**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>

</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:

<!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">

<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 |