TASK – 4 :

BOOTSTRAP INTRO :

1. Class and Properties :

Breakpoints :

**Breakpoints** in Bootstrap are used to make webpages **responsive** (adjust layout for different screen sizes).

|  |  |
| --- | --- |
| **Breakpoints** | **Screen Size** |
| Extra Small | < 576px (mobile) |
| Small | ≥ 576px |
| Medium | ≥ 768px |
| Large | ≥ 992px |
| Extra Large | ≥ 1200px |
| Extra – Extra large | ≥ 1400px |

**PROPERTY :**

@media (min-width: 576px) { ... }

@media (min-width: 768px) { ... }

@media (min-width: 992px) { ... }

@media (min-width: 1200px) { ... }

@media (min-width: 1400px) { ... }

**Container-Fluid :**

Used to wrap and align page content properly.

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| --- | --- |
| **Class** | **Description** |
| .container | Fixed width container that adjusts at each breakpoint (adds left-right padding). |
| .container-fluid | |  | | --- | |  |  |  | | --- | | Always takes the full width of the screen. | |
| .container-{breakpoint} | Full width until the specified breakpoint (e.g., .container-md). |

**PROPERTY :**

.container {

width: 100%;

margin-right: auto;

margin-left: auto;

padding-right: 15px;

padding-left: 15px;

max-width: 1140px; /\* changes with breakpoint \*/

}

.container-fluid {

width: 100%;

padding-right: 15px;

padding-left: 15px;

}

**Typography :**

Bootstrap provides text-related classes for font style, size, weight, and alignment.

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| --- | --- |
| CLASS | USE |
| .h1 to .h6 | Heading Styles |
| .display-1 to .display-6 | Larger heading Styles |
| .lead | For important paragraph |
| .text-center, .text-start, .text-end | Text alignment |
| .fw-bold, .fw-light, .fw-normal | Font Weight |

**PROPERTY :**

.h1, .h2, .h3, .h4, .h5, .h6 {

font-weight: 500;

line-height: 1.2;

}

.lead {

font-size: 1.25rem;

font-weight: 300;

}

.text-center {

text-align: center;

}

.fw-bold {

font-weight: bold;

}

**Images :**

Bootstrap offers classes to make **images responsive and styled** easily.

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| --- | --- |
| Class | Description |
| .img-fluid | Makes image responsive (fits parent width) |
| .rounded | Adds small rounded corners |
| .rounded-circle | Makes image circular |
| .img-thumbnail | Adds border and padding like a photo frame |
| .float-start, .float-end, .mx-auto d-block | Controls image alignment |

**PROPERTY :**

.img-fluid {

max-width: 100%;

height: auto;

}

rounded {

border-radius: 0.25rem;

}

.rounded-circle {

border-radius: 50%;

}

.img-thumbnail {

padding: 0.25rem;

background-color: #fff;

border: 1px solid #dee2e6;

border-radius: 0.25rem;

}

**Color and Background Color :**

Used for text color and background color customization.

**TEXT COLORS :**

|  |  |
| --- | --- |
| Class | Effect |
| .text-primary | Blue Text |
| .text-success | Green Text |
| .text-danger | Red Text |
| .text-warning | Yellow Text |
| .text-info | Light Blue Text |
| .text-muted | Light Grey Text |

**BACKGROUND COLORS :**

|  |  |
| --- | --- |
| Class | Effect |
| .bg-primary | Blue Text |
| .bg-success | Green Text |
| .bg-danger | Red Text |
| .bg-light | Yellow Text |
| .bg-dark | Light Blue Text |

**PROPERTY :**

.text-primary { color: #0d6efd !important; }

.text-success { color: #198754 !important; }

.text-danger { color: #dc3545 !important; }

.bg-primary { background-color: #0d6efd !important; }

.bg-success { background-color: #198754 !important; }

.bg-danger { background-color: #dc3545 !important; }

**FLEX (Flexbox Utiliities) :**

Flexbox classes are used to arrange elements easily in a row or column.

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| --- | --- |
| Class | Purpose |
| .d-flex | Enables flex display |
| .flex-row, .flex-column | Direction of flex items |
| .justify-content-center | Aligns items **horizontally** |
| .align-items-center | Aligns items **vertically** |
| .flex-wrap | Wraps items to next line |
| .gap-2 / .gap-3 | |  | | --- | |  |  |  | | --- | | Adds spacing between items | |

**PROPERTY :**

.d-flex {

display: flex;

}

.flex-row {

flex-direction: row;

}

.flex-column {

flex-direction: column;

}

.justify-content-center {

justify-content: center;

}

.align-items-center {

align-items: center;

}

gap-3 {

gap: 1rem; /\* space between items \*/

}