









# Full Stack Web Development Program











## Day 13 - Working with Bootstrap Containers





#### **Titles**

- Bootstrap Containers
- Bootstrap Grid System
- Grid System Classes







## Learning Objectives

By the end of this module, you will be able to:

- Develop custom layouts using Bootstrap containers and the grid system
- Implement Bootstrap containers and grid system in web design projects to create structured and responsive layouts







## Working with Bootstrap Containers

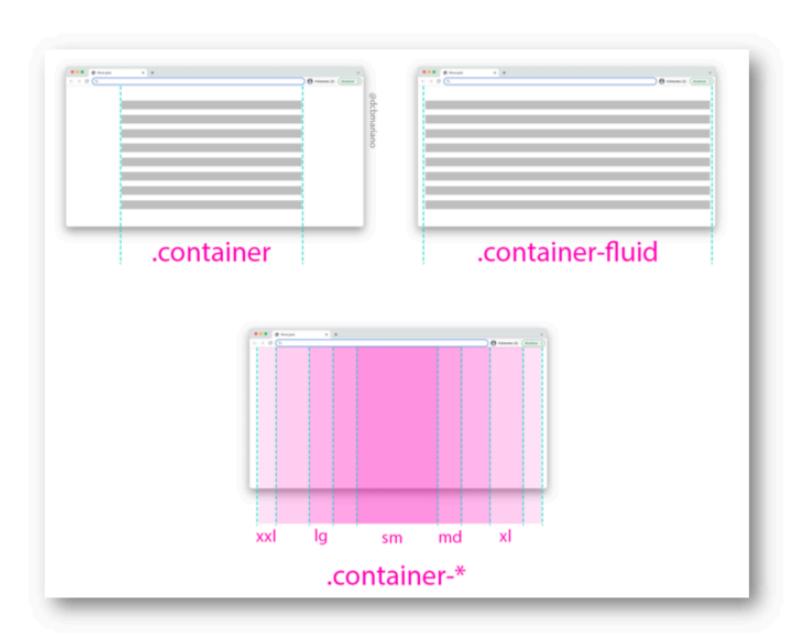






#### **Bootstrap Containers**

- Containers serve as the foundational framework for content, ensuring responsiveness in design.
- Crucial components within Bootstrap's grid system and containers become necessary when implementing the default grid layout.

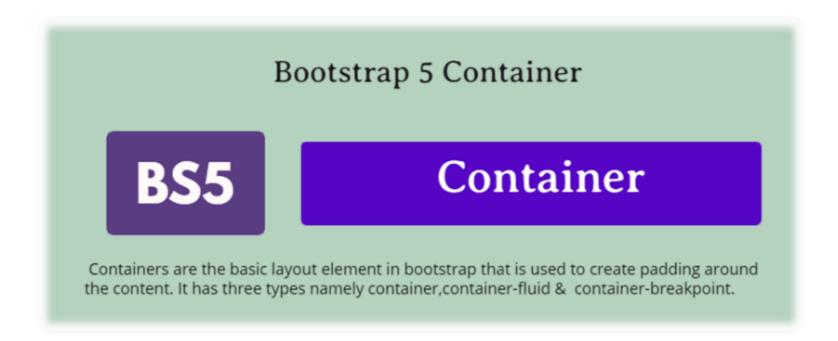








- Bootstrap's grid system hinges on the arrangement of containers, rows, and columns, facilitating content arrangement and alignment.
- While nesting is possible, it's important to note that the majority of layouts can be efficiently designed without the need for nested containers.



There are three containers available in Bootstrap:

Container name	Container description
.container	This class provides a responsive, fixed-width container. Its max-width changes at each breakpoint.
.container-fluid	This class provides a full-width container, spanning the entire width of the viewport.
.container-{breakpoint}	These containers allow you to specify a class that is 100% wide until the specified breakpoint is reached. We apply max-widths for each of the higher breakpoints.









Code Example:- index.html

```
<body>
   <div class="container bg-info">
       <h2>Container Example</h2>
       This content is placed within a container.
   </div>
   <div class="container-fluid bg-light">
       <h2>Container Fluid Example</h2>
       This content is placed within a fluid container.
   </div>
   <!-- Link to Bootstrap JS (for optional components like dropdowns, modals, etc.) -->
   <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.1/dist/js/bootstrap.bundle.min.js"</pre>
       integrity="sha384-HwwvtgBNo3bZJJLYd8oVXjrBZt8cqVSpeBNS5n7C8IVInixGAoxmnlMuBnhbgrkm"
       crossorigin="anonymous"></script>
</body>
```





Output

#### **Container Example**

This content is placed within a container.

