

Bootstrap Grid System



Agenda

1

BootStrap Grid System

Objective

At the end of this module, you will be able to learn

- What is a Bootstrap Grid System
- How to work with a Bootstrap Grid System

BootStrap Grid System



Bootstrap Grid System

- Bootstrap grid system provides an easy way to create layouts of web pages
- Bootstrap grid system allows **up to 12 columns** across the page
- If you don't want to use all 12 columns, you can group the columns together to create wider columns
- Bootstrap grid system is **responsive** and the columns will re-arrange according to the screen size of the device
- In a big screen, the contents will be organized in the respective columns, in smaller screen, the content items will be **stacked on top of each other**

Grid system rules

Some Bootstrap grid system rules:

- Rows must be placed within a `.container` (fixed-width) or `.container-fluid` (full-width) for proper alignment and padding
- Use rows to create horizontal groups of columns
- Content should be placed within columns, and only columns may be immediate children of rows
- Predefined classes like `.row` and `.col-sm-4` are available for quickly making grid layouts
- Columns create gutters (gaps between column content) via padding. That padding is offset in rows for the first and last column via negative margin on `.rows`
- Grid columns are created by specifying the number of 12 available columns you wish to span. For example, three equal columns would use three `.col-sm-4`

Grid classes

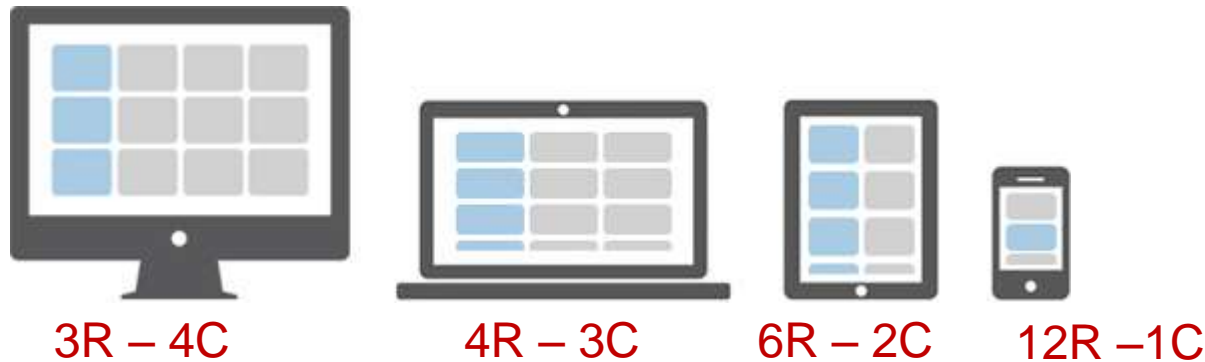
- The Bootstrap grid system has four classes:
 - xs (for phones)
 - sm (for tablets)
 - md (for desktops)
 - lg (for larger desktops)
- The classes above can be combined to create more dynamic and flexible layouts.

Bootstrap 3 grid system features

Features Bootstrap 3 Grid System	Extra small devices Phones (<768px)	Small devices Tablets (≥768px)	Medium devices Desktops (≥992px)	Large devices Desktops (≥1200px)
Max container width	None (auto)	750px	970px	1170px
Class prefix	.col-xs-	.col-sm-	.col-md-	.col-lg-
Max column width	Auto	~62px	~81px	~97px
Gutter width	15px on each side of a column (i.e. 30px)			

Creating layouts with Bootstrap 3 Grid System

- Bootstrap 3 mobile first grid system can easily help you to control how your website layout will render on different types of devices with different screen sized like cell phone, tablet, desktops etc.



- 12 content boxes in total but placement will vary depending on the device.

Basic structure of Bootstrap Grid

```
<div class="container">
  <div class="row">
    <div class="col-*-*"></div>
  </div>
  <div class="row">
    <div class="col-*-*"></div>
    <div class="col-*-*"></div>
    <div class="col-*-*"></div>
  </div>
  <div class="row">
    ...
  </div>
</div>
```

Example: grid system

```
<!DOCTYPE html>
```

Bootstrap uses HTML5 doctype

```
<html>
```

```
<head>
```

```
<title>Grid System program for medium desktop</title>
```

```
<link rel="stylesheet" type="text/css" href="css/bootstrap.min.css" />
```

```
<script src="js/bootstrap.min.js" type="text/javascript"></script>
```

```
<style type="text/css">
```

```
p {
```

```
padding: 10px;
```

```
font-size: 20px;
```

```
font-weight: bold;
```

```
text-align: center;
```

```
color: #000099;
```

```
background: #FF0000;
```

```
}
```

Include above files in the
respective folder

Style for paragraph

Example: grid system

```
h1 {  
padding: 50 px;  
text-align: center;  
padding: 10px;  
color: red;  
background: yellow;  
}  
</style>  
</head>
```



Example: grid system

```
<body>
```

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

Bootstrap requires a containing element to wrap site contents

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

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

```
<h1>Demo for Bootstrap Grid System</h1>
```

```
</div>
```

First row, the container occupies 12 columns

```
</div>
```

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

```
<br>
```

```
<div class="col-lg-2">
```

```
<p>2 columns</p>
```

```
</div>
```

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

```
<p>8 columns</p>
```

```
</div>
```

contd..

Example: grid system (Contd.).

```
<div class="col-lg-2">  
<p>2 columns</p>  
</div>  
</div>
```

Second row

```
<div class="row"><br>  
<div class="col-lg-4">  
<p>4 columns</p>  
</div>  
<div class="col-lg-4">  
<p>4 columns</p>  
</div>  
<div class="col-lg-4">  
<p>4 columns</p>  
</div>  
</div><body></html>
```

Third row

Output



Demo for BootStrap Grid System

2 columns

8 columns

2 columns

4 columns

4 columns

4 columns

Quiz

1. Bootstrap's grid system allows up to ----- columns across the page
 - a. 8 columns
 - b. 10 columns
 - c. 12 columns
 - d. 6 columns

2. Which of the following is a Bootstrap grid system class?
 - a. xs
 - b. sm
 - c. md
 - d. lg

Summary

- In this module, you have learnt
 - What is a Bootstrap Grid System
 - How to work with a Bootstrap Grid System



Thank You

