



BOOTSTRAP

B

GRID SYSTEM

- Mobile first flexbox grid
- Build layouts
- Twelve column system
- Six default responsive tiers
- Sass variables and mixins
- Dozens of predefined classes

GRID OPTIONS

BREAKPOINTS	CONTAINER MAX-WIDTH	CLASS PREFIX
xs <576px	None (auto)	.col-
sm ≥576px	540px	.col-sm-
md ≥768px	720px	.col-md-
lg ≥992px	960px	.col-lg-
xl ≥1200px	1140px	.col-xl-
xxl ≥1400px	1320px	.col-xxl-

RESPONSIVE CLASSES

Extra small (xs)
Small (sm)
Medium (md)
Large (lg)
Extra large (xl)
Extra extra large (xxl)

ALL BREAKPOINTS

.col and .col-*

col	col	col	col
col-8			col-4

STACKED TO HORIZONTAL

.col-sm-*

col-sm-8		col-sm-4
col-sm	col-sm	col-sm

MIX AND MATCH

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

ROW COLUMNS

.row-cols-*

Column	Column
Column	Column

NESTING

Level 1: .col-sm-3	Level 2: .col-8 .col-sm-6	Level 2: .col-4 .col-sm-6
--------------------	---------------------------	---------------------------

HOW IT WORKS

- Our grid supports six responsive breakpoints.
- Containers center and horizontally pad your content.
- Rows are wrappers for columns.
- Columns are incredibly flexible.
- Gutters are also responsive and customizable.
- Sass variables, maps, and mixins power the grid.

AUTO-LAYOUT COLUMNS

.col-sm-6

EQUAL-WIDTH

1 of 2	2 of 2	
1 of 3	2 of 3	3 of 3

SETTING ONE COLUMN WIDTH

1 of 3	2 of 3 (wider)	3 of 3
1 of 3	2 of 3 (wider)	3 of 3

VARIABLE WIDTH CONTENT

col-{breakpoint}-auto

1 of 3	Variable width content	3 of 3
1 of 3	Variable width content	3 of 3

CSS

SASS VARIABLES

```
$grid-columns: 12
$grid-gutter-width: 1.5rem
$grid-row-columns: 6
```

```
$grid-breakpoints: (
  xs: 0,
  sm: 576px,
  md: 768px,
  lg: 992px,
  xl: 1200px,
  xxl: 1400px
);
```

```
$container-max-widths: (
  sm: 540px,
  md: 720px,
  lg: 960px,
  xl: 1140px,
  xxl: 1320px
);
```

SASS MIXINS

```
// Creates a wrapper for a series of columns
@include make-row();
```

```
// Make the element grid-ready (applying everything but the width)
@include make-col-ready();
```

```
// Without optional size values, the mixin will create equal columns (similar to using .col)
@include make-col();
@include make-col($size, $columns: $grid-columns);
```

```
// Offset with margins
@include make-col-offset($size, $columns: $grid-columns);
```

CUSTOMIZING THE GRID



COLUMNS AND GUTTERS

```
$grid-columns: 12 !default
$grid-gutter-width: 1.5rem !default
$grid-row-columns: 6 !default
```

@Christopher
@Edinson

GRID TIERS

```
$grid-breakpoints: (
  xs: 0,
  sm: 480px,
  md: 768px,
  lg: 1024px
);

$container-max-widths: (
  sm: 420px,
  md: 720px,
  lg: 960px
);
```