BOOTSTRAP

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BOOTSTRAP

- BOOTSTRAP is the 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:

  - Web design is about creating web sites which automatically adjust themselves to look good on all devices like mobiles and tablets etc,...

TYPOGRAPHY

- Bootstrap Version 5 version works in this concept
- Bootstrap's default font size is 14px, with line-height of 1.428px.
- for headings bootstrap will allocate the size as follows:
-         h1 - 36px
-         h2 - 30px
-         h3 - 24px
-         h4 - 18px
-         h5 - 14px
-         h6 - 12px

HEADINGS

```html
<h1>Hello world</h1>
<h2>Hello world</h2>
<h3>Hello world</h3>
<h4>Hello world</h4>
<h5>Hello world</h5>
<h6>Hello world</h6>
```

TYPOGRAPHY

- This BS Typography includes some elements like: (Bootstrap 5)
  - mark (Used to highlight the text)
  - abbr (Used to add abbrevation to the text)
    - <abbr title="xx">xx</abbr>
  - dl(used to define description lists)
    - dt (Descriptive title)
    - dd (Descriptive details)
  - code (used to highlight the word in particular sentence)
  - kbd (used to make the word in a sentence with the appropriate block)
  - pre (used to write the text in a seperate block)

MARK

```html
<h1>Highlight Text</h1>
<p>Use the mark element to <mark>highlight</mark> text.</p>
```

Highlight Text

Use the mark element to highlight text.

ABBREVIATIONS

```html
<h1>Abbreviations</h1>
<p>The abbr element is used to mark up an abbreviation or acronym:</p>
<p>The <abbr title="World Health Organization">WHO</abbr> was founded in 1948.</p>
```

Abbreviations

The abbr element is used to mark up an abbreviation or acronym:

The WHO was founded in 1948.

DESCRIPTION LIST

```html
<h1>Description Lists</h1>
<p>The dl element indicates a description list:</p>
<dl>
  <dt>Coffee</dt>
  <dd>- black hot drink</dd>
  <dt>Milk</dt>
  <dd>- white cold drink</dd>
</dl>
```

Description Lists

The dl element indicates a description list:

Coffee
- black hot drink

Milk
- white cold drink

CODE

```
<h1>Code Snippets</h1>
<p>Inline snippets of code should be embedded in the code element:</p>
<p>The following HTML elements: <code>span</code>, <code>section</code>,
  and <code>div</code> defines a section in a document.</p>
```

Code Snippets

Inline snippets of code should be embedded in the code element:

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

KBD

```html
<h1>Keyboard Inputs</h1>
<p>To indicate input that is typically entered via the keyboard,use the kbd element:</p>
<p>Use <kbd>ctrl + p</kbd> to open the Print dialog box.</p>
```

Keyboard Inputs

To indicate input that is typically entered via the keyboard,use the kbd element:

Use `ctrl + p` to open the Print dialog box.

PRE


```
<body>
<h1>Multiple Code Lines</h1>
<p>For multiple lines of code, use the pre element:</p>
<pre>
Text in a pre element
is displayed in a fixed-width
font, and it preserves
both       spaces and
line breaks.
</pre>
```

Multiple Code Lines

For multiple lines of code, use the pre element:

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

COLORS

- Bootstrap 4 introduced various utility classes for colors and can also be implemented in Bootstrap 5

- Some of the line meanings will be given through colours

- text-muted
- text-primary
- text-success
- text-info
- text-warning

- bg-primary
- bg-success
- bg-info
- bg-warning
- bg-danger

COLORS

```
<h2>Contextual Colors</h2>
<p>Use the contextual classes to provide "meaning through colors":</p>
<p class="text-muted">This text is muted.</p>
<p class="text-primary">This text is important.</p>
<p class="text-success">This text indicates success.</p>
<p class="text-info">This text represents some information.</p>
<p class="text-warning">This text represents a warning.</p>
<p class="text-danger">This text represents danger.</p>
```

Contextual Colors

Use the contextual classes to provide "meaning through colors":

This text is muted.

This text is important.

This text indicates success.

This text represents some information.

This text represents a warning.

This text represents danger.

MARGIN & PADDING

- Bootstrap 5 supports margin and padding
- MARGIN
  - m – (1-5)
  - mt (top) – (1-5)
  - mb (bottom) – (1-5)
  - ms (start/left) – (1-5)
  - me (end/right) – (1-5)
- PADDING
  - p-1
  - p-2
  - p-3
  - p-4
  - p-5
  - p-auto

MARGIN & PADDING

```html
<div class="mt-5 p-5 bg-primary text-white">.bg-primary</div>
<div class="mb-5 p-4 bg-secondary text-white">.bg-secondary</div>
<div class="ms-5 p-3 bg-success text-white">.bg-success</div>
<div class="me-5 p-2 bg-danger text-white">.bg-danger</div>
```

.bg-primary

.bg-secondary

.bg-success

.bg-danger

TEXT ALIGNMENT

- Bootstrap 5 supports all the below text alignments
- Text-start
  - Text will be starting from the left side of the window
- Text-center
  - Text will be starting from center of the window
- Text-end
  - Text will be starting from right side of the window

TEXT ALIGN

```html
<p class="text-start">Start aligned text on all viewport sizes.</p>
<p class="text-center">Center aligned text on all viewport sizes.</p>
<p class="text-end">End aligned text on all viewport sizes.</p>
```

Start aligned text on all viewport sizes.

