

Bootstrap

INTRODUCTION

- Bootstrap is a free front-end framework for faster and easier web development
- Bootstrap includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels and many other, as well as optional JavaScript plugins
- Bootstrap also gives you the ability to easily create responsive designs

Responsive Web Design

Responsive web design makes your web page look good on all devices.



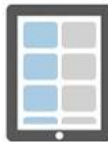
Desktop



Tablet



Phone



Viewport

Viewport is the user's visible area of a web page.

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

The width=device-width part sets the width of the page to follow the screen-width of the device (which will vary depending on the device).

The initial-scale=1.0 part sets the initial zoom level when the page is first loaded by the browser.



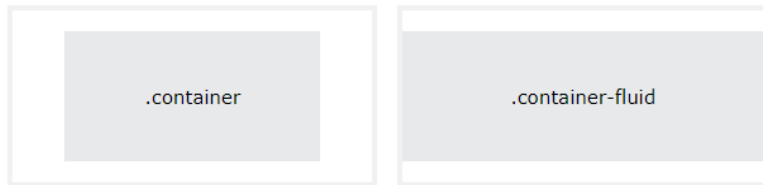
Without the viewport meta tag



With the viewport meta tag

BOOTSTRAP 5 CONTAINERS

- The `.container` class provides a responsive fixed width container
- The `.container-fluid` class provides a full width container, spanning the entire width of the viewport



	Extra small <576px	Small ≥576px	Medium ≥768px	Large ≥992px	Extra Large ≥1200px	XXL ≥1400px
max-width	100%	540px	720px	960px	1140px	1320px

BOOTSTRAP GRID SYSTEM

Bootstrap's grid system allows up to 12 columns across the page.

span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

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)

BOOTSTRAP GRID SYSTEM EXAMPLE

```
<div class="container">  
  <!--Row with three equal columns-->  
  <div class="row">  
    <div class="col-lg-4">Column left</div>  
    <div class="col-lg-4">Column middle</div>  
    <div class="col-lg-4">Column right</div>  
  </div>  
  
  <!--Row with three columns divided in 1:4:1 ratio-->  
  <div class="row">  
    <div class="col-lg-2">Column left</div>  
    <div class="col-lg-8">Column middle</div>  
    <div class="col-lg-2">Column right</div>  
  </div>  
  
  <!--Row with three columns divided unevenly-->  
  <div class="row">  
    <div class="col-lg-3">Column left</div>  
    <div class="col-lg-7">Column middle</div>  
    <div class="col-lg-2">Column right</div>  
  </div>  
</div>
```

TABLE & ALERT

Tables

```
<div class="table-responsive">  
  <table class="table">  
    ...  
  </table>  
</div>
```

Alert

Alerts are created with the .alert class, followed by one of the contextual classes .alert-success, .alert-info, .alert-warning, .alert-danger, .alert-primary, .alert-secondary, .alert-light or .alert-dark

```
<div class="alert alert-success">  
  Indicates a successful or positive action.  
</div>
```


BUTTON

Basic

Primary

Secondary

Success

Info

Warning

Danger

Dark

Light

[Link](#)

```
<button type="button" class="btn">Basic</button>
<button type="button" class="btn btn-primary">Primary</button>
<button type="button" class="btn btn-secondary">Secondary</button>
<button type="button" class="btn btn-success">Success</button>
<button type="button" class="btn btn-info">Info</button>
<button type="button" class="btn btn-warning">Warning</button>
<button type="button" class="btn btn-danger">Danger</button>
<button type="button" class="btn btn-dark">Dark</button>
<button type="button" class="btn btn-light">Light</button>
<button type="button" class="btn btn-link">Link</button>
```

NAVBAR

Link 1 Link 2 Link 3

`<!-- A grey horizontal navbar that becomes vertical on small screens -->`

```
<nav class="navbar navbar-expand-sm bg-light">
  <div class="container-fluid">
    <!-- Links -->
    <ul class="navbar-nav">
      <li class="nav-item">
        <a class="nav-link" href="#">Link 1</a>
      </li>
      <li class="nav-item">
        <a class="nav-link" href="#">Link 2</a>
      </li>
      <li class="nav-item">
        <a class="nav-link" href="#">Link 3</a>
      </li>
    </ul>
  </div>
</nav>
```

Change Font Size With Media Queries

```
/* If the screen size is 601px or more, set the font-size  
of <div> to 80px */
```

```
@media only screen and (min-width: 601px) {  
  div.example {  
    font-size: 80px;  
  }  
}
```

```
/* If the screen size is 600px or less, set the font-size  
of <div> to 30px */
```

```
@media only screen and (max-width: 600px) {  
  div.example {  
    font-size: 30px;  
  }  
}
```

References

- <https://www.w3schools.com/bootstrap5/>