

BOOTSTRAP 5 BEGINNER COURSE (With Examples & Explanations)

□ 1. Introduction to Bootstrap

What is Bootstrap?

Bootstrap is a popular **CSS framework** that helps you quickly build responsive, mobile-friendly websites using ready-made:

- Layouts
- Components
- Utilities

Why Use Bootstrap?

- ✓ Saves time
- ✓ No need to write CSS from scratch
- ✓ Mobile-first design
- ✓ Large community & documentation

How to Include Bootstrap

Option 1 – Using CDN (easiest)

Add this inside your `<head>`:

```
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
  rel="stylesheet"
/>
```

Add JS at bottom of `<body>`:

```
<script src=
"https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/js/bootstrap.bundle.min.js"
"></script>
```

□ 2. Bootstrap Containers

Containers wrap your content and align everything nicely.

Types

1. `container` – fixed width
2. `container-fluid` – full width
3. `container-{breakpoint}` – responsive width

Example:

```
<div class="container">
  <h1>This is inside a container</h1>
</div>
```

```
<div class="container-fluid bg-light">
  <p>This takes full width</p>
</div>
```

Explanation:

- `container` becomes wide or narrow depending on screen size.
 - `container-fluid` always stretches 100% width.
-

□ 3. Grid System (Very Important)

Bootstrap uses a **12-column grid** for layout.

Basic Structure

```
<div class="container">
  <div class="row">
    <div class="col">Column 1</div>
    <div class="col">Column 2</div>
    <div class="col">Column 3</div>
  </div>
</div>
```

Responsive Columns

Example:

```
<div class="row">
  <div class="col-sm-6 col-md-4 col-lg-3">
    Column
  </div>
</div>
```

Explanation:

- col-sm-6 → 2 columns on small screens
- col-md-4 → 3 columns on medium
- col-lg-3 → 4 columns on large

Nesting Columns

```
<div class="col-6">
  <div class="row">
    <div class="col-6">A</div>
    <div class="col-6">B</div>
  </div>
</div>
```

□ 4. Typography

Bootstrap improves text with helper classes.

Headings

```
<h1 class="display-1">Big Heading</h1>
<h3 class="fw-bold">Bold Text</h3>
```

Explanation:

- display-1 to display-6 create large headings
- fw-bold = font-weight bold

Text Alignment

```
<p class="text-center">Centered Text</p>
<p class="text-end">Right Text</p>
```

Text Colors

```
<p class="text-primary">Blue Text</p>
<p class="text-danger">Red Text</p>
```

5. Colors & Backgrounds

Bootstrap includes built-in colors.

Text Colors

```
<p class="text-success">Success</p>
<p class="text-warning">Warning</p>
```

Background Colors

```
<div class="bg-info text-white p-3">Information Box</div>
```

Explanation:

- `bg-info` → light blue
 - `text-white` makes text visible
 - `p-3` adds padding
-

6. Buttons

Bootstrap has styled buttons:

```
<button class="btn btn-primary">Primary</button>
<button class="btn btn-danger">Delete</button>
<button class="btn btn-outline-dark">Outline</button>
```

Button Sizes

```
<button class="btn btn-success btn-lg">Large</button>
<button class="btn btn-secondary btn-sm">Small</button>
```

Full-width Button

```
<button class="btn btn-primary w-100">Full Width</button>
```

□ 7. Forms

Bootstrap makes forms look modern.

Basic Form Example

```
<form class="p-3">
  <div class="mb-3">
    <label class="form-label">Email</label>
    <input type="email" class="form-control">
  </div>

  <div class="mb-3">
    <label class="form-label">Password</label>
    <input type="password" class="form-control">
  </div>

  <button class="btn btn-primary">Login</button>
</form>
```

Explanation:

- form-control styles inputs
 - form-label styles labels
 - mb-3 adds spacing between inputs
-

□ 8. Navbar

Create responsive navigation bars easily.

Example:

```
<nav class="navbar navbar-expand-lg navbar-dark bg-dark">
  <div class="container">
    <a class="navbar-brand" href="#">MySite</a>

    <button class="navbar-toggler" data-bs-toggle="collapse" data-bs-
target="#menu">
      <span class="navbar-toggler-icon"></span>
```

```
</button>

<div id="menu" class="collapse navbar-collapse">
  <ul class="navbar-nav ms-auto">
    <li class="nav-item"><a class="nav-link" href="#">Home</a></li>
    <li class="nav-item"><a class="nav-link" href="#">About</a></li>
  </ul>
</div>
</div>
</nav>
```

Explanation:

- navbar-expand-lg → collapses on small screens
 - ms-auto → menu items move to right
 - navbar-dark bg-dark → black theme
-

9. Cards

Cards display content in a stylish layout.

Example:

```
<div class="card" style="width: 18rem;">
  
  <div class="card-body">
    <h5 class="card-title">Card title</h5>
    <p class="card-text">Some text inside.</p>
    <a href="#" class="btn btn-primary">Go</a>
  </div>
</div>
```

Card Groups

```
<div class="card-group">
  <div class="card">...</div>
  <div class="card">...</div>
</div>
```

10. Utilities

Bootstrap provides many helper classes.

