

# Cheat Sheet for comprehensive Bootstrap

## Grid System

### Grid Classes

- **Container:** `container` (fixed-width) or `container-fluid` (full-width)
- **Rows:** `row`
- **Columns:** `col-`, `col-sm-`, `col-md-`, `col-lg-`, `col-xl-`

### Example

```
<div class="container">  
  <div class="row">  
    <div class="col-sm-6 col-md-4">Column 1</div>  
    <div class="col-sm-6 col-md-4">Column 2</div>  
    <div class="col-sm-12 col-md-4">Column 3</div>  
  </div>  
</div>
```

## Typography

### Headings

- `h1` to `h6`
- `.h1` to `.h6` for inline text

### Display Headings

- `.display-1` to `.display-4`

### Text Utilities

- **Alignment:** `.text-left`, `.text-center`, `.text-right`, `.text-justify`
- **Transformation:** `.text-lowercase`, `.text-uppercase`, `.text-capitalize`
- **Weight and Italics:** `.font-weight-bold`, `.font-weight-normal`, `.font-italic`

## Buttons

### Button Classes

- `.btn`
- `.btn-primary`, `.btn-secondary`, `.btn-success`, `.btn-danger`, `.btn-warning`, `.btn-info`,  
 `.btn-light`, `.btn-dark`, `.btn-link`

## Button Sizes

- `.btn-lg`, `.btn-sm`

### Example

```
<button type="button" class="btn btn-primary btn-lg">Large Primary Button</button>
<button type="button" class="btn btn-secondary btn-sm">Small Secondary Button</button>
```

## Forms

### Form Controls

- `.form-control` for text inputs, selects, and textareas
- `.form-check` for checkboxes and radios

### Example

```
<form>
  <div class="form-group">
    <label for="exampleInputEmail1">Email address</label>
    <input type="email" class="form-control" id="exampleInputEmail1"
aria-describedby="emailHelp">
  </div>
  <div class="form-group">
    <label for="exampleInputPassword1">Password</label>
    <input type="password" class="form-control"
id="exampleInputPassword1">
  </div>
  <button type="submit" class="btn btn-primary">Submit</button>
</form>
```

## Navbars

### Basic Navbar

- `.navbar`
- `.navbar-brand` for the brand/logo
- `.navbar-nav` for the navigation links

### Example

```
<nav class="navbar navbar-expand-lg navbar-light bg-light">
  <a class="navbar-brand" href="#">Brand</a>
  <button class="navbar-toggler" type="button" data-toggle="collapse"
data-target="#navbarNav" aria-controls="navbarNav" aria-
expanded="false" aria-label="Toggle navigation">
    <span class="navbar-toggler-icon"></span>
  </button>
```

```
<div class="collapse navbar-collapse" id="navbarNav">
  <ul class="navbar-nav">
    <li class="nav-item active">
      <a class="nav-link" href="#">Home</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" href="#">Features</a>
    </li>
  </ul>
</div>
</nav>
```

## Cards

### Basic Card

- `.card``
- `.card-header``, `.card-body``, `.card-footer``

### Example

```
<div class="card">
  <div class="card-header">Header</div>
  <div class="card-body">
    <h5 class="card-title">Card title</h5>
    <p class="card-text">Some quick example text.</p>
    <a href="#" class="btn btn-primary">Go somewhere</a>
  </div>
</div>
```

## Utilities

### Spacing

- **Margin:** `.m-``, `.mt-``, `.mr-``, `.mb-``, `.ml-``
- **Padding:** `.p-``, `.pt-``, `.pr-``, `.pb-``, `.pl-``
- **Sizes:** ``0``, ``1``, ``2``, ``3``, ``4``, ``5``, ``auto``

### Borders

- `.border``, `.border-top``, `.border-right``, `.border-bottom``, `.border-left``
- `.border-0``, `.border-top-0``, `.border-right-0``, `.border-bottom-0``, `.border-left-0``

### Colors

- **Text Colors:** `.text-primary``, `.text-secondary``, `.text-success``, `.text-danger``, `.text-warning``, `.text-info``, `.text-light``, `.text-dark``, `.text-muted``, `.text-white``

- **Background Colors:** `.bg-primary`, `.bg-secondary`, `.bg-success`, `.bg-danger`, `.bg-warning`, `.bg-info`, `.bg-light`, `.bg-dark`, `.bg-white`

## Responsive Utilities

### Display

- `.d-none`, `.d-inline`, `.d-inline-block`, `.d-block`, `.d-table`, `.d-table-cell`, `.d-flex`, `.d-inline-flex`
- Responsive variations: `.d-sm-none`, `.d-md-block`, etc.

