



Bootstrap 4

# Last lecture reminder

We learned about:

- What is Bootstrap and why we want to use it
- How we apply Bootstrap style to our files
- Basic Bootstrap features:
  - Typography
  - Colors
  - Spacing
  - Sizing
  - Border
  - Radius
- Bootstrap components:
  - Buttons
  - Navbar



# Bootstrap - Components



# Bootstrap - Grid System

Bootstrap's grid system uses a series of containers, rows, and columns to layout and align content

The grid is fully responsive and match for all screen devices



# Bootstrap - Grid System

How Bootstrap's grid system is working:

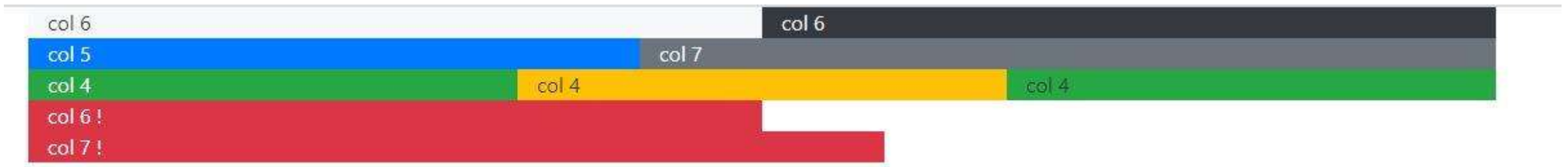
- **Bootstrap using flex-box for the grid-system**
- **The grid supports six responsive breakpoints** (based on min-width media queries as we learned before) for more details - [Bootstrap breakpoints](#)
- **Containers center and horizontally pad your content** - by adding the .container class you will automatically center and horizontally pad your content
- **Columns are incredibly flexible** - There are 12 template columns available per row, allowing you to create different combinations of elements that span any number of columns



# Class Exercise - Bootstrap Grid

## Instructions:

- Create the following grid image using Bootstrap:



# Class Exercise - Bootstrap Grid Solution

# Bootstrap - Forms & Inputs

## form-control -

Email address

Example textarea

```
<div class="mb-3">
  <label for="exampleFormControlInput1" class="form-label">Email address</label>
  <input type="email" class="form-control" id="exampleFormControlInput1" placeholder="name
</div>
<div class="mb-3">
  <label for="exampleFormControlTextarea1" class="form-label">Example textarea</label>
  <textarea class="form-control" id="exampleFormControlTextarea1" rows="3"></textarea>
</div>
```

Copy



# Bootstrap - Forms & Inputs

**form-control-#size** - apply sizing to the input (form-control-lg , form-control-sm)



Three text input fields are shown stacked vertically. The top field is large and contains the placeholder text ".form-control-lg". The middle field is the default size and contains the placeholder text "Default input". The bottom field is small and contains the placeholder text ".form-control-sm". Below the inputs is a code block with the corresponding HTML for each, and a "Copy" button to the right.

```
<input class="form-control form-control-lg" type="text" placeholder=".form-control-lg">  
<input class="form-control" type="text" placeholder="Default input" aria-label="default in<br><input class="form-control form-control-sm" type="text" placeholder=".form-control-sm" ari
```

**disabled** - boolean attribute that disabling the input



Two disabled text input fields are shown stacked vertically. The top field is disabled and contains the placeholder text "Disabled input". The bottom field is disabled and contains the placeholder text "Disabled readonly input". Below the inputs is a code block with the corresponding HTML for each, and a "Copy" button to the right.

```
xt" placeholder="Disabled input" aria-label="Disabled input example" disabled>  
xt" value="Disabled readonly input" aria-label="Disabled input example" disabled readonly>
```

