Bootstrap Layout Components:
Dropdown Menus

Bootstrap dropdowns are versatile UI components that provide a list of links or actions in a toggleable and contextual overlay. Here's an explanation of how to use dropdowns, along with examples:

Single Button Dropdown

A single button dropdown is created by wrapping a <button> or <a> with the dropdown markup. The data-bs-toggle="dropdown" attribute toggles the dropdown menu when the button is clicked.

Example:

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Bootstrap Dropdown Example</title>
  <!-- Bootstrap CSS -->
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css" rel="stylesheet">
</head>
<body>
  <div class="container mt-5">
      <!-- Dropdown -->
      <div class="dropdown">
```

```html
        <button class="btn btn-secondary dropdown-toggle" type="button"
data-bs-toggle="dropdown" aria-expanded="false">
      Dropdown button
      </button>
      <ul class="dropdown-menu">
      <li><a class="dropdown-item" href="#">Action</a></li>
      <li><a class="dropdown-item" href="#">Another action</a></li>
      <li><a class="dropdown-item" href="#">Something else
here</a></li>
      </ul>
      </div>
  </div>

  <!-- Bootstrap Bundle with Popper -->
  <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/js/bootstrap.bundl
e.min.js"></script>
</body>
</html>
```

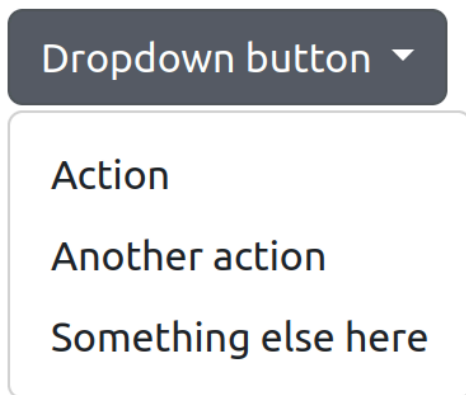**<button>**: Defines the dropdown toggle button. Clicking this button toggles the visibility of the dropdown menu.
class="btn btn-secondary dropdown-toggle":

- btn: Makes the element a styled button using Bootstrap's button classes.
- btn-secondary: Applies the "secondary" button style (gray in default Bootstrap themes).
- dropdown-toggle: Adds a dropdown caret and styling to indicate the button's functionality as a dropdown toggle.

type="button": Specifies the button's type to ensure it acts as a clickable button (not a form submit button).
data-bs-toggle="dropdown": Enables the dropdown toggle functionality. This attribute tells Bootstrap's JavaScript to show or hide the dropdown menu when the button is clicked.
aria-expanded="false": An accessibility attribute indicating whether the dropdown menu is currently expanded (visible). Initially, it is false.

Dropdown button ▾

Action

Another action

Something else here

Split Button Dropdown

A split button dropdown separates the dropdown toggle from the main button for better design flexibility. The toggle uses .dropdown-toggle-split for alignment and spacing.

Example:
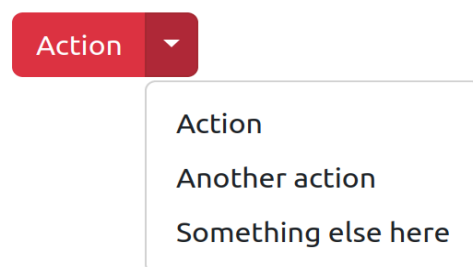```
<div class="btn-group">
  <button type="button" class="btn btn-danger" onclick="alert('Primary Action Triggered!')">Action</button>
  <button type="button" class="btn btn-danger dropdown-toggle dropdown-toggle-split" data-bs-toggle="dropdown" aria-expanded="false">
```

```
</button>
  <ul class="dropdown-menu">
      <li><a class="dropdown-item" href="#">Action</a></li>
      <li><a class="dropdown-item" href="#">Another action</a></li>
      <li><a class="dropdown-item" href="#">Something else
here</a></li>
  </ul>
</div>
```

Example Usage Scenario

Imagine a file management tool:

- The **primary button** (Action) directly deletes a file when clicked.
- The **dropdown toggle button** opens a menu with additional options:
    - **"Move to Trash"**
    - **"Permanently Delete"**
    - **"Cancel Deletion"**
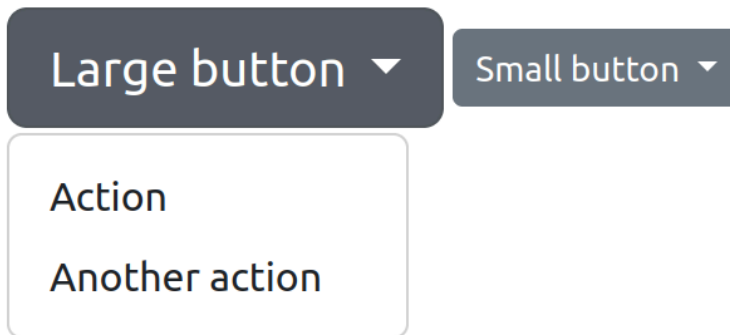
Sizing Dropdowns

Dropdown buttons can be styled with different sizes like btn-lg (large) or btn-sm (small).

