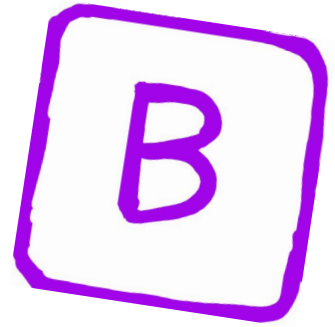# Bootstrap

Bootstrap

- **CSS** framework

- Web **layout** and **design** made **easy**

- Predefined CSS classes

Bootstrap - Import

- 4 files need to be imported
- Import in the **<head>** tag

```html
<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.1/css/bootstrap.min.css">

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

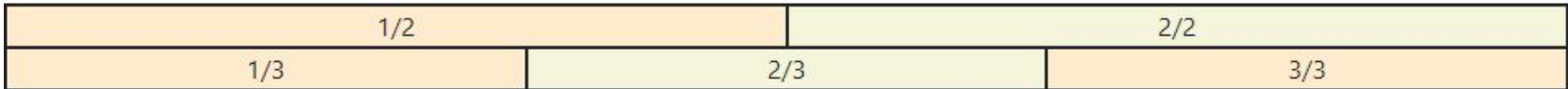- Import before **</body>** tag
- In this specifically order

```html
<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.3/umd/popper.min.js"></script>
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.1.1/js/bootstrap.min.js"></script>

<script src="jquery.min.js"></script>
<script src="popper.min.js"></script>
<script src="bootstrap.min.js"></script>
```

Bootstrap - Grid

- Built with **Flexbox**

- Fully **responsive** layout system

- Needs to be inside **.container**

```html
<div class="container-fluid">
    <div class="row">
        <div class="col">
            1/2
        </div>
        <div class="col">
            2/2
        </div>
    </div>
    <div class="row">
        <div class="col">
            1/3
        </div>
        <div class="col">
            2/3
        </div>
        <div class="col">
            3/3
        </div>
    </div>
</div>
```

1/2		2/2	
1/3	2/3	3/3	

For more information -> https://getbootstrap.com/docs/4.1/layout/grid/

Bootstrap - Grid

- Each row is separated in 12 fractions
- You can define the column width

```html
<div class="container-fluid">
    <div class="row">
        <div class="col">
            2/12
        </div>
        <div class="col-8">
            8/12
        </div>
        <div class="col">
            2/12
        </div>
    </div>
</div>
```

2/12	8/12	2/12

For more information -> https://getbootstrap.com/docs/4.1/layout/grid/
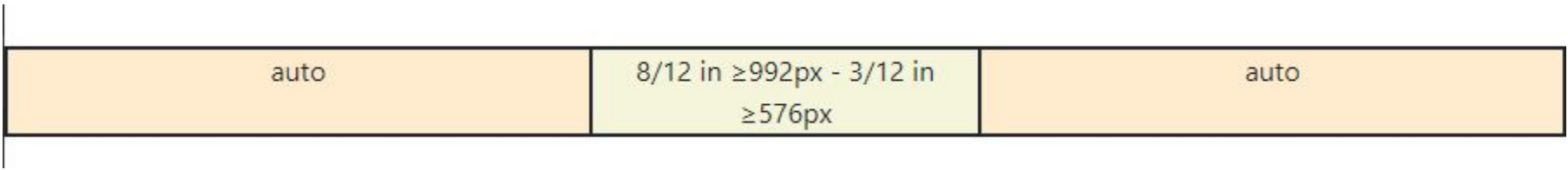
Bootstrap - Grid

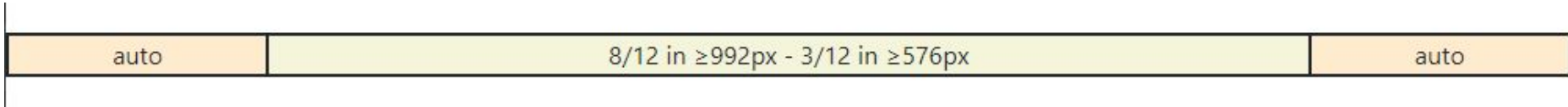- Column width depending on the viewport width

