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.

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.

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.

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.

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 */
}
```