



Bootstrap 5

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Resource (แหล่งอ้างอิง)

- Bootstrap official website
<https://getbootstrap.com/>
- W3Schools bootstrap (ver.5)
<https://www.w3schools.com/bootstrap5/index.php>
- Tutorial Republic (ver.5)
<https://www.tutorialrepublic.com/twitter-bootstrap-tutorial/>
- Bootstrap 5 (cheat sheet)
<https://bootstrapcreative.com/resources/bootstrap-5-cheat-sheet-classes-index/>

What & Why Bootstrap?

Why Bootstrap?

Bootstrap is one of the most popular CSS Framework..

Bootstrap is a free, open source [HTML, CSS, and JavaScript framework](#) for quickly building responsive websites..

Initially, Bootstrap was called [Twitter Blueprint](#) and was developed by a team working at Twitter. It supports responsive design and features [predefined design templates](#) that you can use out of the box.

..CSS Framework???

reference : <https://developer.mozilla.org/en-US/docs/Glossary/Bootstrap>

CSS Framework

A CSS framework is a library allowing for easier, more standards-compliant web design using the Cascading Style Sheets language

reference :

https://en.wikipedia.org/wiki/CSS_framework

Getting Start.. Bootstrap

Getting start..

<https://getbootstrap.com/docs/5.1/getting-started/introduction/#starter-template>

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

    <!-- Bootstrap CSS -->
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" rel="style

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

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

  <!-- Option 1: Bootstrap Bundle with Popper -->
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js" inte

  <!-- Option 2: Separate Popper and Bootstrap JS -->
  <!--
  <script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.10.2/dist/umd/popper.min.js" integr
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.min.js" integrity='
  -->
</body>
</html>
```

Copy

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Starter template..

```
<!doctype html>
<html lang="en">
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-1BmE4kWBq78iYhFldvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3"
crossorigin="anonymous">
    <title>Hello, world!</title>
  </head>
  <body>

    <!-- Start HTML Here -->

    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js"
integrity="sha384-ka7Sk0Gln4gmtz2MlQnikT1wXgYsOg+OMhuP+IlRH9sENBO0LRn5q+8nbTov4+lp"
crossorigin="anonymous"></script>

  </body>
</html>
```


Part of Bootstrap

Part of Bootstrap



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Utilities

API
Background
Borders
Colors
Display
Flex
Float
Interactions
Opacity
Overflow
Position
Shadows
Sizing
Spacing
Text
Vertical align
Visibility

Layout

Breakpoints
Containers
Grid
Columns
Gutters
Utilities
Z-index
CSS Grid

Forms

Overview
Form control
Select
Checks & radios
Range
Input group
Floating labels
Layout
Validation

Components

Accordion
Alerts
Badge
Breadcrumb
Buttons
Button group
Card
Carousel
Close button
Collapse
Dropdowns
List group
Modal
Navs & tabs
Navbar
Offcanvas
Pagination
Placeholders
Popovers
Progress
Scrollspy
Spinners
Toasts
Tooltips

Content

Reboot
Typography
Images
Tables
Figures

Helpers

Clearfix
Colored links
Ratio
Position
Stacks
Visually hidden
Stretched link
Text truncation
Vertical rule

Class utility

Utilities

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Visibility

<https://getbootstrap.com/docs/5.0/utilities/api/>



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➤ Getting started

➤ Customize

➤ Layout

➤ Content

➤ Forms

➤ Components

➤ Helpers

▼ Utilities

API


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Display

Flex



Utility API

View on GitHub

The utility API is a Sass-based tool to generate utility classes.

Bootstrap utilities are generated with our utility API and can be used to modify or extend our default set of utility classes via Sass. Our utility API is based on a series of Sass maps and functions for generating families of classes with various options. If you're unfamiliar with Sass maps, read up on the [official Sass docs](#) to get started.

The `$utilities` map contains all our utilities and is later merged with your custom `$utilities` map, if present. The utility map contains a keyed list of utility groups which accept the following options:

Option	Type	Description
<code>property</code>	Required	Name of the property, this can be a string or an array of strings (e.g., horizontal paddings or margins).
<code>values</code>	Required	List of values, or a map if you don't want the class name to be the same as the value. If <code>null</code> is used as map key, it isn't compiled.

Layout

Breakpoint & Container

Breakpoint

- *sm, md, lg, xl, xxl*

Breakpoint	Class infix	Dimensions
X-Small	<i>None</i>	<576px
Small	<i>sm</i>	≥576px
Medium	<i>md</i>	≥768px
Large	<i>lg</i>	≥992px
Extra large	<i>xl</i>	≥1200px
Extra extra large	<i>xxl</i>	≥1400px

Container

- *sm, md, lg, xl, xxl*
- *fluid*

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

bootstrap icon

bootstrap icon

<https://icons.getbootstrap.com/>



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```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1" />
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" rel="stylesheet"
    integrity="sha384-1BmE4kWBq78iYhF1dvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3" crossorigin="anonymous">
    <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap-icons@1.7.1/font/bootstrap-icons.css">
    <title>Hello, Bootstrap 5!</title>
  </head>
  <body>
    <h1 class="display-1 border">Codecamp Thailand</h1>
    <i class="bi-alarm display-1 border"></i>
    <i class="bi bi-facebook display-1"></i>

    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js"
    integrity="sha384-ka7Sk0Gln4gmtz2MlQnikT1wXgYs0g+OMhuP+IlRH9sENB00LRn5q+8nbTov4+1p"
    crossorigin="anonymous"></script>

  </body>
</html>
```