```
<div class="container-fluid">
    <div class="row">
        <div class="col">
            auto
        </div>
        <div class="col-lg-8 col-sm-3">
            8/12 in ≥992px - 3/12 in ≥576px
        </div>
        <div class="col">
            auto
        </div>
    </div>
</div>
```
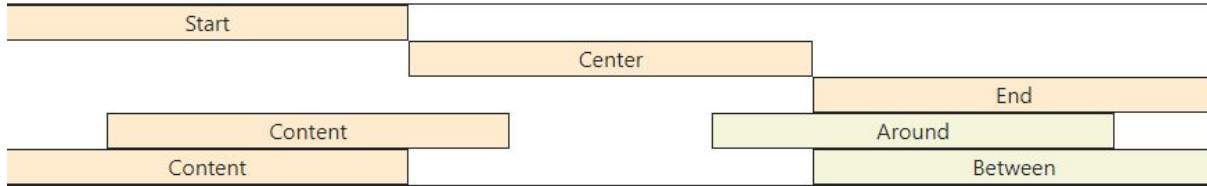
auto	8/12 in ≥992px - 3/12 in ≥576px	auto

auto	8/12 in ≥992px - 3/12 in ≥576px	auto

Bootstrap - Grid

	Extra small <576px	**Small** ≥576px	**Medium** ≥768px	**Large** ≥992px	**Extra large** ≥1200px
Max container width	None (auto)	540px	720px	960px	1140px
Class prefix	.col-	.col-sm-	.col-md-	.col-lg-	.col-xl-

For more information -> https://getbootstrap.com/docs/4.1/layout/grid/

Bootstrap - Grid

- Set column position

```
<div class="container-fluid">
    <div class="row justify-content-start">
        <div class="col-4">
            Start
        </div>
    </div>
    <div class="row justify-content-center">
        <div class="col-4">
            Center
        </div>
    </div>
    <div class="row justify-content-end">
        <div class="col-4">
            End
        </div>
    </div>
    <div class="row justify-content-around">
        <div class="col-4">
            Content
        </div>
        <div class="col-4">
            Around
        </div>
    </div>
    <div class="row justify-content-between">
        <div class="col-4">
            Content
        </div>
        <div class="col-4">
            Between
        </div>
    </div>
</div>
```

Bootstrap - Grid

- Set column offset

```
<div class="container-fluid">
    <div class="row">
        <div class="col-4">.col-md-4</div>
        <div class="col-4 offset-4">.col-md-4 .offset-md-4</div>
    </div>
    <div class="row">
        <div class="col-3 offset-3">.col-md-3 .offset-md-3</div>
        <div class="col-3 offset-3">.col-md-3 .offset-md-3</div>
    </div>
</div>
```

.col-md-4		.col-md-4 .offset-md-4
	.col-md-3 .offset-md-3	.col-md-3 .offset-md-3

For more information -> https://getbootstrap.com/docs/4.1/layout/grid/

Bootstrap - Buttons

- Basic web component
- 3 sizes

```html
<button class="btn">Button</button>
<a class="btn btn-lg" href="#">Buton Large</a>
<input class="btn btn-sm" type="button" value="Small Button">
```

Button   Buton Large   Small Button

```html
<div class="btn-group">
    <button class="btn">1</button>
    <button class="btn">2</button>
    <button class="btn">3</button>
    <button class="btn">4</button>
</div>
```

1   2   3   4

For more information -> https://getbootstrap.com/docs/4.1/components/buttons/

Bootstrap - Carousel

- Important
  - data-slide = "{prev | next}"
  - id = href of controls
  - set 1 active item

350 x 150

```html
<div id="carouselControl" class="carousel slide" >
    <div class="carousel-inner">
        <div class="carousel-item active">
            <img class="d-block w-100" src="350x150.png">
        </div>
        <div class="carousel-item">
            <img class="d-block w-100" src="350x150.png">
        </div>
        <div class="carousel-item">
            <img class="d-block w-100" src="350x150.png">
        </div>
    </div>
    <a class="carousel-control-prev" href="#carouselControl" data-slide="prev">
        <span class="carousel-control-prev-icon"></span>
    </a>
    <a class="carousel-control-next" href="#carouselControl" data-slide="next">
        <span class="carousel-control-next-icon"></span>
    </a>
</div>
```

For more information -> https://getbootstrap.com/docs/4.1/components/carousel/

Bootstrap - Dropdown

- Important
  - data-toggle = "dropdown"

- Menu direction can be changed {dropdown | dropright | … }

