Bootstrap Text/Typograph

- Bootstrap uses a default font-size of 1rem (16px by default), and its line-height is 1.5.
- In addition, all <p> elements have margin-top: 0 and margin-bottom: 1rem (16px by default).
- <h1> - <h6>Bootstrap styles HTML headings (<h1> to <h6>) with a bolder font-weight and a responsive font-size.
- You can also use **.h1 to .h6** classes on other elements to make them behave as headings if you want:
- <p class="h1">h1 Bootstrap heading</p>
  <p class="h2">h2 Bootstrap heading</p>
  <p class="h3">h3 Bootstrap heading</p>
  <p class="h4">h4 Bootstrap heading</p>
  <p class="h5">h5 Bootstrap heading</p>
  <p class="h6">h6 Bootstrap heading</p>

Display Heading

- Display headings are used to stand out more than normal headings (larger font-size and lighter font-weight), and there are six classes to choose from: **.display-1 to .display-6:**
- <h1 class="display-1">Display 1</h1>
- <h1 class="display-2">Display 2</h1>
- <h1 class="display-3">Display 3</h1>
- <h1 class="display-4">Display 4</h1>
- <h1 class="display-5">Display 5</h1>
- <h1 class="display-6">Display 6</h1>

<small>,<mark>

- <small> element (and the **.small** class) is used to create a smaller, secondary text in any heading:
  - <div class="container mt-3">

<h1>h1 heading **<small>secondary text</small>**</h1>

<h2>h2 heading <small>secondary text</small></h2>

- <mark> and **.mark** with a yellow background color and some padding:
- <div class="container mt-3">

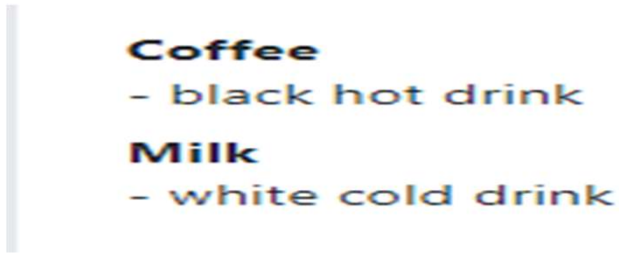
<h1>Highlight Text</h1>

<p>Use the mark element (or the .mark class) to **<mark>highlight</mark>** text.</p>

</div>

<abbr>,<dl>,<code>

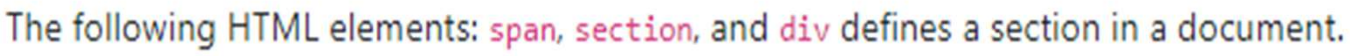
- <abbr> element with a dotted border bottom and a cursor with question mark on hover:
  - <p>The <abbr title="World Health Organization">WHO</abbr> was founded in 1948.</p>
- <dl>



Coffee
- black hot drink

Milk
- white cold drink

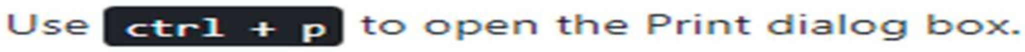
- <code>



The following HTML elements: span, section, and div defines a section in a document.

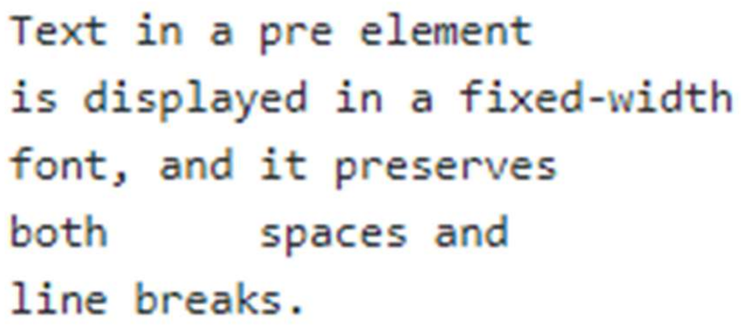
<kbd>,<pre>

- <kbd> element in the following way:

