

# Bootstrap 5 Grid System:-

Bootstrap's grid system is built with flexbox and 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:

span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1								
span 4				span 4				span 4											
span 4		span 8																	
span 6						span 6													
span 12																			

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

Make sure that the sum adds up to 12 or fewer (it is not required that you use all 12 available columns).

## Grid Classes

The Bootstrap 5 grid system has six classes:

- `.col-` (extra small devices - screen width less than 576px)
- `.col-sm-` (small devices - screen width equal to or greater than 576px)
- `.col-md-` (medium devices - screen width equal to or greater than 768px)
- `.col-lg-` (large devices - screen width equal to or greater than 992px)
- `.col-xl-` (xlarge devices - screen width equal to or greater than 1200px)
- `.col-xxl-` (xxlarge devices - screen width equal to or greater than 1400px)

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

**Tip:** Each class scales up, so if you want to set the same widths for `sm` and `md`, you only need to specify `sm`.

# Basic Structure of a Bootstrap 5 Grid

The following is a basic structure of a Bootstrap 5 grid:

```
<!-- Control the column width, and how they should appear on different devices -->
<div class="row">
  <div class="col-*-*"></div>
  <div class="col-*-*"></div>
</div>
<div class="row">
  <div class="col-*-*"></div>
  <div class="col-*-*"></div>
  <div class="col-*-*"></div>
</div>

<!-- Or let Bootstrap automatically handle the layout -->
<div class="row">
  <div class="col"></div>
  <div class="col"></div>
  <div class="col"></div>
</div>
```

## First example:

- 1)create a row (`<div class="row">`).
- 2)Then, add the desired number of columns (tags with appropriate `.col-*-*` classes).
  - I)The first star (\*) represents the responsiveness: sm, md, lg, xl or xxl,
  - II)while the second star represents a number, which should add up to 12 for each row.

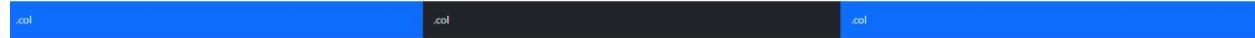
**Second example:** instead of adding a number to each `col`, let bootstrap handle the layout, to create equal width columns: two "col" elements = 50% width to each col, while three cols = 33.33% width to each col. Four cols = 25% width, etc. You can also use `.col-sm|md|lg|x1|xx1` to make the columns responsive.

Below we have collected some examples of basic Bootstrap 5 grid layouts.

### Three equal columns example:-

#### Three equal width columns

Note: Try to add a new div with class="col" inside the row class - this will create four equal-width columns.



```
<!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 href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css" rel="stylesheet">

<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.min.js"></script>

</head>

<body>

<div class="container-fluid mt-3">

<h1>Three equal width columns</h1>

<p>Note: Try to add a new div with class="col" inside the row class - this will create four equal-width columns.</p>
```

```

<div class="row">

    <div class="col p-3 bg-primary text-white">First </div>

    <div class="col p-3 bg-dark text-white">Second</div>

    <div class="col p-3 bg-primary text-white">Third</div>

</div>

</div>

</body>

</html>

```

The following example shows how to create four equal-width columns starting at tablets and scaling to extra large desktops. **On mobile phones or screens that are less than 576px wide, the columns will automatically stack on top of each other:**

---

#### Responsive Columns

Resize the browser window to see the effect.

The columns will automatically stack on top of each other when the screen is less than 576px wide.



```

<!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 href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css" rel="stylesheet">

    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.min.js"></script>

```

```
</head>

<body>

<div class="container-fluid mt-3">
    <h1>Responsive Columns</h1>
    <p>Resize the browser window to see the effect.</p>
    <p>The columns will automatically stack on top of each other when the screen is less than 576px wide.</p>
    <div class="row">
        <div class="col-sm-3 p-3 bg-primary text-white">First </div>
        <div class="col-sm-3 p-3 bg-dark text-white">Second</div>
        <div class="col-sm-3 p-3 bg-primary text-white">Third</div>
        <div class="col-sm-3 p-3 bg-dark text-white">Fourth</div>
    </div>
</div>

</body>
</html>
```

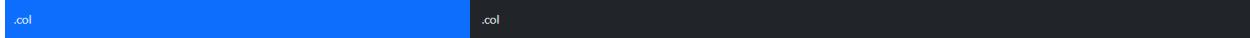
# Two Unequal Responsive Columns

---

## Two Unequal Responsive Columns

Resize the browser window to see the effect.