Example:
```
<div class="btn-group">
  <button class="btn btn-secondary btn-lg dropdown-toggle" type="button" data-bs-toggle="dropdown" aria-expanded="false">
      Large button
  </button>
  <ul class="dropdown-menu">
      <li><a class="dropdown-item" href="#">Action</a></li>
      <li><a class="dropdown-item" href="#">Another action</a></li>
  </ul>
</div>

<div class="btn-group">
  <button class="btn btn-secondary btn-sm dropdown-toggle" type="button" data-bs-toggle="dropdown" aria-expanded="false">
      Small button
  </button>
  <ul class="dropdown-menu">
      <li><a class="dropdown-item" href="#">Action</a></li>
      <li><a class="dropdown-item" href="#">Another action</a></li>
  </ul>
</div>
```
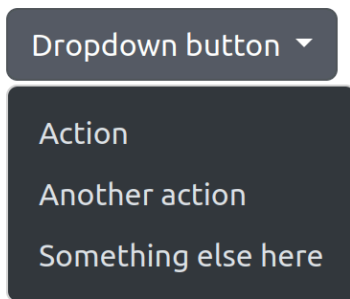
Dark Dropdowns

Dark dropdowns can be used with .dropdown-menu-dark. Starting from Bootstrap 5.3, this approach is deprecated, and data-bs-theme="dark" is recommended instead.

Example:

```html
<div class="dropdown">
  <button class="btn btn-secondary dropdown-toggle" type="button" data-bs-toggle="dropdown" aria-expanded="false">
    Dropdown button
  </button>
  <ul class="dropdown-menu dropdown-menu-dark">
    <li><a class="dropdown-item" href="#">Action</a></li>
    <li><a class="dropdown-item" href="#">Another action</a></li>
    <li><a class="dropdown-item" href="#">Something else here</a></li>
  </ul>
</div>
```

Dropdown in a Navbar

Dropdowns can be integrated into a navbar to provide more actions or navigation options.
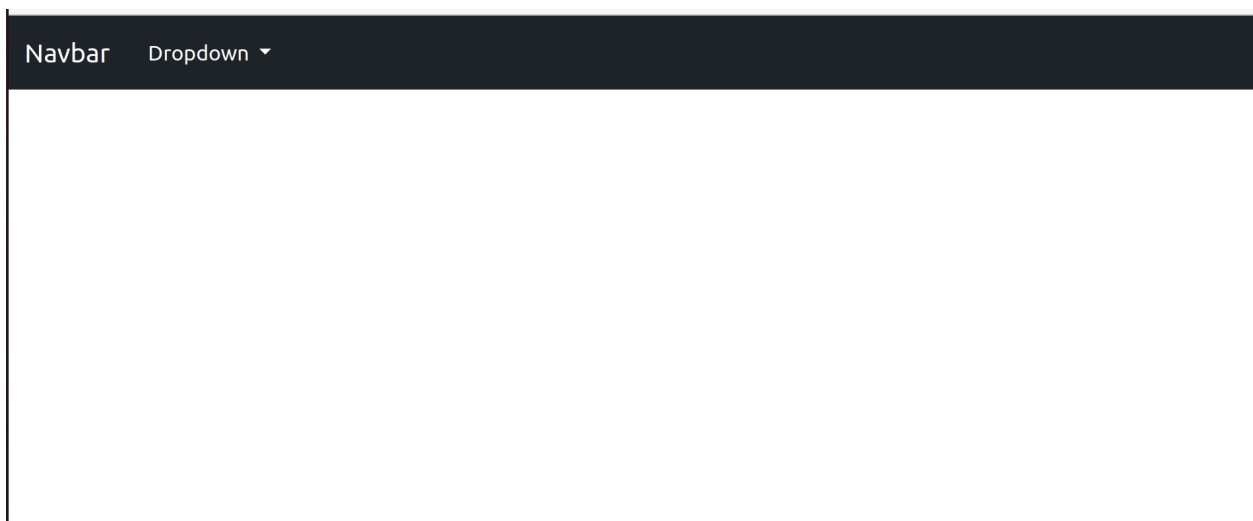
Example:
```
<nav class="navbar navbar-expand-lg navbar-dark bg-dark">
  <div class="container-fluid">
    <a class="navbar-brand" href="#">Navbar</a>
    <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarNavDropdown" aria-controls="navbarNavDropdown" aria-expanded="false" aria-label="Toggle navigation">
    </button>
    <div class="collapse navbar-collapse" id="navbarNavDropdown">
    <ul class="navbar-nav">
    <li class="nav-item dropdown">
    <button class="btn btn-dark dropdown-toggle" data-bs-toggle="dropdown" aria-expanded="false">
    Dropdown
```

```
    </button>
    <ul class="dropdown-menu dropdown-menu-dark">
    <li><a class="dropdown-item" href="#">Action</a></li>
    <li><a class="dropdown-item" href="#">Another action</a></li>
    <li><a class="dropdown-item" href="#">Something else
here</a></li>
    </ul>
    </li>
    </ul>
    </div>
  </div>
</nav>
```

Navbar   Dropdown ▾

Directions

Bootstrap dropdowns can be placed in different directions (dropup, dropend, dropstart, etc.) for better UI placement depending on the layout requirements.

