

# Week 4 Lab — Bootstrap 5 Basics (Grid, Navbar, Cards, Forms & Modal)

**Goal:** Build a responsive “Campus Events” page using Bootstrap 5 (no custom CSS).

**Submit:** repo link + index.html + 2 screenshots (full page, modal open).

## 1) Setup (CDN) — 5 min

```
<!doctype html>
<html lang="en">
<head>
  <meta charset="utf-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1" />
  <title>UCU Campus Events</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css" rel="stylesheet">
</head>
<body>
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.min.js"></script>
</body>
</html>

<!-- Optional: Bootstrap Icons -->
<link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap-icons@1.11.3/font/bootstrap-icons.min.css">
<!-- Use like: <i class="bi bi-calendar-event"></i> -->
```

## 2) Navbar (collapses on mobile) — 10–15 min

```
<nav class="navbar navbar-expand-lg bg-body-tertiary">
  <div class="container">
    <a class="navbar-brand fw-bold" href="#">UCU Events</a>
    <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#nav">
      <span class="navbar-toggler-icon"></span>
    </button>
    <div id="nav" class="collapse navbar-collapse">
      <ul class="navbar-nav ms-auto">
        <li class="nav-item"><a class="nav-link" href="#list">Events</a></li>
        <li class="nav-item"><a class="nav-link" href="#submit">Submit</a></li>
      </ul>
    </div>
  </div>
</nav>
```

## 3) Grid layout + hero — 10 min

```
<header class="py-5 bg-light border-bottom">
  <div class="container">
    <div class="row align-items-center g-4">
      <div class="col-md-8">
        <h1 class="display-6">What's happening on campus</h1>
        <p class="lead">Talks, clubs, sports, chapel, and more—updated weekly.</p>
        <a class="btn btn-primary" data-bs-toggle="modal" data-bs-target="#addEvent">Add Event</a>
      </div>
      <div class="col-md-4 text-md-end">
        <i class="bi bi-calendar-event fs-1"></i>
      </div>
    </div>
  </div>
</header>
```

## 4) Cards grid (events) — 10–15 min

```
<section id="list" class="py-5">
  <div class="container">
    <div class="row g-4">
      <div class="col-sm-6 col-lg-4">
        <div class="card h-100">
          
          <div class="card-body">
            <h5 class="card-title">Inter-Hall Basketball</h5>
            <p class="card-text">Fri 16:00 - Main Court</p>
            <span class="badge text-bg-info">Sports</span>
          </div>
        </div>
      </div>
      <!-- Duplicate this col for 3-6 cards -->
    </div>
  </div>
</section>
```

## 5) Forms (with validation styles) — 10–15 min

```
<section id="submit" class="py-5 bg-light border-top">
  <div class="container">
    <h2 class="h4 mb-3">Submit an Event</h2>
    <form class="row g-3 needs-validation" novalidate>
      <div class="col-md-6">
        <label class="form-label">Title</label>
        <input class="form-control" required>
        <div class="invalid-feedback">Title is required.</div>
      </div>
      <div class="col-md-6">
        <label class="form-label">Category</label>
        <select class="form-select" required>
          <option value="">Choose...</option>
          <option>Sports</option><option>Clubs</option><option>Chapel</option>
        </select>
        <div class="invalid-feedback">Pick a category.</div>
      </div>
      <div class="col-12">
        <label class="form-label">Details</label>
        <textarea class="form-control" rows="3"></textarea>
      </div>
      <div class="col-12">
        <button class="btn btn-success">Submit</button>
      </div>
    </form>
  </div>
</section>

<script>
(() => {
  'use strict';
  const forms = document.querySelectorAll('.needs-validation');
  Array.from(forms).forEach(f => {
    f.addEventListener('submit', e => {
      if (!f.checkValidity()) { e.preventDefault(); e.stopPropagation(); }
      f.classList.add('was-validated');
    }, false);
  });
})();
```

```
</script>
```

## 6) Modal (JS component) — 10 min

```
<div class="modal fade" id="addEvent" tabindex="-1" aria-hidden="true">
  <div class="modal-dialog">
    <div class="modal-content">
      <div class="modal-header">
        <h5 class="modal-title">Add Event</h5>
        <button type="button" class="btn-close" data-bs-dismiss="modal"></button>
      </div>
      <div class="modal-body">
        <p>Use the form below (or the Submit section) to add a campus event.</p>
        <input class="form-control" placeholder="Quick title">
      </div>
      <div class="modal-footer">
        <button class="btn btn-secondary" data-bs-dismiss="modal">Close</button>
        <button class="btn btn-primary">Save</button>
      </div>
    </div>
  </div>
</div>
```

