



Bootstrap

Лекция 7



Что это?

Фреймворк для адаптивных веб-приложений
HTML и CSS шаблоны, JS модули.

Сейчас изучаем Bootstrap 4 (2018)
Bootstrap 5 (2021) – числый JS вместо jQuery,
всякие мелкие улучшения.

React Bootstrap – отдельный модуль.

Что входит?

- Лейауты
- Формы, кнопки
- Таблички
- Навигационные меню
- Карусельки
- Модальные окна
- Типографика

И всё сразу автоматически – адаптивное

Подключение

CDN

```
<link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.6.1/dist/css
/bootstrap.min.css">
<script
src="https://cdn.jsdelivr.net/npm/jquery@3.6.0/dist/jquery.s
lim.min.js"></script>
<script
src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/um
d/popper.min.js"></script>
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@4.6.1/dist/js/b
ootstrap.bundle.min.js"></script>
```

Автономно

<https://getbootstrap.com/> - скачиваем файлы и размещаем на своем сайте

С чего все начинаем

1. Строгий HTML5, добавляем DOCTYPE

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8">
  </head>
</html>
```

2. Параметры для адаптивности

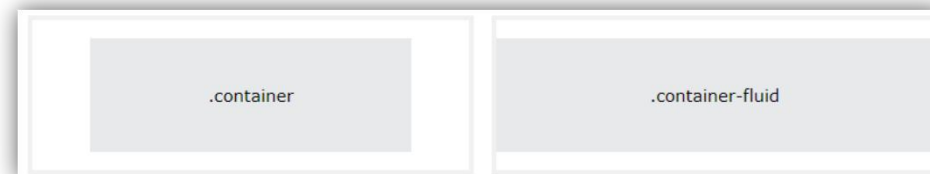
```
<meta name="viewport" content="width=device-width, initial-scale=1">
```

С чего все начинаем

3. Добавляем контейнер

```
<div class="container">
  <h1>My First Bootstrap Page</h1>
  <p>This is some text.</p>
</div>
```

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



Float | Clearfix

Обычные: классы .float-right, .float-left, .clearfix



Условные, адаптивные:
. float-sm-right

sm $\geq 576\text{px}$, md $\geq 768\text{px}$, lg $\geq 992\text{px}$, xl $\geq 1200\text{px}$

```
<div class="container">  
  <div class="clearfix">  
    <div class="float-sm-right">Float right on small screens or wider</div><br>  
    <div class="float-md-right">Float right on medium screens or wider</div><br>  
    <div class="float-lg-right">Float right on large screens or wider</div><br>  
    <div class="float-xl-right">Float right on extra large screens or wider</div><br>  
    <div class="float-none">Float none</div>  
  </div>  
</div>
```

Float right on small screens or wider
Float right on medium screens or wider

Float right on large screens or wider

Float right on extra large screens or wider

Float none

Шаблонные размеры

.w-25 == width: 25%
.mw-50 == max-width: 50%
.h-75 == height: 75%
.mh-100 == max-height: 100%

```
<div class="w-25 bg-warning">Width 25%</div>  
<div class="w-50 bg-warning">Width 50%</div>  
<div class="w-75 bg-warning">Width 75%</div>  
<div class="w-100 bg-warning">Width 100%</div>  
<div class="mw-100 bg-warning">Max Width 100%</div>
```



Width 25%
Width 50%
Width 75%
Width 100%
Max Width 100%

Шаблонные отступы

m - for classes that set **margin**

p - for classes that set **padding**

t - for classes that set **margin-top** or **padding-top**

b - for classes that set **margin-bottom** or **padding-bottom**

l - for classes that set **margin-left** or **padding-left**

r - for classes that set **margin-right** or **padding-right**

x - for classes that set both ***-left** and ***-right**

y - for classes that set both ***-top** and ***-bottom**

0 - for classes that eliminate the **margin** or **padding** by setting it to **0**

1 - (by default) for classes that set the **margin** or **padding** to **\$spacer * .25**

2 - (by default) for classes that set the **margin** or **padding** to **\$spacer * .5**

3 - (by default) for classes that set the **margin** or **padding** to **\$spacer**

4 - (by default) for classes that set the **margin** or **padding** to **\$spacer * 1.5**

5 - (by default) for classes that set the **margin** or **padding** to **\$spacer * 3**

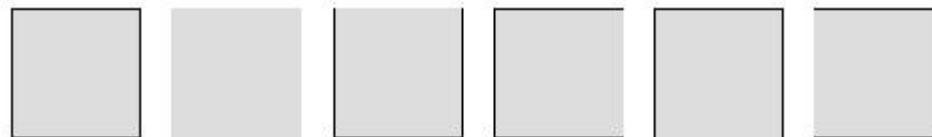
auto - for classes that set the **margin** to **auto**

n1 - sets **margin** to **-.25rem** (-4px if font-size is 16px)

Шаблонные границы