Example: Centered Dropdown

```
<div class="dropdown-center">
  <button class="btn btn-secondary dropdown-toggle" type="button" data-bs-toggle="dropdown" aria-expanded="false">
    Centered dropdown
  </button>
  <ul class="dropdown-menu">
    <li><a class="dropdown-item" href="#">Action</a></li>
    <li><a class="dropdown-item" href="#">Action two</a></li>
    <li><a class="dropdown-item" href="#">Action three</a></li>
  </ul>
</div>
```

Dropup

Dropdowns can open **above** the button using the .dropup class.

Example: Default Dropup

```
<div class="btn-group dropup">
  <button type="button" class="btn btn-secondary dropdown-toggle" data-bs-toggle="dropdown" aria-expanded="false">
    Dropup
  </button>
  <ul class="dropdown-menu">
    <li><a class="dropdown-item" href="#">Action</a></li>
    <li><a class="dropdown-item" href="#">Action two</a></li>
  </ul>
</div>
```
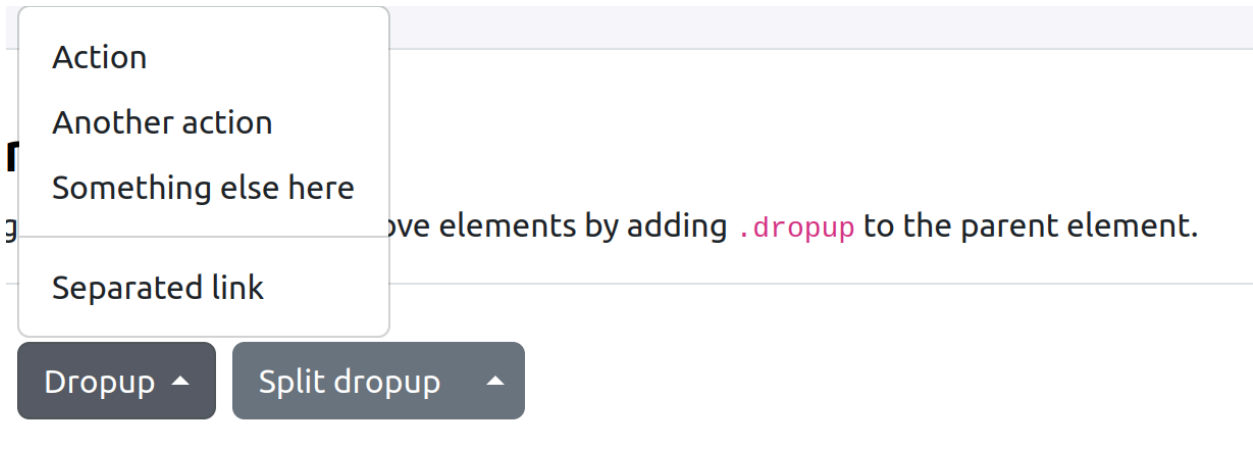
- **Behavior**: The dropdown opens upwards instead of downwards.

- **Use Case**: Ideal when the button is near the bottom of the screen, preventing the dropdown from going out of view.

Example: Split Dropup

```
<div class="btn-group dropup">
  <button type="button" class="btn btn-secondary">
      Split dropup
  </button>
  <button type="button" class="btn btn-secondary dropdown-toggle dropdown-toggle-split" data-bs-toggle="dropdown" aria-expanded="false">
      <span class="visually-hidden">Toggle Dropdown</span>
  </button>
  <ul class="dropdown-menu">
      <li><a class="dropdown-item" href="#">Action</a></li>
      <li><a class="dropdown-item" href="#">Another action</a></li>
  </ul>
</div>
```

Behavior: The dropdown is separate from the primary button.

Use Case: Useful when a button needs a primary action and additional options.

Action

Another action

Something else here

g| ove elements by adding `.dropup` to the parent element.

Separated link

Dropup ▲   Split dropup   ▲

Dropend

The .dropend class positions the dropdown to the **right** of the button.

Example: Default Dropend

```
<div class="btn-group dropend">
  <button type="button" class="btn btn-secondary dropdown-toggle"
data-bs-toggle="dropdown" aria-expanded="false">
      Dropend
  </button>
  <ul class="dropdown-menu">
      <li><a class="dropdown-item" href="#">Action</a></li>
      <li><a class="dropdown-item" href="#">Another action</a></li>
  </ul>
</div>
```

- **Behavior**: Dropdown menu appears to the right of the button.
- **Use Case**: Useful in horizontal layouts where downward or upward placement is not suitable.
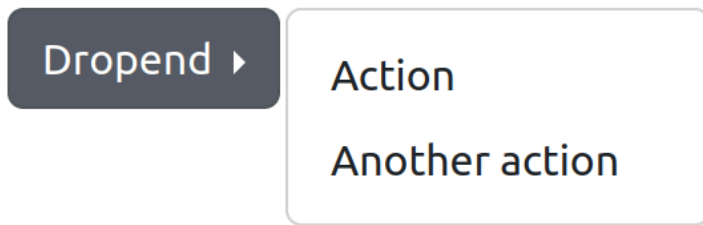
---

4. Dropstart

The .dropstart class positions the dropdown to the **left** of the button.