```
<div class="dropdown">
    <button class="btn dropdown-toggle" data-toggle="dropdown">Dropdown</button>
    <div class="dropdown-menu">
        <a href="" class="dropdown-item">Item1</a>
        <a href="" class="dropdown-item">Item2</a>
        <a href="" class="dropdown-item">Item3</a>
        <a href="" class="dropdown-item">Item4</a>
    </div>
</div>
```

For more information -> https://getbootstrap.com/docs/4.1/components/dropdowns/
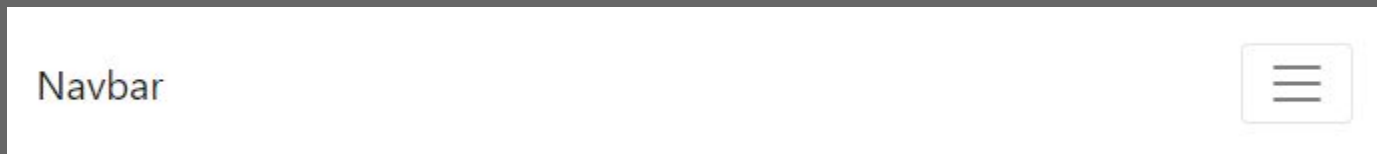
Bootstrap - Navbar

- Important
  - Inside **<nav>** tag
  - . navbar-expand-{sm | md | lg | xl}
  - .collapse
  - .navbar-toggler
    - data-target = navbar-collapse id
    - data-toggle = "collapse"

```html
<nav class="navbar navbar-expand-lg navbar-light">
    <a class="navbar-brand" href="#">Navbar</a>
    <button class="navbar-toggler" data-toggle="collapse" data-target="#navbarNav">
        <span class="navbar-toggler-icon"></span>
    </button>
    <div class="navbar-collapse collapse" id="navbarNav">
        <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>
            <li class="nav-item dropdown">
                <a class="nav-link dropdown-toggle" data-toggle="dropdown" href="#">Dropdown</a>
                <div class="dropdown-menu">
                    <a href="#" class="dropdown-item">Dp 1</a>
                    <a href="#" class="dropdown-item">Dp 2</a>
                    <a href="#" class="dropdown-item">Dp 3</a>
                </div>
            </li>
        </ul>
        <form class="form-inline ml-auto">
            <input class="form-control" type="search" placeholder="Search">
            <button class="btn btn-outline" type="submit">Search</button>
        </form>
    </div>
</nav>
```

For more information -> https://getbootstrap.com/docs/4.1/components/navbar/

Bootstrap - Navbar

Navbar   Link 1   Link 2   Link 3   Dropdown ▾   Search   Search

Navbar   ☰

More components in
https://getbootstrap.com/docs/4.1/components

Bootstrap - Utilities

- Spacing
  - m -> margin
  - p -> padding
  - -
  - l -> left
  - r -> right
  - b -> bottom
  - t -> top
  - x -> horizontal
  - y -> vertical
  - values: 1 | 2 | 3 | 4 | 5 | auto
  - -
  - Examples : ml-3 / mx-auto / py-4 / mr-0 / p-4 / m-0

- Sizing
  - w -> width
  - h -> height
  - mw -> max-width
  - mh -> max-height
  - -
  - values: 25 | 50 | 75 | 100
  - -
  - Examples : h-50 / w-25 / h-auto / mw-100

Bulma.io

- Bootstrap alternative
- No JS
- No JQ
- Minimalistic
- Easy to understand
- Grid System

```html
<div class="dropdown is-active">
  <div class="dropdown-trigger">
    <button class="button" aria-haspopup="true" aria-controls="dropdown-menu">
      <span>Dropdown button</span>
      <span class="icon is-small">
        <i class="fas fa-angle-down" aria-hidden="true"></i>
      </span>
    </button>
  </div>
  <div class="dropdown-menu" id="dropdown-menu" role="menu">
    <div class="dropdown-content">
      <a href="#" class="dropdown-item">
        Dropdown item
      </a>
      <a class="dropdown-item">
        Other dropdown item
      </a>
      <a href="#" class="dropdown-item is-active">
        Active dropdown item
      </a>
      <a href="#" class="dropdown-item">
        Other dropdown item
      </a>
      <hr class="dropdown-divider">
      <a href="#" class="dropdown-item">
        With a divider
      </a>
    </div>
  </div>
</div>
```

Dropdown button ⌄

Dropdown item
Other dropdown item
Active dropdown item
Other dropdown item

With a divider

Small   Normal   Medium   Large

```html
<a class="button is-small">Small</a>
<a class="button">Normal</a>
<a class="button is-medium">Medium</a>
<a class="button is-large">Large</a>
```

```javascript
var dropdown = document.getElementsByClassName('dropdown');
for(var i = 0; i < dropdown.length; i++){
    dropdown[i].addEventListener('click', function(event) {
        this.classList.toggle('is-active');
    });
}
```