="close" data-dismiss="alert">
        &times;
    </button>
    Error ! Change few things.
</div>
```

Panel::

```
<div class="container">

    <div class="panel panel-primary">

        <div class="panel-heading">
            <h6 class="panel-title">Panel title</h6>
        </div>

        <div class="panel-body">
            This is a Basic panel
        </div>

    </div>

    <div class="panel panel-success">

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

        <div class="panel-body">
            This is a Basic panel
        </div>

    </div>

    <div class="panel panel-info">

        <div class="panel-heading">
            <h3 class="panel-title">Panel title</h3>
        </div>
```



```

        <div class="panel-body">
            This is a Basic panel
        </div>

</div>

<div class="panel panel-warning">

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

    <div class="panel-body">
        This is a Basic panel
    </div>

</div>

<div class="panel panel-danger">

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

    <div class="panel-body">
        This is a Basic panel
    </div>
</div>
<div class="panel panel-danger">

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

    <div class="panel-body">
        This is a Basic panel
    </div>
</div>
<div class="panel panel-danger">

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

    <div class="panel-body">
        This is a Basic panel
    </div>
</div>
<div class="panel panel-danger">

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

    <div class="panel-body">
        This is a Basic panel
    </div>
</div>
<div class="panel panel-danger">

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

    <div class="panel-body">
        This is a Basic panel
    </div>
</div>

```

```

        This is a Basic panel
    </div>
</div>    <div class="panel panel-danger">

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

        <div class="panel-body">
            This is a Basic panel
        </div>
    </div>    <div class="panel panel-danger">

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

        <div class="panel-body">
            This is a Basic panel
        </div>
    </div>
</div>

```

DropDowns:

```

<div class="container">
    <div class="dropdown">

        <button id="dropdownMenu1" class="btn dropdown-toggle" data-
toggle="dropdown">
            <span class="caret"></span>
            Smart Phones
        </button>

        <ul class="dropdown-menu" aria-labelledby="dropdownMenu1">
            <li><a href="#">iPhone</a></li>
            <li><a href="#">Android</a></li>
            <li><a href="#">Windows Phone</a></li>
            <li><a href="#">Black Berry</a></li>
        </ul>
    </div>
</div>

```

NavBars:

```

<nav class="navbar navbar-inverse navbar-fixed-top">

    <div class="navbar-header">
        <a class="navbar-brand" href="#">Amazon</a>
        <button type="button" data-target="#navbarCollapse" data-

```

```

toggle="collapse" class="navbar-toggle">
    </div>

    <div>
        <ul class="nav navbar-nav">
            <li class="active"><a href="#">Home</a></li>
            <li><a href="#">Laptops</a></li>
            <li><a href="#">Tablets</a></li>
            <li><a href="#">Fashion</a></li>
            <li><a href="#">Furniture</a></li>

        </ul>

    </div>

</nav>

```

Breadcrumbs:

```

<div class="container">

    <ol class="breadcrumb">
        <li><a href="#">Home</a></li>
        <li><a href="#">Products</a></li>
        <li class="active">Mobiles</li>
    </ol>

</div>

```

ProgressBar::

```

<div class="progress">
    <div class="progress-bar" style="width: 60%;">
        <span class="sr-only">60% Complete</span>
    </div>
</div>

```

Model plugins :

```

<div class="container">

    <h2>Modal popup Example</h2>

    <!-- Button trigger modal -->
    <button class="btn btn-primary btn-lg" data-toggle="modal" data-
target="#myModal">
        Click to open modal popup
    </button>

    <!-- Modal -->
    <div class="modal fade" id="myModal" aria-labelledby="myModalLabel"
aria-hidden="true">

```

```

<div class="modal-dialog">
    <div class="modal-content">
        <div class="modal-header">
            <button class="close" data-dismiss="modal" aria-
hidden="true">
                &times;
            </button>

            <h4 class="modal-title" id="myModalLabel">
                This is Modal title
            </h4>

        </div>

        <div class="modal-body">
            Add some text here
        </div>
        <!-- modal-footer Starts -->
        <div class="modal-footer">

            <button class="btn btn-default"
                data-dismiss="modal">
                Close
            </button>

            <button class="btn btn-primary">
                Submit changes
            </button>

        </div><!-- modal-footer ends -->

    </div><!-- modal-content ends -->

</div><!-- modal-dialog ends -->

</div><!-- modal ends -->

</div>

```

Tab pane :

```

<div class="container">

    <ul id="myTab" class="nav nav-tabs">

        <li >
            <a href="#iphone" data-toggle="tab">iPhone</a>
        </li>

        <li class="active">

```

```

        <a href="#android" data-toggle="tab">Android</a>
    </li>

    <li>
        <a href="#windowsphone" data-toggle="tab">Windows Phone</
a>
    </li>

</ul>

<div id="myTabContent" class="tab-content">

    <div class="tab-pane fade " id="iphone">
        <p>iPhone is a line of smartphones designed and marketed by
Apple Inc. It runs Apple's iOS mobile operating system. The first generation iPhone was
released on June 29, 2007; the most recent iPhone models are the iPhone 6 and iPhone
6 Plus, which were unveiled at a special event on September 9, 2014. The user interface
is built around the device's multi-touch screen, including a virtual keyboard. The iPhone
has Wi-Fi and can connect to many cellular networks, including 1xRTT (represented by a
1x on the status bar) and GPRS (shown as GPRS on the status bar), EDGE (shown as a
capital E on the status bar), UMTS and EV-DO (shown as 3G), a faster version of UMTS
and 4G (shown as a 4G symbol on the status bar), and LTE (shown as LTE on the status
bar). An iPhone can shoot video (though this was not a standard feature until the
iPhone 3GS), take photos, play music, send and receive email, browse the web, send
texts, GPS navigation, record notes, do mathematical calculations, and receive visual
voicemail. Other functions - video games, reference works, social networking, etc. can
be enabled by downloading application programs; as of October 2013, the App Store
offered more than one million apps by Apple and third parties and is ranked as the
world's second largest mobile software distribution network of its kind (by number of
currently available applications).</p>
    </div>