Example: Default Dropstart

```
<div class="btn-group dropstart">
  <button type="button" class="btn btn-secondary dropdown-toggle"
data-bs-toggle="dropdown" aria-expanded="false">
    Dropstart
  </button>
  <ul class="dropdown-menu">
    <li><a class="dropdown-item" href="#">Action</a></li>
    <li><a class="dropdown-item" href="#">Another action</a></li>
  </ul>
</div>
```
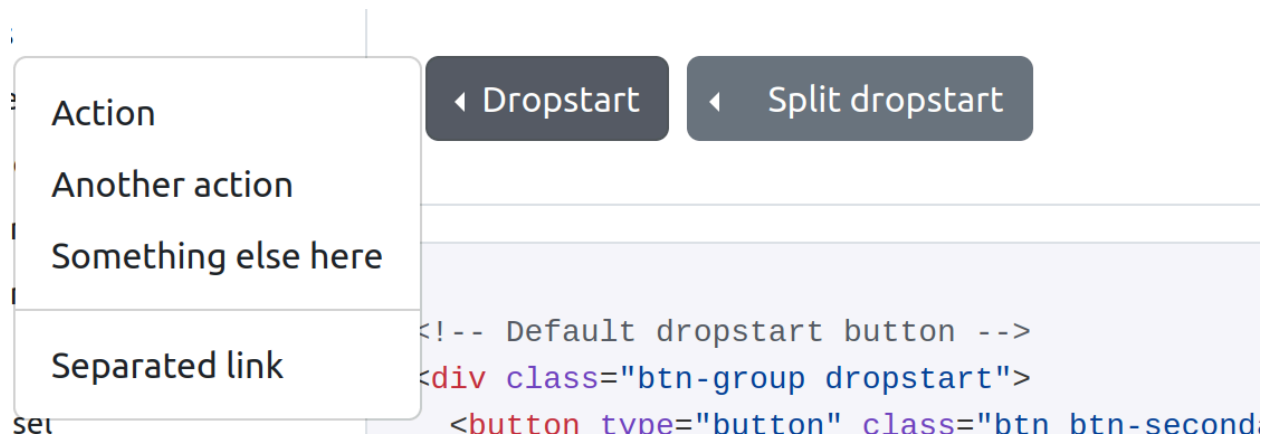
```
Action
Another action
Something else here

Separated link
```

◂ Dropstart   ◂ Split dropstart

```
<!-- Default dropstart button -->
<div class="btn-group dropstart">
    <button type="button" class="btn btn-second
```

- **Behavior**: Dropdown menu appears to the left of the button.
- **Use Case**: Useful in situations where the button is near the right edge of the screen.

---

5. Menu Items

You can define dropdown items as <a> or <button>.

Example: Using Buttons

```
<div class="dropdown">
  <button class="btn btn-secondary dropdown-toggle" type="button"
data-bs-toggle="dropdown" aria-expanded="false">
      Dropdown
  </button>
  <ul class="dropdown-menu">
<li><button class="dropdown-item" type="button">Action</button>
</li>
```

```
     <li><button class="dropdown-item" type="button">Another
action</button></li>
  </ul>
</div>
```

- **Behavior**: Dropdown items are rendered as buttons.
- **Use Case**: Useful when actions are not navigation links but trigger JavaScript functionality.

Example: Non-Interactive Items

```
<ul class="dropdown-menu">
  <li><span class="dropdown-item-text">Dropdown item
text</span></li>
  <li><a class="dropdown-item" href="#">Action</a></li>
</ul>
```

- **Behavior**: Text items are static and non-clickable.
- **Use Case**: Useful for displaying labels or headings within the dropdown.

---

6. Active & Disabled Items

- **Active Item**: Adds a visual highlight and accessibility feature using aria-current="true".

```
<ul class="dropdown-menu">
  <li><a class="dropdown-item" href="#">Regular link</a></li>
  <li><a class="dropdown-item active" href="#"
aria-current="true">Active link</a></li>
```

```
</ul>
```

Disabled Item: Prevents clicking with .disabled and aria-disabled="true".

```
<ul class="dropdown-menu">
  <li><a class="dropdown-item disabled" aria-disabled="true">Disabled link</a></li>
</ul>
```

Responsive Alignment

Concept:

Responsive dropdowns adjust their alignment based on screen size breakpoints (e.g., small, medium, large screens). You can align dropdown menus dynamically using **.dropdown-menu{-sm|-md|-lg|-xl|-xxl}-end** and **.dropdown-menu{-sm|-md|-lg|-xl|-xxl}-start**.