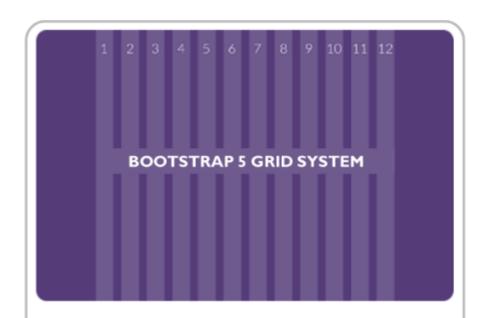
#### **Container Fluid Example**

This content is placed within a fluid container.



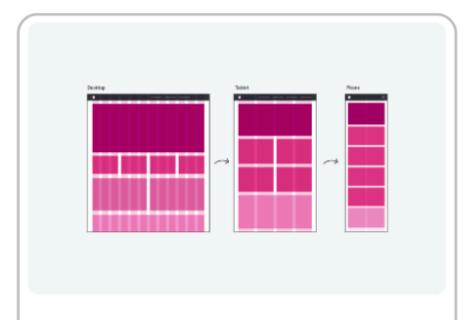
#### **Bootstrap Grid System**

The Bootstrap grid system serves as a fundamental structure for arranging content within a web page layout and is composed of rows and columns that facilitate the organization and responsiveness of the content.



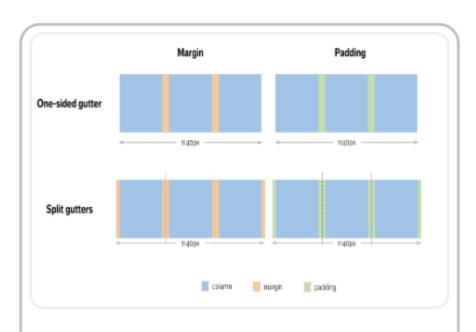
#### Rows and Columns 📄

The grid system is based on rows and columns. Rows are containers for columns, which can be sized and positioned within the row to create the desired layout.



#### **Columns Counts & Class**

Bootstrap rows can have up to 12 columns, defined by classes indicating the column count. For instance, use .col-6 for two equalwidth columns.



#### **Gutters and Padding**

Columns have gutters for spacing between them, which makes the layout visually pleasing. The nogutters class can remove margins and padding.

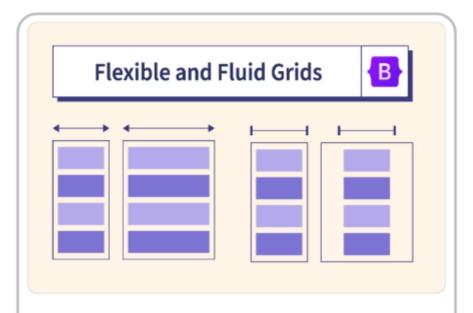








#### **Bootstrap Grid System (contd.)**



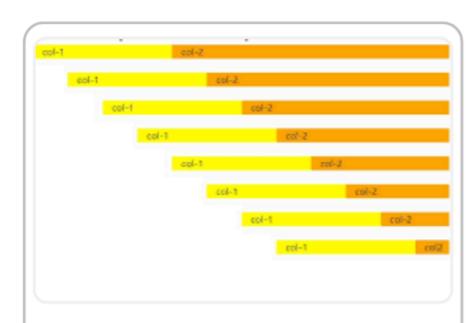
#### Fluid and Relative Sizing

Columns' widths are specified in percentages, ensuring their fluidity and responsiveness relative to their parent element.



#### **Responsive Design**

The grid system is important for responsive designs. Bootstrap has responsive classes for different screen sizes, ensuring optimal appearance on various devices.



#### **Offsetting Columns**

Bootstrap grid system allows offsetting columns to create unique layouts by adjusting their positioning within a row.

## **Bootstrap Grid System (contd.)**

The grid system of Bootstrap enables the creation of up to 12 columns on a page. You can combine these columns to form wider ones if you do not need to use all 12 individually.