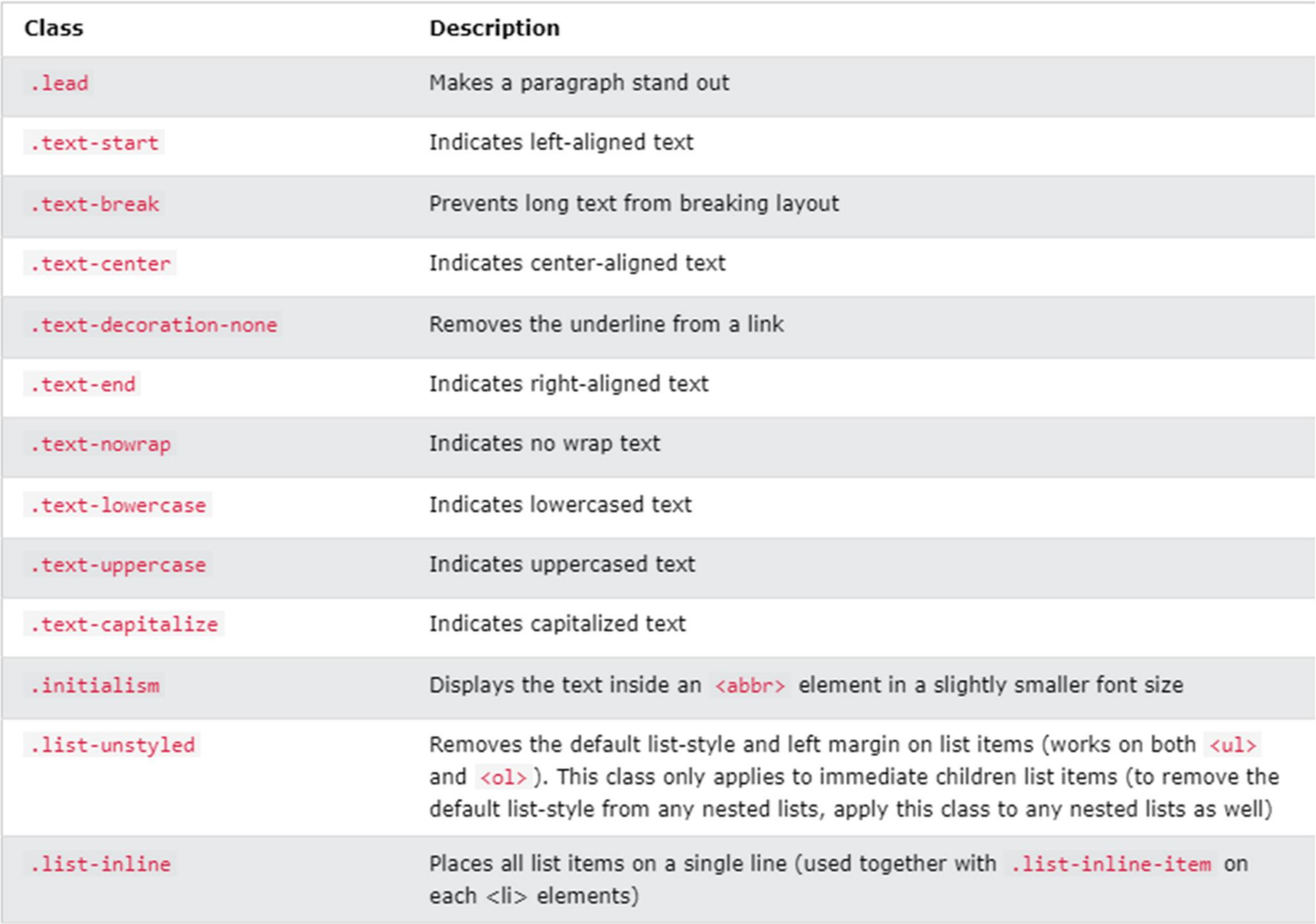


Use ctrl + p to open the Print dialog box.

- <pre> element in the following way:



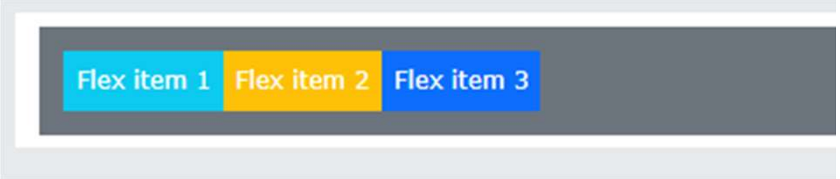
```
Text in a pre element
is displayed in a fixed-width
font, and it preserves
both      spaces and
line breaks.
```