Center aligned text on all viewport sizes.

End aligned text on all viewport sizes.

DISPLAY

- Bootstrap 5 and Bootstrap 4 support Display classes
- d-block
- d-inline
- d-inline-block
- d-flex
- d-grid

D - BLOCK

```html
<div class="d-block">This is a block element</div>
<div class="d-block p-3">This is a block element with padding </div>
<div class="d-block p-3 bg-primary">This is a block element with padding and background.</div>
<div class="d-block p-3 bg-primary text-white">This is a block element with padding and background.</div>
```

This is a block element

This is a block element with padding

This is a block element with padding and background.

This is a block element with padding and background.

D - INLINE

```html
<span class="d-inline">This is an inline element</span>
<span class="d-inline p-2 ">This is an inline element with padding</span>
<span class="d-inline p-2 bg-warning">This is an inline element with padding and background.</span>
<span class="d-inline p-2 bg-warning text-white">This is an inline element with padding </span>
<span class="d-inline">Another inline element.</span>
```

This is an inline element This is an inline element with padding This is an inline element with padding and background. This is an inline element with padding Another inline element.

D – INLINE BLOCK

```html
<button class="d-inline-block m-1">Inline-block button</button>
<button class="d-inline-block m-1">Another inline-block button</button>
```
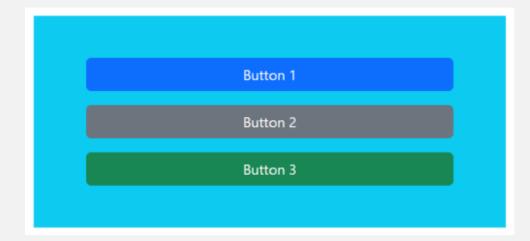
Inline-block button   Another inline-block button

D - FLEX

```
<div class="d-flex  p-1 justify-content-between ">
    <div>Flexible item 1</div>
    <div>Flexible item 2</div>
    <div>Flexible item 3</div>
    <div>Flexible item 4</div>
    <div>Flexible item 5</div>
</div>
```

Flexible item 1   Flexible item 2   Flexible item 3   Flexible item 4   Flexible item 5

D - GRID

```
<div class="container bg-info">
<div class="d-grid  gap-3 p-5">
    <button class="btn btn-primary">Button 1</button>
    <button class="btn btn-secondary">Button 2</button>
    <button class="btn btn-success">Button 3</button>
</div>
</div>
```

FLOATS & FIXED POSITIONS

- Bootstrap 5 supports Floats and fixed positions

- Floats
  - float-start
  - float-end
  - float-none

- Positions
  - Position-relative
  - Position-absolute
  - Position-fixed
  - Position-sticky
  - Position-static

FLOATS

```html
<div class="float-start">Float start on all viewport sizes</div><br>
<div class="float-end">Float end on all viewport sizes</div><br>
<div class="float-none">Don't float on all viewport sizes</div>
```

Float start on all viewport sizes

Float end on all viewport sizes

Don't float on all viewport sizes

BACKGROUNDS

- Bootstrap 4 introduced various utility classes for colors and can also be implemented in Bootstrap 5
- bg-primary
- bg-secondary
- bg-success
- bg-danger
- bg-warning
- bg-info
- bg-dark
- bg-body
- bg-white
- bg-transparent

BACKGROUNDS

```html
<div class="p-3 mb-2 bg-primary text-white">.bg-primary</div>
<div class="p-3 mb-2 bg-secondary text-white">.bg-secondary</div>
<div class="p-3 mb-2 bg-success text-white">.bg-success</div>
<div class="p-3 mb-2 bg-danger text-white">.bg-danger</div>
<div class="p-3 mb-2 bg-warning text-dark">.bg-warning</div>
<div class="p-3 mb-2 bg-info text-dark">.bg-info</div>
<div class="p-3 mb-2 bg-light text-dark">.bg-light</div>
<div class="p-3 mb-2 bg-dark text-white">.bg-dark</div>
<div class="p-3 mb-2 bg-body text-dark">.bg-body</div>
<div class="p-3 mb-2 bg-white text-dark">.bg-white</div>
<div class="p-3 mb-2 bg-transparent text-dark">.bg-transparent</div>
```

.bg-primary

.bg-secondary

.bg-success

.bg-danger

.bg-warning

.bg-info

.bg-light

.bg-dark

.bg-body

.bg-white

SIZING & BORDER

- Bootstrap 5 and Bootstrap 4 supports Sizing and Border
- SIZING
  - h-value (25 | 50 | 75 | 100)
  - w-value (25 | 50 | 75 | 100)
- BORDER
  - BorderThinkness
    - Border-(value)
  - Border coloring
    - Border-(color)

SIZING

```
<div class="border border-3 border-danger h-25 w-25  bg-info">Hello 1</div>
<div class="h-50 w-50 bg-secondary">Hello 2</div>
```