# Bootstrap - Forms & Inputs

## Custom file input file-import -

Default file input example

Choose File

No file chosen

Multiple files input example

Choose Files

No file chosen

Disabled file input example

Choose File

No file chosen

Small file input example

Choose File

No file chosen

Large file input example

Choose File

No file chosen

```
<div class="mb-3">
  <label for="formFile" class="form-label">Default file input example</label>
  <input class="form-control" type="file" id="formFile">
</div>
<div class="mb-3">
  <label for="formFileMultiple" class="form-label">Multiple files input example</label>
  <input class="form-control" type="file" id="formFileMultiple" multiple>
</div>
<div class="mb-3">
  <label for="formFileDisabled" class="form-label">Disabled file input example</label>
  <input class="form-control" type="file" id="formFileDisabled" disabled>
</div>
<div class="mb-3">
  <label for="formFileSm" class="form-label">Small file input example</label>
  <input class="form-control form-control-sm" id="formFileSm" type="file">
</div>
<div>
  <label for="formFileLg" class="form-label">Large file input example</label>
  <input class="form-control form-control-lg" id="formFileLg" type="file">
</div>
```

Copy

# Bootstrap - Forms & Inputs

Use **form-control** class to style datalists

Datalist example

Type to search...

```
<label for="exampleDataList" class="form-label">Datalist example</label>
<input class="form-control" list="datalistOptions" id="exampleDataList" placeholder="Type
<datalist id="datalistOptions">
  <option value="San Francisco">
  <option value="New York">
  <option value="Seattle">
  <option value="Los Angeles">
  <option value="Chicago">
</datalist>
```

Copy

Datalist example

Type to search...

San Francisco  
New York  
Seattle  
Los Angeles  
Chicago

```
class="form-label">Datalist example</label>
list="datalistOptions" id="exampleDataList" placeholder="Type
">
:o">
>
```