Class	Description
`.lead`	Makes a paragraph stand out
`.text-start`	Indicates left-aligned text
`.text-break`	Prevents long text from breaking layout
`.text-center`	Indicates center-aligned text
`.text-decoration-none`	Removes the underline from a link
`.text-end`	Indicates right-aligned text
`.text-nowrap`	Indicates no wrap text
`.text-lowercase`	Indicates lowercased text
`.text-uppercase`	Indicates uppercased text
`.text-capitalize`	Indicates capitalized text
`.initialism`	Displays the text inside an `<abbr>` element in a slightly smaller font size
`.list-unstyled`	Removes the default list-style and left margin on list items (works on both `<ul>` and `<ol>`). This class only applies to immediate children list items (to remove the default list-style from any nested lists, apply this class to any nested lists as well)
`.list-inline`	Places all list items on a single line (used together with `.list-inline-item` on each <li> elements)

Bootstrap Flex-Flexbox

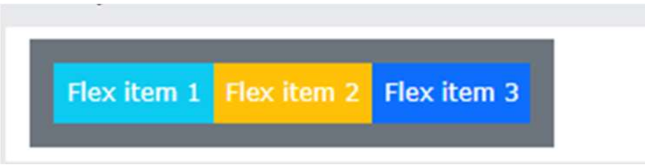
- The biggest difference between Bootstrap 3 and Bootstrap 4 & 5 is that Bootstrap 5 now uses **flexbox, instead of floats**, to handle the layout.
- **The Flexible Box Layout Module**, makes it easier to design flexible responsive layout structure without using float or positioning.
- To create a flexbox container and to transform direct children into flex items, use the **d-flex** class:



```
<div class="d-flex p-3 bg-secondary text-white">
  <div class="p-2 bg-info">Flex item 1</div>
  <div class="p-2 bg-warning">Flex item 2</div>
  <div class="p-2 bg-primary">Flex item 3</div>
</div>
```

d-inline-flex class:

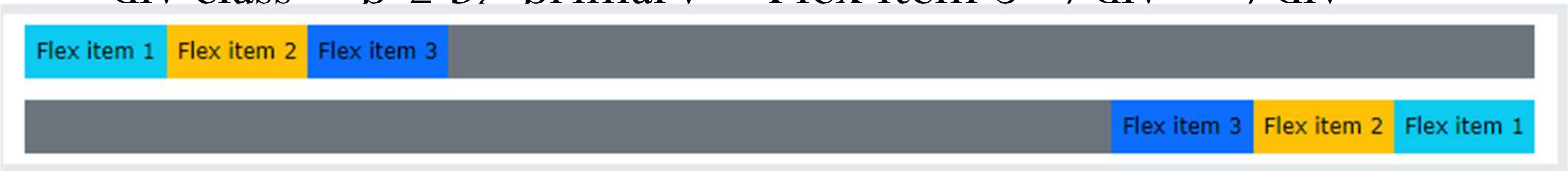
- To create an inline flexbox container, use the **d-inline-flex** class:


Flex item 1 Flex item 2 Flex item 3

-
```
<div class="d-inline-flex p-3 bg-secondary text-white">
  <div class="p-2 bg-info">Flex item 1</div>
  <div class="p-2 bg-warning">Flex item 2</div>
  <div class="p-2 bg-primary">Flex item 3</div>
</div>
```

Horizontal Direction

- Use **.flex-row** to display the flex items horizontally (side by side). This is default.Use **.flex-row-reverse** to right-align the horizontal direction:
-
  ```
  <div class="d-flex flex-row bg-secondary">
    <div class="p-2 bg-info">Flex item 1</div>
    <div class="p-2 bg-warning">Flex item 2</div>
    <div class="p-2 bg-primary">Flex item 3</div></div>
  ```