## 7) Utilities polish — 5 min

```
<!-- Try spacing, display, and color utilities -->
<div class="container py-5">
  <div class="d-flex justify-content-between align-items-center p-3 bg-white rounded border">
    <span class="text-muted">Left</span>
    <span class="badge text-bg-primary">Center</span>
    <button class="btn btn-outline-secondary">Right</button>
  </div>
</div>
```

## Deliverables (end of Week 4)

- Repo: ucu-dip-webdev-2025-lab04-bootstrap--
- Files: index.html (uses Bootstrap CDN only)
- Screenshots (2): full page; modal open

## Grading (4 pts)

- Navbar + responsive grid layout — 1.5
- Cards section looks good at mobile & desktop — 1.0
- Form with validation styles — 1.0
- Modal works + repo hygiene (names/screenshots) — 0.5

## Quick fixes

- Toggler doesn't open? Ensure bundle JS is included after HTML and button data-bs-target matches the collapse id.
- Icons not showing? Check the Bootstrap Icons CDN link and icon class name (bi bi-...).

# Beginner-Friendly Bootstrap Examples (Paste inside )

## 0) Quick starter (CDN)

```
<!doctype html>
<html lang="en">
<head>
  <meta charset="utf-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1" />
  <title>Bootstrap Playground</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css" rel="stylesheet">
</head>
<body class="bg-light">
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.min.js"></script>
</body>
</html>
```

## 1) Typography & Utilities

```
<div class="container py-4">
  <h1 class="display-6">Hello, Bootstrap ■</h1>
  <p class="lead text-muted">This is a simple lead paragraph for beginners.</p>
  <p class="mb-0">Spacing: <span class="badge text-bg-secondary">mt-3</span>, <span class="badge text-bg-secondary">my-4</span></p>
  <hr class="my-4">
  <p class="fw-bold">Bold</p>
  <p class="fst-italic">Italic</p>
  <p class="text-success">Success color</p>
  <p class="text-center">Centered text</p>
</div>
```

## 2) Buttons (sizes & states)

```
<div class="container py-4">
  <button class="btn btn-primary">Primary</button>
  <button class="btn btn-outline-secondary">Outline</button>
  <button class="btn btn-success btn-sm">Small</button>
  <button class="btn btn-danger btn-lg">Large</button>
  <button class="btn btn-warning" disabled>Disabled</button>
</div>
```

## 3) Alerts (dismissible)

```
<div class="container py-4">
  <div class="alert alert-success alert-dismissible fade show" role="alert">
    <strong>Nice!</strong> Your profile was saved.
    <button type="button" class="btn-close" data-bs-dismiss="alert"></button>
  </div>
</div>
```

## 4) Badges in Buttons

```
<div class="container py-4">
  <button class="btn btn-dark">
    Notifications <span class="badge text-bg-danger ms-1">3</span>
  </button>
</div>
```

## 5) List Group (active/disabled)

```
<div class="container py-4">
```

```


- Today</li>
- Tomorrow</li>
- Next Week (disabled)</li>


</div>

```

## 6) Responsive Images

```

<div class="container py-4">
  
  
  
</div>

```

## 7) Grid Basics (stack on mobile, columns on desktop)

```

<div class="container py-4">
  <div class="row g-3">
    <div class="col-12 col-md-6 col-lg-4"><div class="p-3 bg-white border rounded">Column A</div></div>
    <div class="col-12 col-md-6 col-lg-4"><div class="p-3 bg-white border rounded">Column B</div></div>
    <div class="col-12 col-md-6 col-lg-4"><div class="p-3 bg-white border rounded">Column C</div></div>
  </div>
</div>

```

## 8) Table (striped + responsive)

```

<div class="container py-4">
  <div class="table-responsive">
    <table class="table table-striped table-hover align-middle">
      <thead class="table-light">
        <tr><th>Day</th><th>Course</th><th>Time</th></tr>
      </thead>
      <tbody>
        <tr><td>Mon</td><td>Web Dev</td><td>10:00-12:00</td></tr>
        <tr><td>Wed</td><td>DB Systems</td><td>14:00-16:00</td></tr>
        <tr><td>Fri</td><td>Networks</td><td>09:00-11:00</td></tr>
      </tbody>
    </table>
  </div>
</div>

```

## 9) Card Grid (simple)

```

<div class="container py-4">
  <div class="row g-3">
    <div class="col-sm-6 col-lg-4">
      <div class="card h-100">
        
        <div class="card-body">
          <h5 class="card-title">Inter-Hall Basketball</h5>
          <p class="card-text">Fri 16:00 - Main Court</p>
          <a class="btn btn-primary">Details</a>
        </div>
      </div>
    </div>
    <!-- duplicate col for more cards -->
  </div>
</div>