Copy

# Bootstrap - Forms & Inputs

For style the submit button we can use **.btn** classes -

email@example.com

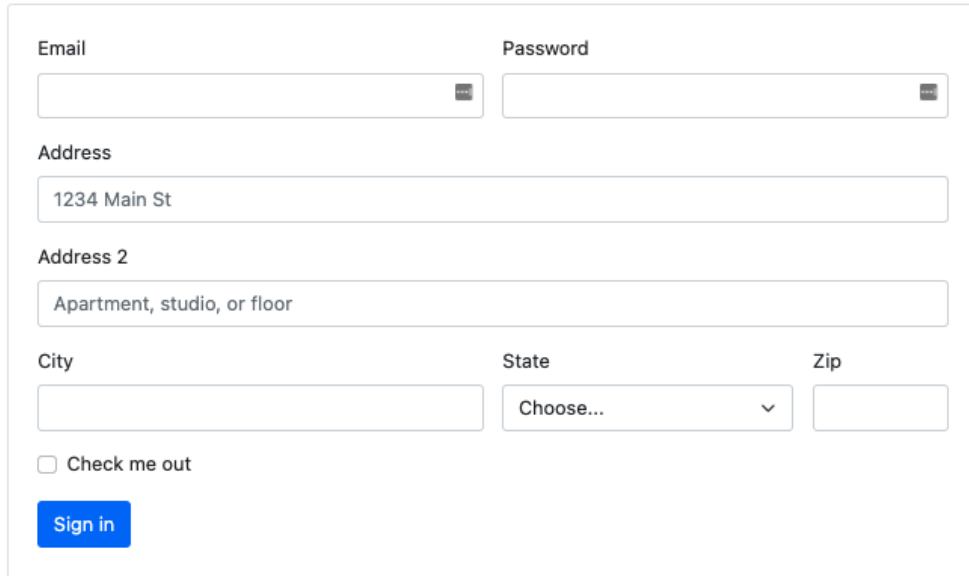
Password

Confirm identity

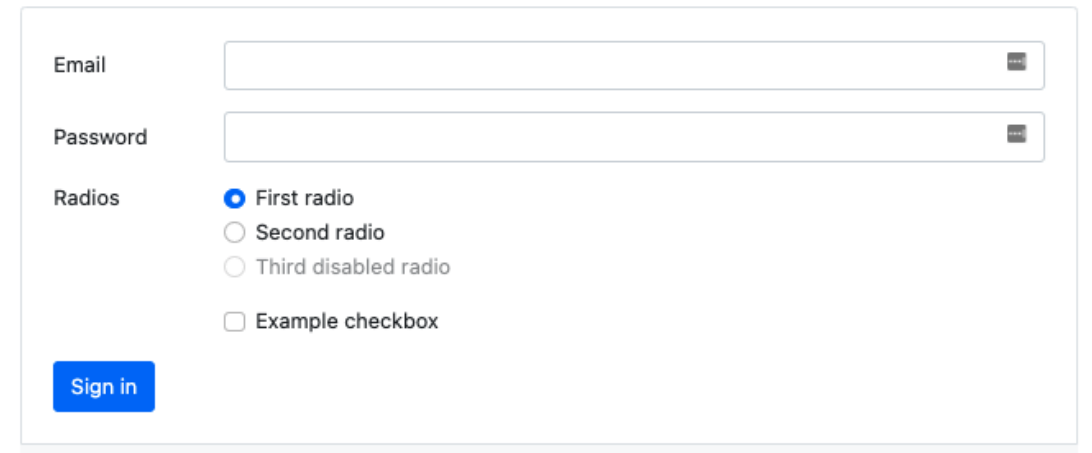
```
<form class="row g-3">
  <div class="col-auto">
    <label for="staticEmail2" class="visually-hidden">Email</label>
    <input type="text" readonly class="form-control-plaintext" id="staticEmail2" value="em
  </div>
  <div class="col-auto">
    <label for="inputPassword2" class="visually-hidden">Password</label>
    <input type="password" class="form-control" id="inputPassword2" placeholder="Password"
  </div>
  <div class="col-auto">
    <button type="submit" class="btn btn-primary mb-3">Confirm identity</button>
  </div>
</form>
```

# Bootstrap - Forms & Inputs

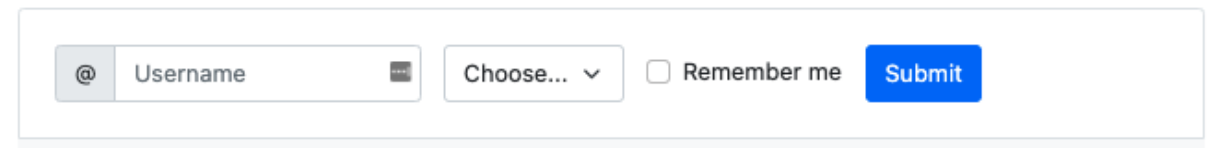
Form layouts - Bootstrap gives us some already made form layouts that we can use and customize:



A Bootstrap form layout example. It features a grid of input fields. The first row contains 'Email' and 'Password' fields. The second row contains an 'Address' field with the placeholder text '1234 Main St'. The third row contains an 'Address 2' field with the placeholder text 'Apartment, studio, or floor'. The fourth row contains 'City', 'State' (a dropdown menu with 'Choose...' and a downward arrow), and 'Zip' fields. Below these fields is a checkbox labeled 'Check me out'. At the bottom left is a blue 'Sign in' button.



A Bootstrap form layout example. It features a grid of input fields. The first row contains an 'Email' field. The second row contains a 'Password' field. Below these fields is a 'Radios' section with three radio buttons: 'First radio' (selected), 'Second radio', and 'Third disabled radio'. Below the radios is a checkbox labeled 'Example checkbox'. At the bottom left is a blue 'Sign in' button.



A Bootstrap form layout example. It features a grid of input fields. The first row contains a 'Username' field with a placeholder '@' and a dropdown menu with 'Choose...' and a downward arrow. Below these fields is a checkbox labeled 'Remember me'. At the bottom right is a blue 'Submit' button.

For more details: [Bootstrap documentation](#)

# Bootstrap - Forms & Inputs

Form validation:

- **is-valid** - create a green border around the valid input
- **valid-feedback** - allow you to add a comment about the validation like: "Looks good"  
the comment will be with green color

```
<form class="row g-3">
  <div class="col-md-4">
    <label for="validationServer01" class="form-label">First name</label>
    <input type="text" class="form-control is-valid" id="validationServer01" value="Mark" />
    <div class="valid-feedback">
      Looks good!
    </div>
  </div>
</form>
```

First name	Last name
<input type="text" value="Mark"/>	<input type="text" value="Otto"/>
Looks good!	Looks good!