Align Right on Large Screens

The dropdown is left-aligned by default, but becomes right-aligned on large screens or larger.

Code Example:

```
<div class="btn-group">
  <button type="button" class="btn btn-secondary dropdown-toggle" data-bs-toggle="dropdown" data-bs-display="static" aria-expanded="false">
```

Left-aligned but right-aligned when large screen
  </button>
  <ul class="dropdown-menu dropdown-menu-lg-end">
      <button class="dropdown-item" type="button">Action</button>
      <button class="dropdown-item" type="button">Another action</button>
      <button class="dropdown-item" type="button">Something else here</button>

</div>

Explanation:

- .dropdown-menu-lg-end: Aligns the menu to the right starting at the lg breakpoint (large screens, ≥992px).
- data-bs-display="static": Prevents dynamic positioning so the dropdown stays aligned to the button.

Align Left on Large Screens

The dropdown is right-aligned by default but becomes left-aligned on large screens or larger.

Code Example:

<div class="btn-group">
  <button type="button" class="btn btn-secondary dropdown-toggle" data-bs-toggle="dropdown" data-bs-display="static" aria-expanded="false">
      Right-aligned but left-aligned when large screen

```
    </button>
    <ul class="dropdown-menu dropdown-menu-end
dropdown-menu-lg-start">
        <li><button class="dropdown-item"
type="button">Action</button></li>
        <li><button class="dropdown-item" type="button">Another
action</button></li>
        <li><button class="dropdown-item" type="button">Something
else here</button></li>
    </ul>
</div>
```

Explanation:

- .dropdown-menu-end: Right-aligns the menu by default.
- .dropdown-menu-lg-start: Overrides the default alignment and aligns it to the left for screens ≥992px.

Menu Content Customization

Headers:

Add headers to label sections in the dropdown menu.

Code Example:

```
<ul class="dropdown-menu">
  <li><h6 class="dropdown-header">Dropdown header</h6></li>
  <li><a class="dropdown-item" href="#">Action</a></li>
  <li><a class="dropdown-item" href="#">Another action</a></li>
</ul>
```

Dividers:

Separate groups of menu items.

<hr> - horizontal rule

Code Example:

```
<ul class="dropdown-menu">
  <li><a class="dropdown-item" href="#">Action</a></li>
  <li><a class="dropdown-item" href="#">Another action</a></li>
  <li><hr class="dropdown-divider"></li>
  <li><a class="dropdown-item" href="#">Separated link</a></li>
</ul>
```

Forms in Dropdowns:

You can include forms inside dropdowns for functionality like login or search.

Code Example:

```
<div class="dropdown">
```

```html
  <button type="button" class="btn btn-primary dropdown-toggle"
data-bs-toggle="dropdown" aria-expanded="false"
data-bs-auto-close="outside">
      Dropdown form
  </button>
  <form class="dropdown-menu p-4">
      <div class="mb-3">
      <label for="email" class="form-label">Email</label>
      <input type="email" class="form-control" id="email"
placeholder="email@example.com">
      </div>
      <div class="mb-3">
      <label for="password" class="form-label">Password</label>
      <input type="password" class="form-control" id="password"
placeholder="Password">
      </div>
      <button type="submit" class="btn btn-primary">Sign in</button>
  </form>
</div>
```

Button-group:

The **Button Group** feature in Bootstrap allows you to group a series of buttons together, either horizontally or vertically, and apply consistent styling. Here's an explanation of the various ways to use button groups with examples:

1. Basic Example

A basic button group places buttons side by side. The .btn-group class wraps the buttons, and you can specify the role for accessibility.

```
<div class="btn-group" role="group" aria-label="Basic example">
  <button type="button" class="btn btn-primary">Left</button>
  <button type="button" class="btn btn-primary">Middle</button>
  <button type="button" class="btn btn-primary">Right</button>
</div>
```

- **Result**: This will display three buttons aligned horizontally: "Left," "Middle," and "Right."

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Vertical Button Group Example</title>
```

```html
<!-- Bootstrap CSS (Ensure you have included Bootstrap in your project) -->
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha1/dist/css/bootstrap.min.css" rel="stylesheet">
</head>
<body>


<!-- Button Group displayed vertically -->
<div class="btn-group d-flex flex-column" role="group" aria-label="Basic example">
    <button type="button" class="btn btn-primary">Left</button>
    <button type="button" class="btn btn-primary">Middle</button>
    <button type="button" class="btn btn-primary">Right</button>
</div>


<!-- Bootstrap JS (Ensure you have included Bootstrap JS for functionality, optional in this case) -->
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha1/dist/js/bootstrap.bundle.min.js"></script>
</body>
```

</html>

Vertical:

```html
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width,
initial-scale=1.0">

  <title>Vertical Button Group Example</title>

  <!-- Bootstrap CSS (Ensure you have included Bootstrap in your
project) -->

  <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha1/dist/css/boots
trap.min.css" rel="stylesheet">

</head>

<body>


  <!-- Button Group displayed vertically with buttons not taking full
width -->

  <div class="btn-group-vertical" role="group" aria-label="Basic
example">
```

```
      <button type="button" class="btn btn-primary">Left</button>

      <button type="button" class="btn btn-primary">Middle</button>

      <button type="button" class="btn btn-primary">Right</button>

  </div>


  <!-- Bootstrap JS (Ensure you have included Bootstrap JS for
functionality, optional in this case) -->

  <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha1/dist/js/bootstrap.bundle.min.js"></script>

</body>

</html>
```

---

2. Mixed Styles

You can mix different styles within a button group, such as btn-danger, btn-warning, and btn-success.