```

## 10) Forms — Stacked (beginner)

```

<div class="container py-4">
  <form class="bg-white p-3 rounded border">
    <div class="mb-3">
      <label class="form-label" for="email">Email</label>
      <input id="email" type="email" class="form-control" placeholder="you@ucu.ac.ug" required>
      <div class="form-text">We'll never share your email.</div>
    </div>
    <div class="mb-3">
      <label class="form-label" for="pw">Password</label>
      <input id="pw" type="password" class="form-control" required>
    </div>
    <div class="mb-3 form-check">
      <input id="remember" type="checkbox" class="form-check-input">
      <label class="form-check-label" for="remember">Remember me</label>
    </div>
    <button class="btn btn-success">Sign in</button>
  </form>
</div>

```

## 11) Forms — Input Group (with icon/text)

```

<div class="container py-4">
  <div class="input-group">
    <span class="input-group-text">@</span>
    <input type="text" class="form-control" placeholder="username">
    <button class="btn btn-outline-secondary">Check</button>
  </div>
</div>

```

## 12) Floating Labels (nice, modern)

```

<div class="container py-4">
  <div class="form-floating mb-3">
    <input type="email" class="form-control" id="femail" placeholder="name@example.com">
    <label for="femail">Email address</label>
  </div>
  <div class="form-floating">
    <input type="password" class="form-control" id="fpw" placeholder="Password">
    <label for="fpw">Password</label>
  </div>
</div>

```

## 13) Navbar (simple)

```

<nav class="navbar navbar-expand-lg bg-body-tertiary">
  <div class="container">
    <a class="navbar-brand fw-bold" href="#">MySite</a>
    <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#mainnav">
      <span class="navbar-toggler-icon"></span>
    </button>
    <div id="mainnav" class="collapse navbar-collapse">
      <ul class="navbar-nav ms-auto">
        <li class="nav-item"><a class="nav-link active" href="#">Home</a></li>
        <li class="nav-item"><a class="nav-link" href="#">Docs</a></li>
      </ul>
    </div>
  </div>
</nav>

```

## 14) Accordion (FAQ)

```

<div class="container py-4">
  <div class="accordion" id="faq">
    <div class="accordion-item">
      <h2 class="accordion-header">
        <button class="accordion-button" data-bs-toggle="collapse" data-bs-target="#q1">
          What is Bootstrap?
        </button>
      </h2>
      <div id="q1" class="accordion-collapse collapse show" data-bs-parent="#faq">
        <div class="accordion-body">A CSS/JS framework for building responsive sites quickly.</div>
      </div>
    </div>
  </div>
</div>

```

## 15) Modal (trigger + dialog)

```

<div class="container py-4">
  <button class="btn btn-primary" data-bs-toggle="modal" data-bs-target="#infoModal">Open Info</button>
</div>

<div class="modal fade" id="infoModal" tabindex="-1" aria-hidden="true">
  <div class="modal-dialog"><div class="modal-content">
    <div class="modal-header">
      <h5 class="modal-title">Hello!</h5>
      <button class="btn-close" data-bs-dismiss="modal"></button>
    </div>
    <div class="modal-body">This is a beginner modal example.</div>
    <div class="modal-footer">
      <button class="btn btn-secondary" data-bs-dismiss="modal">Close</button>
      <button class="btn btn-primary">OK</button>
    </div>
  </div></div>
</div>

```

## 16) Offcanvas (slide-in menu)

```

<div class="container py-4">
  <button class="btn btn-outline-primary" data-bs-toggle="offcanvas" data-bs-target="#menu">Open Menu</button>
</div>

<div class="offcanvas offcanvas-start" tabindex="-1" id="menu">
  <div class="offcanvas-header">
    <h5 class="offcanvas-title">Menu</h5>
    <button class="btn-close" data-bs-dismiss="offcanvas"></button>
  </div>
  <div class="offcanvas-body">
    <a class="btn btn-link d-block" href="#">Dashboard</a>
    <a class="btn btn-link d-block" href="#">Settings</a>
  </div>
</div>

```

## 17) Toast (quick message)

```

<div class="position-fixed bottom-0 end-0 p-3" style="z-index: 11">
  <div id="liveToast" class="toast align-items-center text-bg-primary border-0" role="status" aria-live="polite">
    <div class="d-flex">
      <div class="toast-body">Signed in successfully!</div>
      <button type="button" class="btn-close btn-close-white me-2 m-auto" data-bs-dismiss="toast"></button>
    </div>
  </div>
</div>

```

```
</div>
```

```
<script>
  const toastEl = document.getElementById('liveToast');
  const toast = new bootstrap.Toast(toastEl, { delay: 2000 });
  toast.show();
</script>
```

## Mini-challenges (beginner practice)

- Make it responsive: Turn a 1-column card list into 2 columns on md, 3 on lg.
- Validation: Add required to form fields and use .was-validated on submit.
- Theme switch: Change the navbar to navbar-dark bg-dark and compare contrast.
- Spacing drill: Add py-5 to a section and g-3 to a row—see the difference.
- Icons (optional): Add Bootstrap Icons CDN and put a calendar icon in your hero.