- **is-invalid** - create a red border around the invalid input
- **invalid-feedback** - allow you to add a comment about the validation like: "Please fill a valid city"  
the comment will be with red color

```
<div class="col-md-6">
  <label for="validationServer03" class="form-label">City</label>
  <input type="text" class="form-control is-invalid" id="validationServer03" />
  <div id="validationServer03Feedback" class="invalid-feedback">
    Please provide a valid city.
  </div>
</div>
```

City

  
Please provide a valid city.



# Class Exercise - Bootstrap Form

## Instructions:

- Create the following form image using Bootstrap:

## Create new account

First name

Last name

How do you know about us ?

- ☒ FRIEND  
☐ FACEBOOK  
☐ OTHER

Create a Password

Must be 8-20 characters long.

Choose a question to reset your password

Response

Email address

We'll never share your email with anyone else.

Send picture for your profile

- ☒ I agree to the policy  
☐ Send me all the news



# Class Exercise - Bootstrap Form Solution

# Bootstrap - Tables & Pagination

**.table** - Bootstrap table base class

#	First	Last	Handle
1	Mark	Otto	@mdo
2	Jacob	Thornton	@fat
3	Larry the Bird		@twitter

```
<table class="table">
  <thead>
    <tr>
      <th scope="col">#</th>
      <th scope="col">First</th>
      <th scope="col">Last</th>
      <th scope="col">Handle</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <th scope="row">1</th>
      <td>Mark</td>
      <td>Otto</td>
      <td>@mdo</td>
    </tr>
    <tr>
      <th scope="row">2</th>
      <td>Jacob</td>
      <td>Thornton</td>
      <td>@fat</td>
    </tr>
    <tr>
      <th scope="row">3</th>
      <td colspan="2">Larry the Bird</td>
      <td>@twitter</td>
    </tr>
  </tbody>
</table>
```

Copy

# Bootstrap - Tables & Pagination

**.table-primary** - change the table text color and background

We have a lot of different colors we can choose from:

```
<!-- On tables -->
<table class="table-primary">...</table>
<table class="table-secondary">...</table>
<table class="table-success">...</table>
<table class="table-danger">...</table>
<table class="table-warning">...</table>
<table class="table-info">...</table>
<table class="table-light">...</table>
<table class="table-dark">...</table>
```