```
<div class="btn-group" role="group" aria-label="Basic mixed styles example">
  <button type="button" class="btn btn-danger">Left</button>
  <button type="button" class="btn btn-warning">Middle</button>
  <button type="button" class="btn btn-success">Right</button>
</div>
```

- **Result**: This will display three buttons in different colors: red (danger), yellow (warning), and green (success).

---

3. Outlined Styles

You can use outlined buttons, where the button's background is transparent, but the border and text remain styled.

```
<div class="btn-group" role="group" aria-label="Basic outlined example">
  <button type="button" class="btn btn-outline-primary">Left</button>
  <button type="button" class="btn btn-outline-primary">Middle</button>
  <button type="button" class="btn btn-outline-primary">Right</button>
</div>
```

- **Result**: The buttons will have a transparent background, with primary borders and text.

---

4. Checkbox and Radio Button Groups

You can create button groups that work like checkboxes or radio buttons.

Checkbox Button Group:
```
<div class="btn-group" role="group" aria-label="Basic checkbox toggle button group">
  <input type="checkbox" class="btn-check" id="btncheck1" autocomplete="off">
```

```
  <label class="btn btn-outline-primary" for="btncheck1">Checkbox
1</label>

  <input type="checkbox" class="btn-check" id="btncheck2"
autocomplete="off">
  <label class="btn btn-outline-primary" for="btncheck2">Checkbox
2</label>

  <input type="checkbox" class="btn-check" id="btncheck3"
autocomplete="off">
  <label class="btn btn-outline-primary" for="btncheck3">Checkbox
3</label>
</div>
```

The **autocomplete="off"** attribute is used in HTML forms to disable the browser's autocomplete feature for a particular input field. Autocomplete is a browser feature that automatically fills in input fields with values that the browser has saved based on the user's previous interactions (like form submissions, usernames, or passwords).

When you use autocomplete="off" on an input field, the browser will **not automatically suggest or fill in** previously entered values in that field.

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">
```

```html
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Autocomplete Example</title>
</head>
<body>


  <form>
    <label for="username">Username:</label>
    <input type="text" id="username" name="username">


    <label for="email">Email:</label>
    <input type="email" id="email" name="email">


    <button type="submit">Submit</button>
  </form>

</body>
</html>
```

- **Result**: This creates checkboxes styled as buttons. Each label toggles the corresponding checkbox.

Radio Button Button Group:

```html
<div class="btn-group" role="group" aria-label="Basic radio toggle button group">
  <input type="radio" class="btn-check" name="btnradio" id="btnradio1" autocomplete="off" checked>
  <label class="btn btn-outline-primary" for="btnradio1">Radio 1</label>

  <input type="radio" class="btn-check" name="btnradio" id="btnradio2" autocomplete="off">
  <label class="btn btn-outline-primary" for="btnradio2">Radio 2</label>

  <input type="radio" class="btn-check" name="btnradio" id="btnradio3" autocomplete="off">
  <label class="btn btn-outline-primary" for="btnradio3">Radio 3</label>
</div>
```

- **Result**: This creates radio buttons styled as buttons. Only one button can be selected at a time.

---

5. Button Toolbar

Button toolbars allow you to combine several button groups into a toolbar for more complex layouts. You can use utility classes to add spacing between groups.

```
<div class="btn-toolbar" role="toolbar" aria-label="Toolbar with button groups">
  <div class="btn-group me-2" role="group" aria-label="First group">
      <button type="button" class="btn btn-primary">1</button>
      <button type="button" class="btn btn-primary">2</button>
      <button type="button" class="btn btn-primary">3</button>
      <button type="button" class="btn btn-primary">4</button>
  </div>
  <div class="btn-group me-2" role="group" aria-label="Second group">
      <button type="button" class="btn btn-secondary">5</button>
      <button type="button" class="btn btn-secondary">6</button>
      <button type="button" class="btn btn-secondary">7</button>
  </div>
  <div class="btn-group" role="group" aria-label="Third group">
      <button type="button" class="btn btn-info">8</button>
  </div>
</div>
```

- **Result**: This creates a toolbar with three groups of buttons, each separated with spacing.

