

BOOTSTRAP - FULL NOTES WITH DEFINITIONS

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Current Version: Bootstrap 5 (latest)

◆ What is Bootstrap?

Definition:

Bootstrap is a free, open-source front-end framework used to build **responsive** and **mobile-first websites** using HTML, CSS, and JavaScript. It simplifies web development by providing ready-made design components and utility classes.

◆ 1. GRID SYSTEM

one row me 2
col=>row-cols-1

Definition:

The grid system is used to structure the layout of a page using rows and columns.

- **1 row = 12 columns**
 - **Breakpoints:** col-sm-, col-md-, col-lg-, col-xl-, col-xxl-
 - **Classes:**
 - container, container-fluid
 - row
 - col, col-6, col-md-4, col-lg-3
- equal division => col
content ke equal
width lena ke liye =>
col-auto
-

◆ 2. COLORS

✓ Text Colors

Used to apply color to text

text-primary, text-secondary, text-success, text-danger, text-warning,
text-info, text-light, text-dark

✓ Background Colors

Used to apply background color

bg-primary, bg-success, bg-danger, bg-warning, bg-dark, bg-light

✓ Background with Text Color

`text-bg-primary, text-bg-danger, text-bg-warning etc.`

◆ 3. TEXT UTILITIES

✓ Font Sizes

`fs-1, fs-2, fs-3, fs-4, fs-5, fs-6` (from largest to smallest)

✓ Text Alignment

`text-start (left) || text-center || text-end (right)`

✓ Text Transform

`text-uppercase || text-lowercase || text-capitalize`

◆ 4. SPACING UTILITIES (Padding & Margin)

✓ Padding Classes

Adds space **inside** an element

- `p-0` to `p-5` (all sides)
- `pt-3` (top), `pb-2` (bottom), `ps-4` (start), `pe-4` (end)
- `px-3` (left & right), `py-2` (top & bottom)

✓ Margin Classes

Adds space **outside** an element

- `m-0` to `m-5`
 - `mt-3, mb-2, ms-4, me-4, mx-3, my-2`
 - `mx-auto` → center horizontally
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◆ 5. WIDTH UTILITIES

Used to control width of an element in percentage

w-25 || w-50 || w-75 || w-100 || w-auto

◆ 6. IMAGE UTILITIES

- img-fluid → Makes image responsive
 - img-thumbnail → Adds border and padding
 - rounded, rounded-circle, rounded-pill → For border-radius
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◆ 7. BUTTONS

✓ Normal Buttons

btn btn-primary, btn btn-danger, btn btn-success, etc.

✓ Outline Buttons

btn btn-outline-primary, btn btn-outline-success, etc.

✓ Button Sizes

btn-lg, btn-sm

◆ 8. TYPOGRAPHY / HEADINGS

- HTML Headings: <h1> to <h6>
 - Display Headings: display-1 to display-6
 - lead → Enlarged paragraph
 - Other tags: <small>, <mark>, <abbr>, <blockquote>
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◆ 9. FORMS

✓ Input Fields

- form-control → Input, textarea
- form-select → Dropdown
- form-check, form-check-input, form-check-label → Checkboxes/radio

✓ Input Group

- input-group, input-group-text, input-group-prepend, input-group-append

✓ Validation

- is-valid, is-invalid, valid-feedback, invalid-feedback
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◆ 10. COMPONENTS

✓ Alerts

alert alert-primary, alert alert-danger, alert-dismissible, fade, show, btn-close

✓ Navbar

- navbar, navbar-brand, navbar-nav, nav-link
- navbar-expand-lg, bg-light, navbar-light, navbar-dark
- navbar-toggler, collapse, navbar-collapse

✓ Cards

- card, card-body, card-title, card-text, card-footer

✓ Modals

- modal, modal-dialog, modal-content, modal-header, modal-body

✓ Dropdowns

- dropdown, dropdown-toggle, dropdown-menu, dropdown-item

✓ List Groups

- list-group, list-group-item, active, disabled
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◆ 11. FLEXBOX UTILITIES

Used to align items using flexbox model

- d-flex, flex-row, flex-column
 - justify-content-start, justify-content-center, justify-content-between
 - align-items-start, align-items-center, align-items-end
 - order-1, order-2, etc.
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◆ 12. DISPLAY UTILITIES

- d-block, d-inline, d-inline-block, d-none, d-flex
 - Responsive examples: d-sm-none, d-md-block
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◆ 13. POSITIONING & SHADOWS

- position-relative, position-absolute, position-fixed, sticky
- Shadow classes: shadow, shadow-sm, shadow-lg, shadow-none