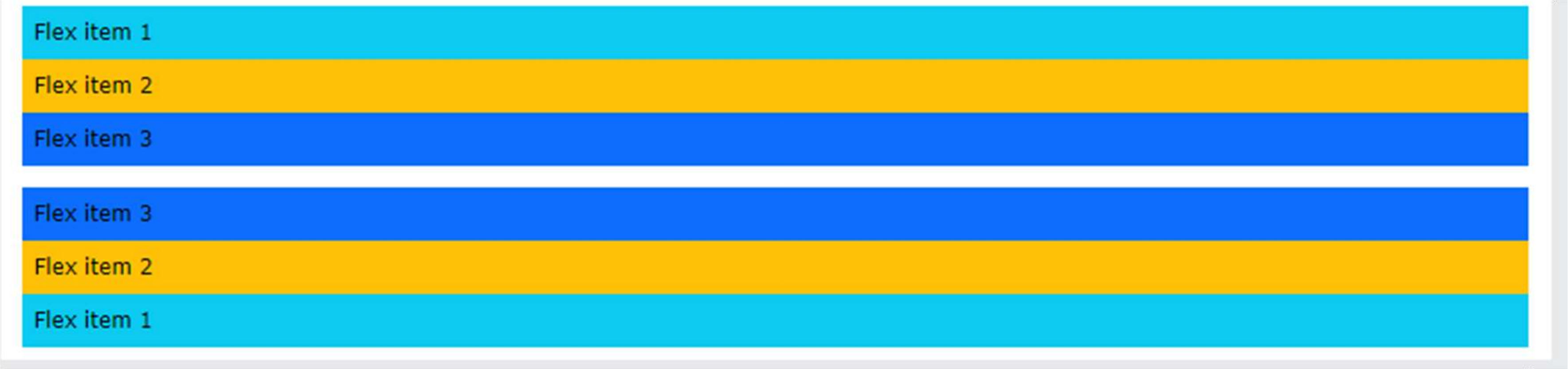


-
  ```
  <div class="d-flex flex-row-reverse bg-secondary">
    <div class="p-2 bg-info">Flex item 1</div>
    <div class="p-2 bg-warning">Flex item 2</div>
    <div class="p-2 bg-primary">Flex item 3</div>
  </div>
  ```

Vertical Direction

- Use **.flex-column** to display the flex items vertically (on top of each other), or **.flex-column-reverse** to reverse the vertical direction:

-
```
 <div class="d-flex flex-column">
  <div class="p-2 bg-info">Flex item 1</div>
  <div class="p-2 bg-warning">Flex item 2</div>
  <div class="p-2 bg-primary">Flex item 3</div></div>
<div class="d-flex flex-column-reverse">
  <div class="p-2 bg-info">Flex item 1</div>
  <div class="p-2 bg-warning">Flex item 2</div>
  <div class="p-2 bg-primary">Flex item 3</div></div>
```

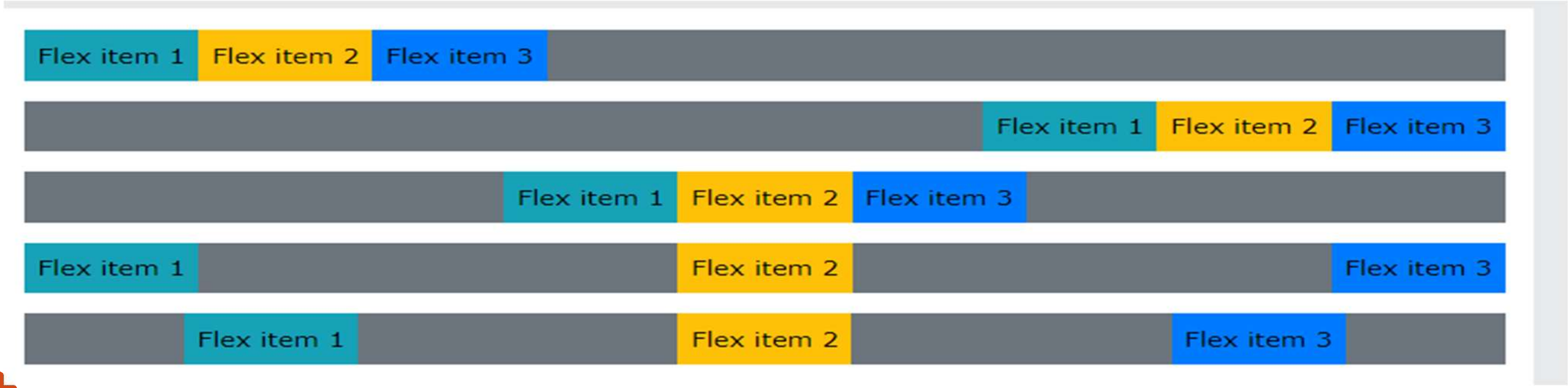


Flex item 1
Flex item 2
Flex item 3

Flex item 3
Flex item 2
Flex item 1

Justify Content

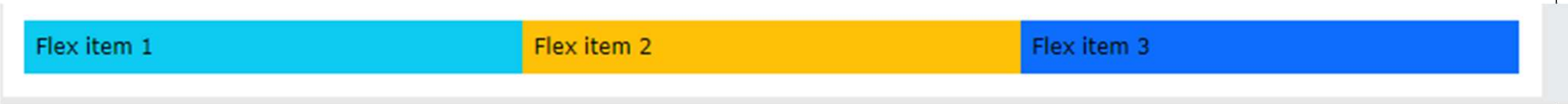
- Use the **.justify-content-*** classes to change the alignment of flex items. Valid classes are **start** (default), **end, center, between or around:**
- <div class="d-flex justify-content-start">...</div>
  <div class="d-flex justify-content-end">...</div>
  <div class="d-flex justify-content-center">...</div>
  <div class="d-flex justify-content-between">...</div>
  <div class="d-flex justify-content-around">...</div>