---

6. **Sizing**

You can change the size of button groups using the .btn-group-lg (large) or .btn-group-sm (small) classes.

```
<div class="btn-group btn-group-lg" role="group" aria-label="Large button group">
  <button type="button" class="btn btn-outline-primary">Left</button>
```

```
  <button type="button" class="btn
btn-outline-primary">Middle</button>
  <button type="button" class="btn
btn-outline-primary">Right</button>
</div>
<br>
<div class="btn-group" role="group" aria-label="Default button group">
  <button type="button" class="btn btn-outline-primary">Left</button>
  <button type="button" class="btn
btn-outline-primary">Middle</button>
  <button type="button" class="btn
btn-outline-primary">Right</button>
</div>
<br>
<div class="btn-group btn-group-sm" role="group" aria-label="Small
button group">
  <button type="button" class="btn btn-outline-primary">Left</button>
  <button type="button" class="btn
btn-outline-primary">Middle</button>
  <button type="button" class="btn
btn-outline-primary">Right</button>
</div>
```

- **Result**: The buttons in the first group will be large, the second
  group will be default size, and the third group will be small.

---

7. Nesting

You can nest button groups inside other button groups, such as adding dropdown buttons inside a button group.

```
<div class="btn-group" role="group" aria-label="Button group with nested dropdown">
  <button type="button" class="btn btn-primary">1</button>
  <button type="button" class="btn btn-primary">2</button>

  <div class="btn-group" role="group">
      <button type="button" class="btn btn-primary dropdown-toggle" data-bs-toggle="dropdown" aria-expanded="false">
    Dropdown
    </button>
    <ul class="dropdown-menu">
    <li><a class="dropdown-item" href="#">Dropdown link</a></li>
    <li><a class="dropdown-item" href="#">Dropdown link</a></li>
    </ul>
  </div>
</div>
```

- **Result**: The first two buttons appear next to each other, with a dropdown button nested at the end.

---

8. Vertical Variation

To stack the buttons vertically instead of horizontally, use the .btn-group-vertical class.

```
<div class="btn-group-vertical" role="group" aria-label="Vertical button group">
```

```
  <button type="button" class="btn btn-primary">Button</button>
  <button type="button" class="btn btn-primary">Button</button>
  <button type="button" class="btn btn-primary">Button</button>
  <button type="button" class="btn btn-primary">Button</button>
</div>
```

- **Result**: The buttons will be stacked vertically instead of horizontally.

You can also **mix vertical buttons with dropdowns,** as shown below:

```
<div class="btn-group-vertical" role="group" aria-label="Vertical button group with dropdown">
  <button type="button" class="btn btn-primary">Button</button>
  <button type="button" class="btn btn-primary">Button</button>
  <div class="btn-group" role="group">
      <button type="button" class="btn btn-primary dropdown-toggle" data-bs-toggle="dropdown" aria-expanded="false">
      Dropdown
      </button>
      <ul class="dropdown-menu">
      <li><a class="dropdown-item" href="#">Dropdown link</a></li>
      <li><a class="dropdown-item" href="#">Dropdown link</a></li>
      </ul>
  </div>
</div>
```

Result: The vertical layout will display buttons, and the dropdown is included within the stack.

Assignment Question:

Design a User Interface with Bootstrap Button Groups

Create a webpage using Bootstrap where you design a toolbar with multiple button groups. The page should meet the following criteria:

1. Toolbar Layout:
   - The toolbar should contain three button groups.
   - The first group should have buttons with primary styling and should display buttons labeled "Home", "About", and "Services".
   - The second group should have buttons with secondary styling and display buttons labeled "Contact", "FAQ", and "Support".
   - The third group should have buttons with outline-primary styling and display buttons labeled "Login" and "Register".
2. Vertical Button Group:
   - Create a separate vertical button group below the toolbar with buttons labeled "Option 1", "Option 2", and "Option 3".
3. Additional Features:
   - Include a dropdown button in the third button group.
   - The dropdown should have at least two items (e.g., "Settings" and "Logout").
   - Ensure that both horizontal and vertical layouts are responsive and adapt well to different screen sizes.
4. Responsiveness:
   - Ensure the button groups remain properly aligned both on large and small screens. Use appropriate Bootstrap classes for responsiveness (e.g., grid system or flex utilities).
   -

Bootstrap Navbar with Examples

Bootstrap's Navbar is a powerful and responsive navigation header that allows developers to create navigation menus with various components, like brand names, navigation links, dropdowns, forms, and more.

Basic Navbar Structure

A simple navbar that includes a brand name, links, and a search form. It uses the .navbar-expand-lg class for responsiveness and includes a toggle button for small screens.

```
<nav class="navbar navbar-expand-lg bg-body-tertiary">
  <div class="container-fluid">
      <a class="navbar-brand" href="#">Navbar</a>
      <button class="navbar-toggler" type="button"
data-bs-toggle="collapse" data-bs-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">
      <a class="nav-link active" aria-current="page"
href="#">Home</a>
      </li>
      <li class="nav-item">
      <a class="nav-link" href="#">Features</a>
      </li>
      <li class="nav-item">
      <a class="nav-link" href="#">Pricing</a>
```

```
        </li>
        <li class="nav-item">
        <a class="nav-link disabled" aria-disabled="true">Disabled</a>
        </li>
        </ul>
        </div>
    </div>
</nav>
```

Explanation:

- .navbar-expand-lg: This makes the navbar expand at the "large" breakpoint. For smaller screens, the navbar will collapse into a hamburger menu.
- .navbar-toggler: This button is displayed on smaller screens to toggle the visibility of the navbar items.
- .navbar-collapse: This class wraps the collapsible content.
- .navbar-nav: This class is used to style the list of navigation items.