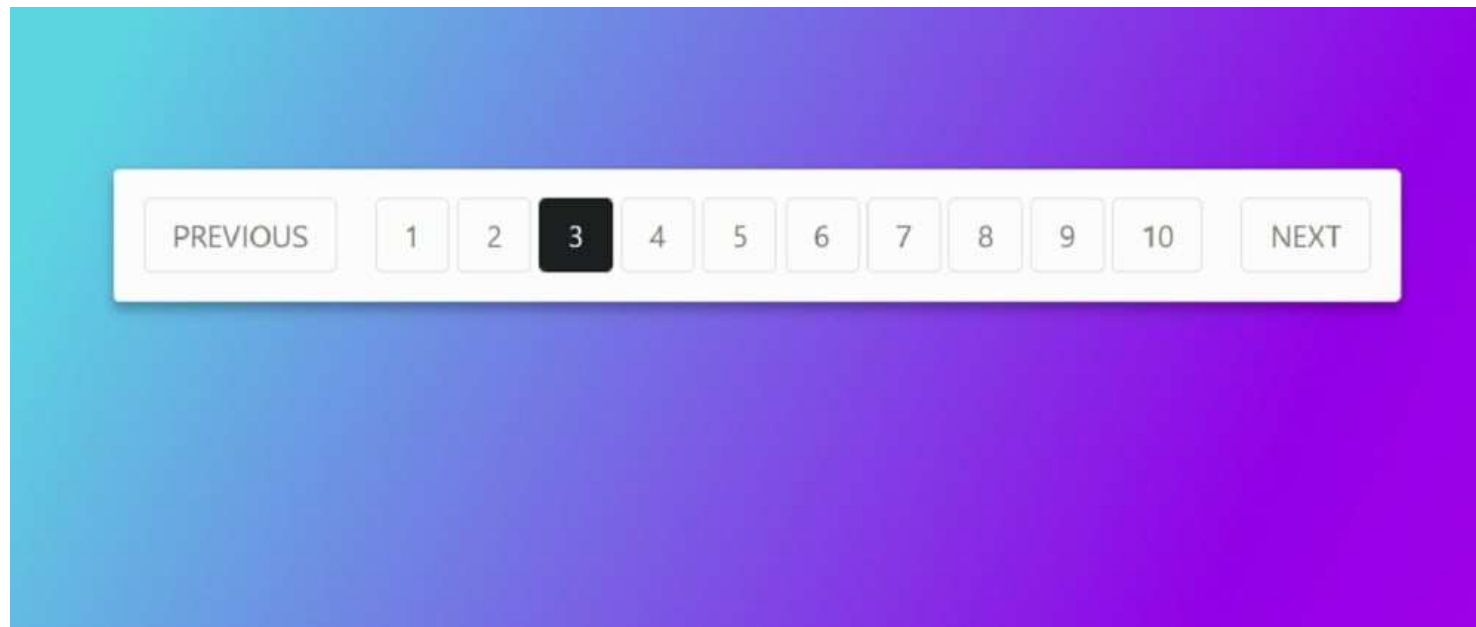
Class	Heading	Heading
Default	Cell	Cell
Primary	Cell	Cell
Secondary	Cell	Cell
Success	Cell	Cell
Danger	Cell	Cell
Warning	Cell	Cell
Info	Cell	Cell
Light	Cell	Cell
Dark	Cell	Cell

**Note:** we can apply color on the entire table or on specific rows or cells

# Bootstrap - Tables & Pagination

**Pagination** - is the process of dividing a document into discrete [pages](#), either electronic pages or printed pages

We can see how pagination is applying on websites that have list of multiple results



# Bootstrap - Tables & Pagination

In order to use Bootstrap pagination style we need to wrap our list with `<nav>` element

Then use the **.pagination** class to give the list the Bootstrap pagination style

Previous123Next

```
<nav aria-label="Page navigation example">
  <ul class="pagination">
    <li class="page-item"><a class="page-link" href="#">Previous</a></li>
    <li class="page-item"><a class="page-link" href="#">1</a></li>
    <li class="page-item"><a class="page-link" href="#">2</a></li>
    <li class="page-item"><a class="page-link" href="#">3</a></li>
    <li class="page-item"><a class="page-link" href="#">Next</a></li>
  </ul>
</nav>
```

Copy

We can also work with icons instead of the “Previous” and “Next” buttons

For more information: [Bootstrap Pagination Documentation](#)

« 1 2 3 »

```
<nav aria-label="Page navigation example">
  <ul class="pagination">
    <li class="page-item">
      <a class="page-link" href="#" aria-label="Previous">
        <span aria-hidden="true">&laquo;</span>
      </a>
    </li>
    <li class="page-item"><a class="page-link" href="#">1</a></li>
    <li class="page-item"><a class="page-link" href="#">2</a></li>
    <li class="page-item"><a class="page-link" href="#">3</a></li>
    <li class="page-item">
      <a class="page-link" href="#" aria-label="Next">
        <span aria-hidden="true">&raquo;</span>
      </a>
    </li>
  </ul>
</nav>
```

Copy



# Class Exercise - Bootstrap Table

## Instructions:

- Create the following table image using Bootstrap:

Month	Number of Sales	Amount
Jan	105	\$15,000.00
Feb	95	\$12,000.00
Mar	150	\$20,000.00
Apr	50	\$30,000.00
May	80	\$15,000.00
Jun	110	\$22,000.00
Total		\$114,000.00



# Class Exercise - Bootstrap Table Solution

# Congratulations!



## Bootstrap 4