Fill / Equal Widths

- Use **.flex-fill** on flex items to force them into equal widths:

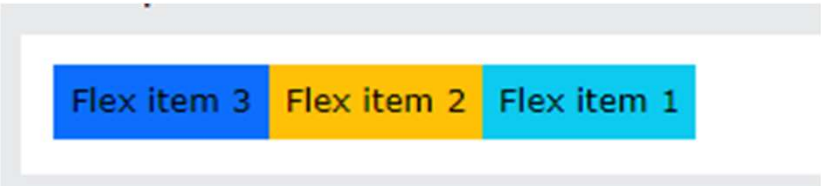
-
  ```
  <div class="d-flex">
    <div class="p-2 bg-info flex-fill">Flex item 1</div>
    <div class="p-2 bg-warning flex-fill">Flex item 2</div>
    <div class="p-2 bg-primary flex-fill">Flex item 3</div>
  </div>
  ```



Order

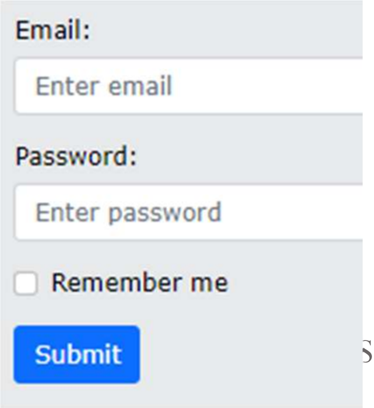
- Change the visual order of a specific flex item(s) with the **.order** classes. Valid classes are from 0 to 5, where the lowest number has highest priority (order-1 is shown before order-2, etc..):

-
  ```
  <div class="d-flex bg-secondary">
    <div class="p-2 bg-info order-3">Flex item 1</div>
    <div class="p-2 bg-warning order-2">Flex item 2</div>
    <div class="p-2 bg-primary order-1">Flex item 3</div>
  </div>
  ```



Bootstrap Forms-Stacked Form

- All textual <input> and <textarea> elements with class **.form-control** get proper form styling.
- **.form-label** class to each label element to ensure correct padding.
- Checkboxes are wrapped around a container element with **.form-check**
- labels have a class of **.form-check-label**
- checkboxes and radio buttons use **.form-check-input**.



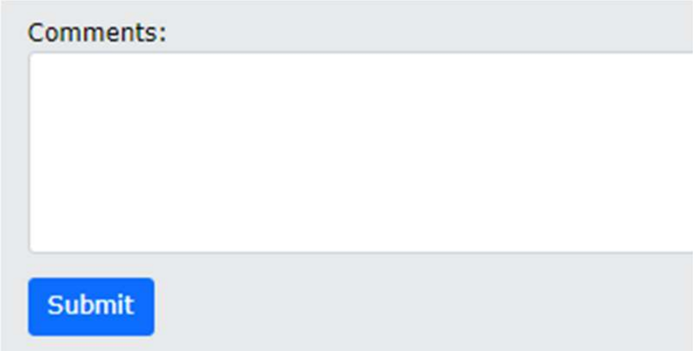
Email:

Enter email

Password:

Enter password

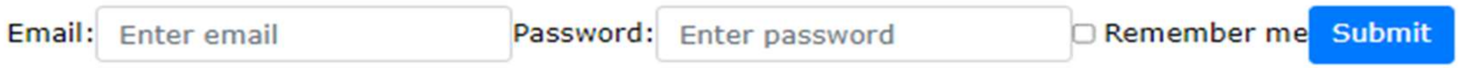
□ Remember me



Comments:

