Bootstrap Utilities

- Bootstrap provides pre-defined classes for handling
    - Text
    - Border
    - Margin
    - Spacing
    - Padding etc.

Borders in Bootstrap

- The border classes are
    - .border
    - .border-top
    - .border-right
    - .border-bottom
    - .border-left
    - .border-0 [remove border]
    - .border-primary, secondary, danger, warning etc.
    - .rounded [radius]
    - .rounded-top
    - .rounded-bottom
    - .rounded-left

- .rounded-right
- .rounded-circle
- .rounded-pill
- .rounded-lg, sm

Ex:

```
<!DOCTYPE html>

<html>

  <head>

    <link rel="stylesheet" href="../node_modules/bootstrap/dist/css/bootstrap.css">

    <script src="../node_modules/jquery/dist/jquery.js"></script>

    <script src="../node_modules/bootstrap/dist/js/bootstrap.bundle.js"></script>

    <style>

      img {

        width: 200px;

        height: 200px;
```

```
        border-width: 5px;

        }


    </style>

  </head>

  <body class="container-fluid">

    <h2>Borders</h2>

    <img class="border border-danger rounded-circle" src="../Images/shoe.jpg">

  </body>

</html>
```

Bootstrap Display

- It provides classes to control the display style of any element.
- Display styles are defined by using "d-effectName"
- The effects can be various
  - .d-inline
  - .d-block

- .d-none
- .d-flex
- .d-table
- .d-sm-inline, block
- .d-md-{}
- .d-lg-{}
- .d-xl-{}

Ex:

```
<!DOCTYPE html>
<html>
  <head>
    <link rel="stylesheet" href="../node_modules/bootstrap/dist/css/bootstrap.css">
    <script src="../node_modules/jquery/dist/jquery.js"></script>
    <script src="../node_modules/bootstrap/dist/js/bootstrap.bundle.js"></script>
```

```html
</head>
<body class="container-fluid">
    <h2>Inline Display</h2>
    <div class="d-inline">
        Para-1
    </div>
    <div class="d-inline">
        Para-2
    </div>
    <h2>Flex Display</h2>
    <ul class="d-flex">
        <li>Item-1</li>
        <li class="ml-5">Item-2</li>
        <li class="ml-5">Item-3</li>
    </ul>
</body>
</html>
```

Bootstrap Float

- It allows the element to float left or right.

- The classes are
  - ○ .float-left
  - ○ .float-right
  - ○ .float-none

Ex:

```
<!DOCTYPE html>

<html>

  <head>

    <link rel="stylesheet" href="../node_modules/bootstrap/dist/css/bootstrap.css">

    <script src="../node_modules/jquery/dist/jquery.js"></script>

    <script src="../node_modules/bootstrap/dist/js/bootstrap.bundle.js"></script>

    <style>

      img {

        width: 100px;

        height: 100px;
```

```
        }
      </style>
  </head>
  <body class="container-fluid">
    <div class="float-left">
      <img src="../Images/shoe.jpg">
    </div>
    <div class="float-right">
      <img src="../Images/shirt.jpg">
    </div>
  </body>
</html>
```

Bootstrap Overflow

- It controls the over flow of contents in a container
- The classes
  - .overflow-auto
  - .overflow-hidden

Ex:

```html
<!DOCTYPE html>
<html>
  <head>
    <link rel="stylesheet"
href="../node_modules/bootstrap/dist/css/bootstrap.css">
    <script
src="../node_modules/jquery/dist/jquery.js"></script>
    <script
src="../node_modules/bootstrap/dist/js/bootstrap.bundle.js"></script>
    <style>
      ul {
        width: 100px;
        height: 100px;
        border:2px solid;
      }
    </style>
  </head>
```

```html
<body class="container-fluid">
  <ul class="overflow-auto">
    <li>Item-1</li>
    <li>Item-2</li>
    <li>Item-3</li>
    <li>Item-4</li>
    <li>Item-5</li>
    <li>Item-6</li>
    <li>Item-7</li>
  </ul>
</body>
</html>
```

Bootstrap Positions

- It is related to positioning of items with regard to other elements in page.
- The classes are
  - .position-static
  - .position-relative
  - .position-absolute

- .position-fixed
- .position-stickey
- .fixed-top
- .fixed-bottom
- .sticky-top

Ex:

```
<!DOCTYPE html>

<html>

  <head>

    <link rel="stylesheet" href="../node_modules/bootstrap/dist/css/bootstrap.css">

    <script src="../node_modules/jquery/dist/jquery.js"></script>

    <script src="../node_modules/bootstrap/dist/js/bootstrap.bundle.js"></script>

    <style>

      ul {

        width: 100px;
```

```
            height: 100px;

            border:2px solid;

          }

      </style>

  </head>

  <body class="container-fluid">

      <p>Para-1</p>

      <p>Para-2</p>

      <p>Para-3</p>

      <h2 style="background-color: yellow;"
class="position-sticky sticky-top">Navigation
Bar</h2>

      <ul class="overflow-auto">

          <li>Item-1</li>

          <li>Item-2</li>

          <li>Item-3</li>

          <li>Item-4</li>

          <li>Item-5</li>

          <li>Item-6</li>
```

```
        <li>Item-7</li>
    </ul>
    <p>Para-1</p>
     <p>Para-2</p>
     <p>Para-3</p>
     <p>Para-1</p>
     <p>Para-2</p>
     <p>Para-3</p>
     <p>Para-1</p>
     <p>Para-2</p>
     <p>Para-3</p>
  </body>
</html>
```

Bootstrap Sizing

- Bootstrap classes for configuring height and width.

Class	Description
.w-25	Width 25%
.w-50	Width 50%
.w-75	Width 75%

.w-100	Width 100%
.h-25	Height
.h-50	
.h-75	
.h-100	
.mw-100	Max width 100
.mh-100	Max height 100
.vw-100	View port -width
.vh-100	View Port height

Ex:

<img class="w-25 h-100" src="../Images/shoe.jpg">

Margin and Padding

- Classes required for margin and padding

m	Margin
p	Padding
t	Top
b	Bottom
l	Left
r	Right
Size	
0	No padding, no

	margin
1	.25
2	.5
3	1
4	1.5
5	2
auto	auto

Syntax:

ml-2   Margin left .5

mx-3   Margin left and right

pl-2   Padding left .5

mx-auto   Margin auto

Ex:

<div class="border border-danger py-4 px-4 mt-4">

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    </div>

Text Formatting

Alignments	
.text-center	**Center**
.text-justify	**Justify**
.text-left	**Left**
.text-right	**Right**
Wrapping	
.text-wrap	Wrap text to next line.
.text-truncate	Overflow:ellipse Ex:

	`<div class=" text-truncate border border-danger" style="max-width: 100px;">` Welcome to Bootstrap `</div>`
Transforms	
.text-lowercase	
.text-uppercase	
.text-capitalize	Title case
Font	
.font-weight-bold	Bold
.font-weight-light	Normal
.font-italic	Italic
Text Decoration	
.text-decoration-none	Remove effects like underline, strike etc.
Text Color	
.text-contextual	Primary, danger, warning
.text-white	White color