

Introduction to Responsive Web Design / Cheat Sheet

1. Bootstrap Grid System

Bootstrap Grid System is a collection of reusable code snippets to create responsive layouts. It is made up of containers, rows, and columns.

It uses a 12 column system for layouting. We can create up to 12 columns across the page.

1.1 Container

The purpose of a container is to hold rows and columns.

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

Here, the container is a **div** element with the Bootstrap class name **container**.

1.2 Row

The purpose of a row is to wrap all the columns.

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

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

```
</div>
```

Here, the row is a **div** element with the Bootstrap class name **row**.

1.3 Column

We should place the columns inside a row and the content inside a column.

We can specify the number of columns our content should occupy in any device. The number of columns we specify should be a number in the range of **1 to 12**.

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

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

```
    <div class="col-12">
```

```
      I'm your content inside the grid!
```

```
    </div>
```

```
  </div>
```

```
</div>
```

Here, the **column is a div** element with the Bootstrap class name **col-12**.

Note

If Bootstrap class name is **col-12**, it occupies the entire width available inside the row.

The Bootstrap class names **col-*** indicates the number of columns you would like to use out of the possible **12 columns per row**. For example, **col-1**, **col-5**, etc.

Try out changing the number of columns in the below Code Playground and check the output.

Sample example using bootstrap

```
<!DOCTYPE html>

<html>

  <head>

    <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
crossorigin="anonymous">

    <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity="sha384-
DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrCXaRkfj"
crossorigin="anonymous"></script>

    <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js"
integrity="sha384-9/reFTGAW83EW2RDu2S0VKalzap3H66lZH81PoYIFhbGU+6BZp6G7niu735Sk7lN"
crossorigin="anonymous"></script>

    <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"
integrity="sha384-B4gt1jrGC7Jh4AgTPSdUtOBvfO8shuf57BaghqFfPLYxofvL8/KUEfYiJOMMV+rV"
crossorigin="anonymous"></script>

  </head>

  <body>

    <div class="container">

      <div class="row">

        <div class="col-12">

          <h1 class="heading">Taj Mahal</h1>

          <p>

            The Taj Mahal is an ivory-white marble mausoleum on the southern
            bank of the river Yamuna in the Indian city of Agra.

          </p>

        </div>

      </div>

    </div>
```

```
</div>
</body>
</html>
```

```
///css file
```

```
@import
url('https://fonts.googleapis.com/css2?family=Bree+Serif&family=Caveat:wght@400;700&family=Lobster&family=Monoton&family=Open+Sans:ital,wght@0,400;0,700;1,400;1,700&family=Playfair+Display+SC:ital,wght@0,400;0,700;1,700&family=Playfair+Display:ital,wght@0,400;0,700;1,700&family=Roboto:ital,wght@0,400;0,700;1,400;1,700&family=Source+Sans+Pro:ital,wght@0,400;0,700;1,700&family=Work+Sans:ital,wght@0,400;0,700;1,700&display=swap');

.heading {
  font-size: 24px;
  font-weight: bold;
}
```

Output is like this

Taj Mahal

The Taj Mahal is an ivory-white marble mausoleum on the southern bank of the river Yamuna in the Indian city of Agra.

2. Creating Multiple Column Layouts

The Layout in the below Code Playground is a Two Column Layout. Similarly try out multiple column layouts like One Column Layout, Three Column Layout, etc. in the below Code .

Another example

```
<!DOCTYPE html>

<html>

  <head>

    <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity="sha384-JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
crossorigin="anonymous">
```

```
<script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity="sha384-DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrCXaRkfj"
crossorigin="anonymous"></script>
```

```
<script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js"
integrity="sha384-9/reFTGAW83EW2RDu2S0VKalzap3H66lZH81PoYlFhbGU+6BZp6G7niu735Sk7lN"
crossorigin="anonymous"></script>
```

```
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"
integrity="sha384-B4gt1jrGC7Jh4AgTPSdUtOBvfO8shuf57BaghqFfPLYxofvL8/KUEfYiJOMMV+rV"
crossorigin="anonymous"></script>
```

```
<style>
```

```
@import
url('https://fonts.googleapis.com/css2?family=Bree+Serif&family=Caveat:wght@400;700&family=Lobster&family=Monoton&family=Open+Sans:ital,wght@0,400;0,700;1,400;1,700&family=Playfair+Display+SC:ital,wght@0,400;0,700;1,700&family=Playfair+Display:ital,wght@0,400;0,700;1,700&family=Roboto:ital,wght@0,400;0,700;1,400;1,700&family=Source+Sans+Pro:ital,wght@0,400;0,700;1,700&family=Work+Sans:ital,wght@0,400;0,700;1,700&display=swap');
```

```
.heading {
  font-size: 24px;
  font-weight: bold;
}
```

```
</style>
```

```
</head>
```

```
<body>
```

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

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

```
<div class="col-8">
```

```
<h1 class="heading">Taj Mahal</h1>
```

```
<p>
```

The Taj Mahal is an ivory-white marble mausoleum on the southern bank of the river Yamuna in the Indian city of Agra.

```
</p>
</div>
<div class="col-4">
  <h1 class="heading">Mysore Palace</h1>
  <p>
    The Mysore Palace is a historical palace and the royal residence at
    Mysore in the Indian State of Karnataka.
  </p>
</div>
</div>
</body>
</html>
```

OutPut

Taj Mahal

The Taj Mahal is an ivory-white marble mausoleum on the southern bank of the river Yamuna in the Indian city of Agra.

Mysore Palace

The Mysore Palace is a historical palace and the royal residence at Mysore in the Indian State of Karnataka.