Bootstrap 5 provides a powerful set of **utilities and helpers** — predefined classes you can use to style and control layout, spacing, alignment, visibility, and more without writing custom CSS.

Here's a categorized summary with examples:

**🎨 1. Spacing (Margin & Padding)**

Use m (margin) and p (padding) with directions and sizes:

m = margin, p = padding

t = top, b = bottom, s = start, e = end, x = left+right, y = top+bottom

**Examples:**

<div class="mt-3 mb-2 p-4 ps-2">Spaced Box</div>

| **Class** | **Description** |
| --- | --- |
| mt-3 | Margin top 1rem |
| px-2 | Padding left & right |
| m-0 | Remove all margin |
| p-5 | Padding on all sides |

**🔠 2. Text Utilities**

Control text alignment, weight, wrapping, and color.

<p class="text-center text-primary fw-bold">Centered & Bold Text</p>

| **Class** | **Description** |
| --- | --- |
| text-start | Align left (LTR) |
| text-center | Align center |
| text-end | Align right |
| fw-bold | Bold |
| text-muted | Light gray text |
| text-uppercase | Uppercase transform |

**📐 3. Sizing Utilities**

Control width and height using % and fixed rem values.

<div class="w-50 h-100">Half-width box</div>

| **Class** | **Description** |
| --- | --- |
| w-25 | 25% width |
| h-100 | 100% height |
| min-vh-100 | Full viewport height |

**🎯 4. Display Utilities**

Control visibility and layout mode.

<div class="d-none d-md-block">Visible only on medium+</div>

| **Class** | **Description** |
| --- | --- |
| d-block | Block display |
| d-inline | Inline display |
| d-flex | Flexbox |
| d-none | Hide element |
| d-sm-none | Hide on small screens |
| d-lg-block | Show on large screens |

**📦 5. Flexbox Helpers**

Powerful tools for layout alignment.

<div class="d-flex justify-content-between align-items-center">...</div>

| **Class** | **Description** |
| --- | --- |
| d-flex | Enable flexbox |
| justify-content-center | Center horizontally |
| align-items-end | Align items bottom |
| flex-column | Stack vertically |
| gap-3 | Spacing between flex children |

**🎨 6. Background & Border**

<div class="bg-light border rounded p-3">Styled box</div>

| **Class** | **Description** |
| --- | --- |
| bg-primary | Bootstrap theme color |
| border | Default border |
| border-0 | No border |
| rounded | Rounded corners |
| rounded-circle | Fully round shape |

**🛠 7. Positioning Utilities**

<div class="position-relative">

<span class="position-absolute top-0 start-100 translate-middle badge bg-danger">New</span>

</div>

| **Class** | **Description** |
| --- | --- |
| position-relative | Context for positioning |
| position-absolute | Place inside parent |
| top-0, start-100 | Position offset |
| translate-middle | Center alignment |

**🔁 8. Visibility & Overflow**

<div class="overflow-auto invisible">Hidden but scrollable</div>

| **Class** | **Description** |
| --- | --- |
| visible | Show element (default) |
| invisible | Hide but retain space |
| overflow-auto | Scroll if needed |
| overflow-hidden | Clip content |