The columns will automatically stack on top of each other when the screen is less than 576px wide.



```
<!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 href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css" rel="stylesheet">

    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.min.js"></script>

</head>

<body>

<div class="container-fluid mt-3">

    <h1>Two Unequal Responsive Columns</h1>

    <p>Resize the browser window to see the effect.</p>

    <p>The columns will automatically stack on top of each other when the screen is less than 576px wide.</p>

    <div class="row">

        <div class="col-sm-4 p-3 bg-primary text-white">First </div>

        <div class="col-sm-8 p-3 bg-dark text-white">Second</div>

    </div>

</div>
```

```
</div>
```

```
</body>
```

```
</html>
```

The following example will result in a 25%/75% split on small devices and a 50%/50% split on medium (and large, xlarge and xxlarge) devices. On extra small devices, it will automatically stack (100%):-

### Medium Grid

The following example will result in a 25%/75% split on small devices and a 50%/50% split on medium (and large, xlarge, xxlarge) devices. On extra small devices, it will automatically stack (100%).

Resize the browser window to see the effect.

```
Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo.
```

```
<!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 href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css" rel="stylesheet">

<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.min.js"></script>

</head>

<body>

<div class="container-fluid mt-3">

<h1>Medium Grid</h1>
```

<p>The following example will result in a 25%/75% split on small devices and a 50%/50% split on medium (and large, xlarge, xxlarge) devices. On extra small devices, it will automatically stack (100%).</p>

<p>Resize the browser window to see the effect.</p>

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

```
  <div class="row">
```

```
    <div class="col-sm-3 col-md-6 bg-primary text-white">
```

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.<br>

Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

```
    </div>
```

```
    <div class="col-sm-9 col-md-6 bg-dark text-white">
```

Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo.

```
  </div>
```

```
  </div>
```

```
</div>
```

```
</div>
```

```
</body>
```

```
</html>
```

The following example will result in a 25%/75% split on small devices, a 50%/50% split on medium devices, and a 33%/66% split on large, xlare and xxlarge devices. On extra small devices, it will automatically stack (100%):-

### Large Grid

The following example will result in a 25%/75% split on small devices, a 50%/50% split on medium devices, and a 33%/66% split on large, xlare and xxlarge devices. On extra small devices, it will automatically stack (100%).

Resize the browser window to see the effect.

```
lorum ipsum dolor sit amet, consectetur adipisciing elit, sed do eiusmod tempor  
incidunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud  
exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.  
Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi  
architecto beatae vitae dicta sunt explicabo.
```

```
<!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 href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css" rel="stylesheet">  
  
    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.min.js"></script>  
  
</head>  
  
<body>  
  
<div class="container-fluid mt-3">  
  
    <h1>Large Grid</h1>  
  
    <p>The following example will result in a 25%/75% split on small devices, a 50%/50% split on medium devices, and a 33%/66% split on large, xlare and xxlarge devices. On extra small devices, it will automatically stack (100%).</p>  
  
    <p>Resize the browser window to see the effect.</p>  
  
    <div class="container-fluid">  
  
        <div class="row">
```

```
<div class="col-sm-3 col-md-6 col-lg-4 bg-primary text-white">  
    Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut  
    labore et dolore magna aliqua.  
  
    Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo  
    consequat.  
</div>  
  
<div class="col-sm-9 col-md-6 col-lg-8 bg-dark text-white">  
    Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium,  
    totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta  
    sunt explicabo.  
</div>  
</div>  
</div>  
  
</body>  
</html>
```