### Flexbox

- **Flex Container:** `.d-flex`, `.d-inline-flex`

- **Direction:** `.flex-row`, `.flex-row-reverse`, `.flex-column`, `.flex-column-reverse`

- **Justify Content:** `.justify-content-start`, `.justify-content-end`, `.justify-content-center`, `.justify-content-between`, `.justify-content-around`

- **Align Items:** `.align-items-start`, `.align-items-end`, `.align-items-center`, `.align-items-baseline`, `.align-items-stretch`

## Modals

### Basic Modal

- `.modal`, `.modal-dialog`, `.modal-content`, `.modal-header`, `.modal-body`, `.modal-footer`

### Example

```
<button type="button" class="btn btn-primary" data-toggle="modal" data-target="#exampleModal">
  Launch demo modal
</button>
```

```
<div class="modal fade" id="exampleModal" tabindex="-1" role="dialog"
  aria-labelledby="exampleModalLabel" aria-hidden="true">
  <div class="modal-dialog" role="document">
    <div class="modal-content">
      <div class="modal-header">
        <h5 class="modal-title" id="exampleModalLabel">Modal title</h5>
        <button type="button" class="close" data-dismiss="modal" aria-label="Close">
          <span aria-hidden="true">&times;</span>
        </button>
      </div>
      <div class="modal-body">
        Modal content
      </div>
      <div class="modal-footer">
```

```
        <button type="button" class="btn btn-secondary" data-  
dismiss="modal">Close</button>  
        <button type="button" class="btn btn-primary">Save  
changes</button>  
    </div>  
</div>  
</div>  
</div>
```

## Tables

### Basic Table

- `.table``
- `.table-striped``, `.table-bordered``, `.table-hover``, `.table-dark``, `.table-sm``

### Example

```
<table class="table table-striped table-bordered">  
  <thead>  
    <tr>  
      <th>Header 1</th>  
      <th>Header 2</th>  
    </tr>  
  </thead>  
  <tbody>  
    <tr>  
      <td>Data 1</td>  
      <td>Data 2</td>  
    </tr>  
  </tbody>  
</table>
```

## Icons (Using FontAwesome)

### Basic Usage

- Include FontAwesome CSS in your HTML
- Use `<i>` tags with appropriate classes

### Example

```
<link rel="stylesheet"  
href="https://cdnjs.cloudflare.com/ajax/libs/font-  
awesome/5.15.3/css/all.min.css">  
<i class="fas fa-user"></i>
```

## Customization

### SASS Variables

- Customize Bootstrap using SASS variables
- Override variables in `\_variables.scss`

### Example

```
$primary: #007bff;  
$enable-rounded: false;  
@import "~bootstrap/scss/bootstrap";
```

## JavaScript Components

### Tooltips

- Initialize with JavaScript

### Example

```
<button type="button" class="btn btn-secondary" data-toggle="tooltip"  
data-placement="top" title="Tooltip on top">  
  Tooltip on top  
</button>  
  
<script>  
$(function () {  
  $('[data-toggle="tooltip"]').tooltip()  
})  
</script>
```

## Responsive Breakpoints

### Breakpoints

- **Extra Small (xs):** <576px
- **Small (sm):** ≥576px
- **Medium (md):** ≥768px
- **Large (lg):** ≥992px
- **Extra Large (xl):** ≥1200px

### Conclusion

- **Bootstrap** is a powerful framework for building responsive, mobile-first sites.

- Utilize the grid system, components, and utilities to create consistent and visually appealing designs.
- Customize Bootstrap using SASS for a tailored experience.

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