```
<span class="border"></span>  
<span class="border border-0"></span>  
<span class="border border-top-0"></span>  
<span class="border border-right-0"></span>  
<span class="border border-bottom-0"></span>  
<span class="border border-left-0"></span>
```

```
<span class="border border-primary"></span>  
<span class="border border-secondary"></span>  
<span class="border border-success"></span>  
<span class="border border-danger"></span>  
<span class="border border-warning"></span>  
<span class="border border-info"></span>  
<span class="border border-light"></span>  
<span class="border border-dark"></span>  
<span class="border border-white"></span>
```



Шаблонные цвета

.bg-* – фон, .text-* - текст

*-primary, *-success, *-info, *-warning, *-danger,
*-secondary, *-dark, *-light

Тени: shadow-none, shadow-sm,
shadow, shadow-lg

This text is important.

This text indicates success.

This text represents some information.

This text represents a warning.

This text represents danger.

Secondary background color.

Dark grey background color.

Light grey background color.

Таблицы

`.table-striped` `.table-bordered` `.table-borderless`
`.table-hover` `.table-dark`
`.table-*` `.thead-*` (* == primary, success, info, warning, danger, active, secondary, light, dark)

Firstname	Lastname	Email
John	Doe	john@example.com
Mary	Moe	mary@example.com
July	Dooley	july@example.com

`.table-responsive-*` (* == пусто, sm, md, lg, xl)

#	Firstname	Lastname	Age	City	Country	Sex	Example	Example	Example
1	Anna	Pitt	35	New York	USA	Female	Yes	Yes	Yes

Картинки

- **Оформление краев:** `.rounded` `.rounded-circle` `.img-thumbnail`
- **Адаптивный размер:** `.img-fluid`

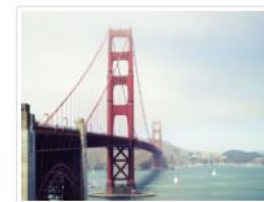
Rounded Corners:



Circle:



Thumbnail:



Типографика

<h1> - <h6> + .display-* (* == 1..4)

Особые семантические значения текста:
<small>, <mark>, <abbr>, <blockquote>, <code>,
<kbd>, <pre>

Display 1

Display 2

Display 3

Display 4

.font-weight-bold

.font-weight-bolder

.font-italic

.font-weight-light

.font-weight-lighter

.font-weight-normal

.lead

.small

Кнопки

```
<button type="button" class="btn btn-primary  
btn-lg">Large</button>
```

.btn-* .btn-outline-* (* == primary, secondary, success, info, warning, ...)

Basic Primary Secondary Success Info Warning Danger Dark Light Link

Primary Secondary Success Info Warning Danger Dark Light

Формы

```
<form action="/action_page.php">
  <div class="form-group">
    <label for="email">Email address:</label>
    <input type="email" class="form-control" placeholder="Enter email" id="email">
  </div>
  <div class="form-group">
    <label for="pwd">Password:</label>
    <input type="password" class="form-control" placeholder="Enter password" id="pwd">
  </div>
  <div class="form-group form-check">
    <label class="form-check-label">
      <input class="form-check-input" type="checkbox"> Remember me
    </label>
  </div>
  <button type="submit" class="btn btn-primary">Submit</button>
</form>
```

Email:

Password:

☐ Remember me

Email:

Password:

☐ Remember me

Поля ввода

Name:

йцукен

Comment:

☐ Option 1 ☐ Option 2 ☐ Option 3

☐ Option 1 ☐ Option 2 ☐ Option 3

Select list (select one):

1

1

2

3

4

5

Дополнительная литература



1. <https://www.w3schools.com/bootstrap4/>



1. <https://getbootstrap.com/>