Bootstrap Inline Form

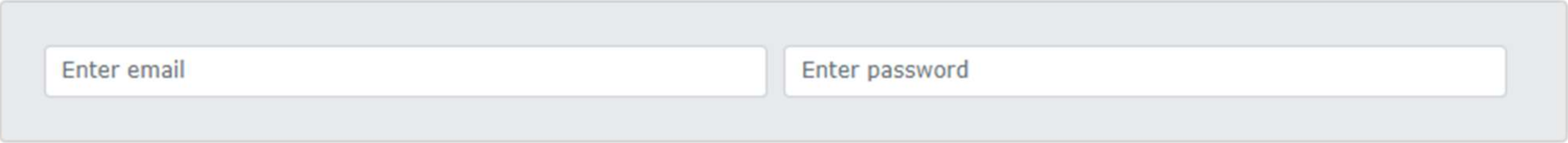
- In an inline form, all of the elements are inline and left-aligned.
- **Note:This only applies to forms within viewports that are at least 576px wide. On screens smaller than 576px, it will stack horizontally.**
- Add class **.form-inline** to the <form> element
-
```
<form class="form-inline" action="/action_page.php">
  <label for="email">Email address:</label>
  <input type="email" class="form-control" placeholder="Enter email" id="email">
  <label for="pwd">Password:</label>
  <input type="password" class="form-control" placeholder="Enter password" id="pwd">
  <div class="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>
```



Form Row/Grid (Inline Forms)

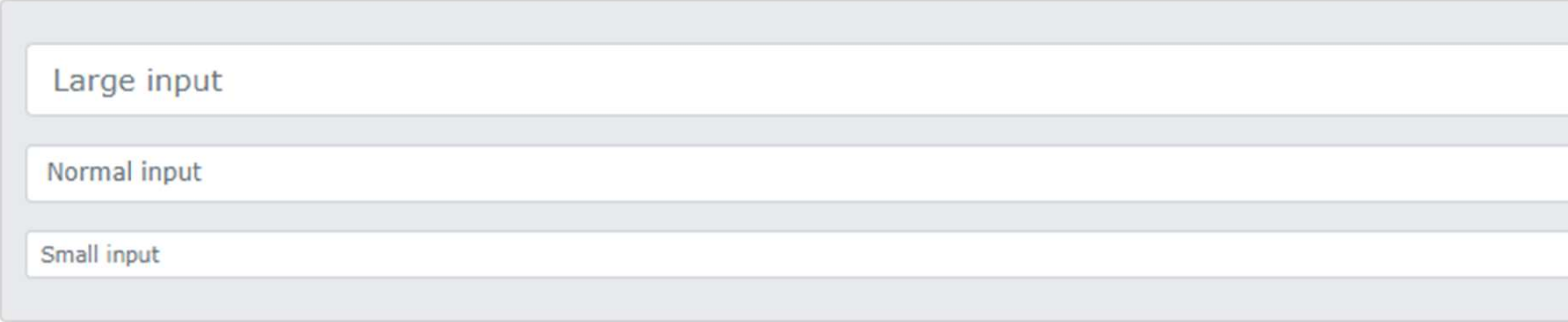
- If you want your form elements to appear side by side, use **.row** and **.col**:
-

```
<form>
  <div class="row">
    <div class="col">
      <input type="text" class="form-control" placeholder="Enter
email" name="email">
    </div>
    <div class="col">
      <input type="password" class="form-control" placeholder="Enter
password" name="pswd">
    </div>
  </div>
</form>
```



Form Control Size

- You can change the size of .form-control inputs with **.form-control-lg** or **.form-control-sm**:
- <input type="text" class="form-control form-control-lg" placeholder="Large input">
  <input type="text" class="form-control" placeholder="Normal input">
  <input type="text" class="form-control form-control-sm" placeholder="Small input">



Responsive web design with viewport

- The viewport is the user's visible area of a web page.
- The viewport varies with the device, and will be smaller on a mobile phone than on a computer screen

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

- This gives the browser instructions on how to control the page's dimensions and scaling.
- 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.

What is a Media Query?

- Media query is a CSS technique introduced in CSS3.
- It uses the @media rule to include a block of CSS properties only if a certain condition is true.
- **Example**
- If the browser window is 600px or smaller, the background color will be lightblue:

```
@media only screen and (max-width: 600px) {
 body {
  background-color: lightblue;
 }
}
```

```
<!DOCTYPE html>
<html><head>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<style>
body {
 background-color: lightgreen;
}
@media only screen and (max-width: 600px) {
 body {
  background-color: lightblue;
 }}</style></head><body>
<p>Resize the browser window. When the width of this document is 600 pixels or less, the background-color is "lightblue", otherwise it is "lightgreen".</p>

</body>
</html>
```