    <div class="tab-pane fade in active" id="android">
        <p>Android is a mobile operating system (OS) based on the Linux
kernel and currently developed by Google. With a user interface based on direct
manipulation, Android is designed primarily for touchscreen mobile devices such as
smartphones and tablet computers, with specialized user interfaces for televisions
(Android TV), cars (Android Auto), and wrist watches (Android Wear). The OS uses
touch inputs that loosely correspond to real-world actions, like swiping, tapping,
pinching, and reverse pinching to manipulate on-screen objects, and a virtual keyboard.
Despite being primarily designed for touchscreen input, it also has been used in game
consoles, digital cameras, regular PCs (e.g. the HP Slate 21) and other electronics.
Android is the most widely used mobile OS and, as of 2013, the highest selling OS
overall. Android devices sell more than Microsoft Windows, iOS, and Mac OS X devices
combined, with sales in 2012, 2013 and 2014 close to the installed base of all PCs. As of
July 2013 the Google Play store has had over 1 million Android apps published, and over
50 billion apps downloaded. A developer survey conducted in April–May 2013 found that
71% of mobile developers develop for Android. At Google I/O 2014, the company
revealed that there were over 1 billion active monthly Android users, up from 538 million
in June 2013.</p>
    </div>

    <div class="tab-pane fade" id="windowsphone">
        <p>Windows Phone is a mobile operating system developed by

```

Microsoft for smartphones as the replacement successor to Windows Mobile. Windows Phone features a new user interface derived from the Microsoft-developed "Modern" design language (formerly known as "Metro"). Unlike Windows Mobile, it is primarily aimed at the consumer market rather than the enterprise market. It was first launched in October 2010 with Windows Phone 7. Windows Phone 8.1 is the latest public release of the operating system, and was delivered in final form to developers on April 14 2014. It will be available for update to all devices previously running Windows Phone 8.

</div>

</div>

</div>

carousel::

```
<div class="bs-example">
  <div id="myCarousel" class="carousel slide" data-ride="carousel">
    <!-- Carousel indicators -->
    <ol class="carousel-indicators">
      <li data-target="#myCarousel" data-slide-to="0" class="active"></li>
      <li data-target="#myCarousel" data-slide-to="1"></li>
      <li data-target="#myCarousel" data-slide-to="2"></li>
    </ol>
    <!-- Wrapper for carousel items -->
    <div class="carousel-inner">
      <div class="item active">
        
        <div class="carousel-caption">
          <p> This is Christmas Offers </p>
        </div>
      </div>

      <div class="item">
        
        <div class="carousel-caption">
          <p> This is Christmas Offers </p>
        </div>
      </div>

      <div class="item">
        
        <div class="carousel-caption">
          <p> This is Christmas Offers </p>
        </div>
      </div>
    </div>
    <!-- Carousel controls -->
    <a class="carousel-control left" href="#myCarousel" data-slide="prev">
      <span class="glyphicon glyphicon-chevron-left"></span>
    </a>
    <a class="carousel-control right" href="#myCarousel" data-slide="next">
      <span class="glyphicon glyphicon-chevron-right"></span>
    </a>
  </div>
```

</div>

Forms :

<div class="container">

<h1>Horizontal form</h1>

<form class="form-horizontal">

<div class="form-group">

<label for="firstname" class="col-sm-2 control-label">First
Name</label>

<div class="col-sm-10">
<input type="text" class="form-control" id="firstname"
placeholder="Enter First Name">
</div>

</div>

<div class="form-group">

<label for="lastname" class="col-sm-2 control-label">Last
Name</label>

<div class="col-sm-10">
<input type="text" class="form-control" id="lastname"
placeholder="Enter Last Name">
</div>

</div>

<div class="form-group">

<div class="col-sm-offset-2 col-sm-10">

<div class="checkbox">

<label>

<input type="checkbox"> Remember me

</label>

</div>

</div>

</div>

<div class="form-group">

<div class="col-sm-offset-2 col-sm-10">

<button type="submit" class="btn btn-default">Sign
in</button>

</div>

```
        </div>
    </form>
</div>
```

```
<div class="container">
  <h2>Image Gallery</h2>
  <p>The .thumbnail class can be used to display an image gallery.</p>
  <p>The .caption class adds proper padding and a dark grey color to text inside
  thumbnails.</p>
  <p>Click on the images to enlarge them.</p>
  <div class="row">
    <div class="col-md-4">
      <div class="thumbnail">
        <a href="/w3images/lights.jpg" target="_blank">
          
          <div class="caption">
            <p>Lorem ipsum donec id elit non mi porta gravida at eget metus.</p>
          </div>
        </a>
      </div>
    </div>
    <div class="col-md-4">
      <div class="thumbnail">
        <a href="/w3images/nature.jpg" target="_blank">
          
          <div class="caption">
            <p>Lorem ipsum donec id elit non mi porta gravida at eget metus.</p>
          </div>
        </a>
      </div>
    </div>
    <div class="col-md-4">
      <div class="thumbnail">
        <a href="/w3images/fjords.jpg" target="_blank">
          
          <div class="caption">
            <p>Lorem ipsum donec id elit non mi porta gravida at eget metus.</p>
          </div>
        </a>
      </div>
    </div>
  </div>
</div>
```