Bootstrap is a popular front-end framework that provides a wide range of CSS classes for building responsive and visually appealing web applications. Here are 20 major Bootstrap classes commonly used by developers, along with examples of how they can be applied:

**### 1. \*\*Container Classes:\*\***

- `.container`: Fixed-width container.

- `.container-fluid`: Full-width container spanning the entire viewport width.

```html

<div class="container">

<!-- Content goes here -->

</div>

```

**### 2. \*\*Grid System:\*\***

- `.row`: Creates a horizontal row to contain columns.

- `.col-\*`: Defines columns within a row. Replace `\*` with a number from 1 to 12 indicating column width.

```html

<div class="row">

<div class="col-md-6">Column 1</div>

<div class="col-md-6">Column 2</div>

</div>

```

**### 3. \*\*Typography:\*\***

- `.display-\*`: Adjusts font size for headings. Replace `\*` with a number from 1 to 4.

- `.lead`: Increases font size for lead paragraphs.

```html

<h1 class="display-4">Heading</h1>

<p class="lead">Lead paragraph.</p>

```

**### 4. \*\*Text Alignment:\*\***

- `.text-left`, `.text-center`, `.text-right`: Align text to the left, center, or right.

```html

<div class="text-center">Centered Text</div>

```

**### 5. \*\*Background Colors:\*\***

- `.bg-\*`: Sets background color. Replace `\*` with a color name or contextual class (e.g., `primary`, `success`, `warning`).

```html

<div class="bg-primary text-white">Primary Background</div>

```

**### 6. \*\*Spacing:\*\***

- `.m-\*`, `.p-\*`: Adds margin or padding. Replace `\*` with a size abbreviation (e.g., `1`, `2`, `3`) and optional direction (e.g., `t`, `b`, `x`, `y`).

```html

<div class="mt-3 mb-3">Margin and Padding</div>

```

**### 7. \*\*Buttons:\*\***

- `.btn`: Basic button class.

- `.btn-\*`: Contextual button classes (e.g., `btn-primary`, `btn-danger`).

```html

<button class="btn btn-primary">Primary Button</button>

```

**### 8. \*\*Forms:\*\***

- `.form-control`: Styles form controls like input fields and text areas.

- `.btn`, `.btn-\*`: Styles form buttons.

```html

<input type="text" class="form-control" placeholder="Username">

<button class="btn btn-primary">Submit</button>

```

**### 9. \*\*Alerts:\*\***

- `.alert`, `.alert-\*`: Creates dismissible alert boxes. Replace `\*` with `success`, `info`, `warning`, or `danger`.

```html

<div class="alert alert-success">

Success Alert!

<button type="button" class="close" data-dismiss="alert">&times;</button>

</div>

```

**### 10. \*\*Badges:\*\***

- `.badge`: Creates a badge.

```html

<span class="badge badge-primary">New</span>

```

**### 11. \*\*Navigation:\*\***

- `.nav`, `.nav-tabs`, `.nav-pills`: Styles navigation components.

- `.navbar`, `.navbar-expand-\*`: Creates a responsive navigation bar.

```html

<ul class="nav nav-tabs">

<li class="nav-item">

<a class="nav-link active" href="#">Home</a>

</li>

<li class="nav-item">

<a class="nav-link" href="#">About</a>

</li>

</ul>

```

**### 12. \*\*Dropdowns:\*\***

- `.dropdown`, `.dropdown-toggle`: Styles dropdown menus and their toggle buttons.

- `.dropdown-menu`: Styles dropdown menu items.

```html

<div class="dropdown">

<button class="btn btn-secondary dropdown-toggle" type="button" id="dropdownMenuButton" data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">

Dropdown

</button>

<div class="dropdown-menu" aria-labelledby="dropdownMenuButton">

<a class="dropdown-item" href="#">Item 1</a>

<a class="dropdown-item" href="#">Item 2</a>

</div>

</div>

```

**### 13. \*\*Modal Dialogs:\*\***

- `.modal`, `.modal-dialog`, `.modal-content`: Styles for modal dialogs.

```html

<div class="modal fade" id="myModal" tabindex="-1" role="dialog" aria-labelledby="exampleModalLabel" aria-hidden="true">

<div class="modal-dialog" role="document">

<div class="modal-content">

<!-- Modal content goes here -->

</div>

</div>

</div>

```

**### 14. \*\*Carousel:\*\***

- `.carousel`, `.carousel-item`: Styles for carousels.

```html

<div id="carouselExampleIndicators" class="carousel slide" data-ride="carousel">

<div class="carousel-inner">

<div class="carousel-item active">

<!-- Carousel item content goes here -->

</div>

</div>

</div>

```

**### 15. \*\*Tooltips and Popovers:\*\***

- `.tooltip`, `.popover`: Styles for tooltips and popovers.

```html

<button type="button" class="btn btn-secondary" data-toggle="tooltip" data-placement="top" title="Tooltip on top">

Tooltip on Top

</button>

```

**### 16. \*\*Breadcrumbs:\*\***

- `.breadcrumb`: Styles for breadcrumb navigation.

```html

<nav aria-label="breadcrumb">

<ol class="breadcrumb">

<li class="breadcrumb-item"><a href="#">Home</a></li>

<li class="breadcrumb-item active" aria-current="page">Current Page</li>

</ol>

</nav>

```

**### 17. \*\*Pagination:\*\***

- `.pagination`, `.page-item`, `.page-link`: Styles for pagination.

```html

<nav aria-label="Page navigation example">

<ul class="pagination">

<li class="page-item"><a class="page-link" href="#">Previous</a></li>

<li class="page-item"><a class="page-link" href="#">1</a></li>

<li class="page-item"><a class="page-link" href="#">2</a></li>

<li class="page-item"><a class="page-link" href="#">Next</a></li>

</ul>

</nav>

```

**### 18. \*\*Jumbotron:\*\***

- `.jumbotron`: Styles for jumbotron component.

```html

<div class="jumbotron">

<h1 class="display-4">Hello, world!</h1>

<p class="lead">This is a simple jumbotron.</p>

</div>

```

**### 19. \*\*List Groups:\*\***

- `.list-group`, `.list-group-item`: Styles for list groups.

```html

<ul class="list-group">

<li class="list-group-item">Item 1</li>

<li class="list-group-item">Item 2</li>

</ul>

```

**### 20. \*\*Media Objects:\*\***

- `.media`, `.media-body`: Styles for media objects.

```html

<div class="media">

<img src="..." class="mr-3" alt="...">

<div class="media-body">

<h5 class="mt-0">Media Heading</h5>

Media content goes here.

</div>

</div>

```

These are just a few examples of the many Bootstrap classes available for styling various components. You can find more detailed information and examples in the Bootstrap documentation.