Navbar with Brand Image

You can use an image for the brand name instead of text.

```
<nav class="navbar bg-body-primary">
  <div class="container-fluid">
      <a class="navbar-brand" href="#">
      <img src="1.jpg" alt="Logo" width="30" height="24">
      </a>
  </div>
</nav>
```

Explanation:

- Instead of text inside the .navbar-brand anchor, an <img> is used.
- You can set the width and height of the logo to fit your design.

---

3. Navbar with Both Image and Text

You can combine an image and text for your brand.

```
<nav class="navbar bg-body-tertiary">
  <div class="container-fluid">
      <a class="navbar-brand" href="#">
      <img src="/path-to-logo.svg" alt="Logo" width="30" height="24" class="d-inline-block align-text-top">
      Bootstrap
      </a>
  </div>
</nav>
```

Explanation:

- The .d-inline-block and .align-text-top classes ensure that the image and text are properly aligned.

---

4. Navbar with Dropdown

You can add dropdown menus to your navbar.

```
<nav class="navbar navbar-expand-lg bg-body-tertiary">
  <div class="container-fluid">
      <a class="navbar-brand" href="#">Navbar</a>
      <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarNavDropdown"
```

aria-controls="navbarNavDropdown" aria-expanded="false"
aria-label="Toggle navigation">
                `<span class="navbar-toggler-icon"></span>`
                `</button>`
                `<div class="collapse navbar-collapse" id="navbarNavDropdown">`
                `<ul class="navbar-nav">`
                `<li class="nav-item">`
                `<a class="nav-link active" aria-current="page"`
href="#">Home
                `</li>`
                `<li class="nav-item dropdown">`
                `<a class="nav-link dropdown-toggle" href="#" role="button"`
data-bs-toggle="dropdown" aria-expanded="false">
                Dropdown link
                `</a>`
                `<ul class="dropdown-menu">`
                `<li><a class="dropdown-item" href="#">Action</a></li>`
                `<li><a class="dropdown-item" href="#">Another action</a></li>`
                `<li><hr class="dropdown-divider"></li>`
                `<li><a class="dropdown-item" href="#">Something else`
here
                `</ul>`
                `</li>`
                `</ul>`
                `</div>`
  `</div>`
`</nav>`

Explanation:

- .nav-item.dropdown: This class creates a dropdown item within the navbar.
- .dropdown-toggle: This class is used to toggle the visibility of the dropdown items.
- .dropdown-menu: Contains the actual dropdown items.

---

5. Navbar with Forms

You can include search forms or other form controls in the navbar.

```
<nav class="navbar bg-body-tertiary">
 <div class="container-fluid">
     <form class="d-flex" role="search">
     <input class="form-control me-2" type="search"
placeholder="Search" aria-label="Search">
     <button class="btn btn-outline-success"
type="submit">Search</button>
     </form>
 </div>
</nav>
```

Explanation:

- .d-flex: This makes the form use Flexbox for alignment.
- .form-control: Styles the input field.
- .btn btn-outline-success: Applies button styles to the search button.

---

6. Navbar with Text

You can add text inside the navbar using .navbar-text.

```
<nav class="navbar bg-body-tertiary">
  <div class="container-fluid">
      <a class="navbar-brand" href="#">Navbar with text</a>
      <div class="collapse navbar-collapse">
      <span class="navbar-text">
      Navbar text with an inline element
      </span>
      </div>
  </div>
</nav>
```

7. Navbar with Multiple Items and Links

You can create a more complex navbar with multiple navigation links.

```
<nav class="navbar navbar-expand-lg bg-body-tertiary">
  <div class="container-fluid">
      <a class="navbar-brand" href="#">Navbar</a>
      <button class="navbar-toggler" type="button"
data-bs-toggle="collapse" data-bs-target="#navbarNavAltMarkup"
aria-controls="navbarNavAltMarkup" aria-expanded="false"
aria-label="Toggle navigation">
      <span class="navbar-toggler-icon"></span>
      </button>
      <div class="collapse navbar-collapse"
id="navbarNavAltMarkup">
      <div class="navbar-nav">
      <a class="nav-link active" aria-current="page"
href="#">Home</a>
```

```
<a class="nav-link" href="#">Features</a>
<a class="nav-link" href="#">Pricing</a>
<a class="nav-link disabled" aria-disabled="true">Disabled</a>
</div>
</div>
</div>
</nav>
```

Explanation:

- .navbar-nav: This contains all the navigation links.
- .nav-link: This class is applied to each navigation link.
- .active: This class highlights the current page (e.g., Home).
- .disabled: This class is used to disable certain links, preventing interaction.