Spacing (Margin & Padding)

```
<div class="mt-3 mb-4 p-5">
  Box with margin/padding
</div>
```

- m = margin
- p = padding
- Numbers = 0–5

Flexbox Utilities

```
<div class="d-flex justify-content-center align-items-center">
  Centered Content
</div>
```

Position Classes

```
<div class="position-relative">
  <div class="position-absolute top-0 end-0">Top Right</div>
</div>
```

□ 11. Responsive Design

Breakpoints:

Screen	Class prefix
Extra small	(none)
Small	sm
Medium	md
Large	lg
XL	xl
XXL	xxl

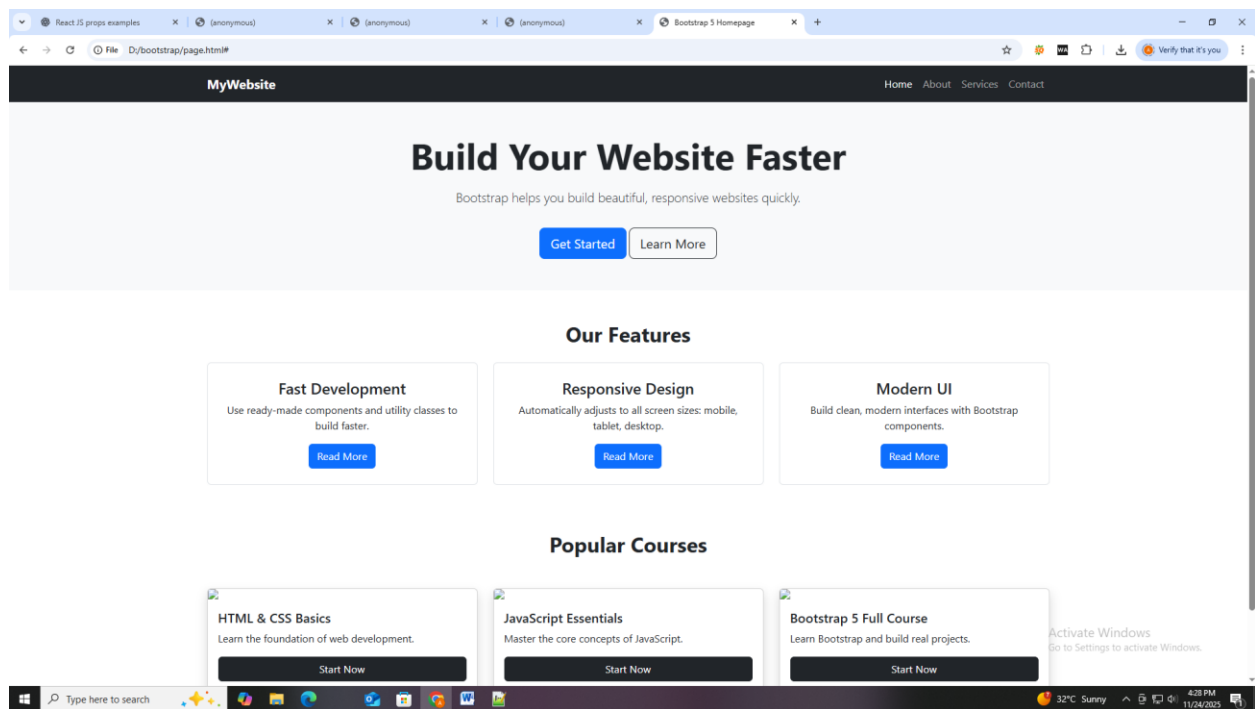
Example:

```
<p class="text-center text-md-start text-lg-end">
  Responsive text alignment
</p>
```

12. Practice Project (Mini Website)

Build a simple homepage using:

- ✓ Navbar
- ✓ Hero banner
- ✓ Grid layout
- ✓ Buttons
- ✓ Cards



index.html file code:-

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

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

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

```
<title>Bootstrap 5 Homepage</title>
```

```
<!-- Bootstrap CDN -->
```

```
<link
```

```
  href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
```

```
  rel="stylesheet"
```

```
/>
```

```
</head>
```

```
<body>
```

```
<!-- NAVBAR -->
```

```
<nav class="navbar navbar-expand-lg navbar-dark bg-dark">
```

```
  <div class="container">
```

```
    <a class="navbar-brand fw-bold" href="#">MyWebsite</a>
```

```
  <button
```

```
    class="navbar-toggler"
```

```
    data-bs-toggle="collapse"
```

```
    data-bs-target="#menu"
```

```
  >
```

```
    <span class="navbar-toggler-icon"></span>
```

```
</button>
```

```
<div id="menu" 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="#">About</a>
  </li>
  <li class="nav-item">
    <a class="nav-link" href="#">Services</a>
  </li>
  <li class="nav-item">
    <a class="nav-link" href="#">Contact</a>
  </li>
</ul>
</div>
</div>
</nav>
```

```
<!-- HERO SECTION -->
```

```
<section class="bg-light text-dark py-5">
  <div class="container text-center">
    <h1 class="display-4 fw-bold">Build Your Website Faster</h1>
    <p class="lead mt-3">
      Bootstrap helps you build beautiful, responsive websites quickly.
    </p>
```

```
<button class="btn btn-primary btn-lg mt-3">Get Started</button>
```

```
<button class="btn btn-outline-dark btn-lg mt-3">Learn More</button>
```

```
</div>
```

```
</section>
```

```
<!-- GRID SECTION -->
```

```
<section class="container my-5">
```

```
<h2 class="text-center mb-4 fw-bold">Our Features</h2>
```

```
<div class="row text-center">
```

```
<div class="col-md-4 mb-4">
```

```
<div class="p-4 border rounded">
```

```
<h4>Fast Development</h4>
```

```
<p>
```

```
Use ready-made components and utility classes to build faster.
```

```
</p>
```

```
<button class="btn btn-primary">Read More</button>
```

```
</div>
```

```
</div>
```

```
<div class="col-md-4 mb-4">
```

```
<div class="p-4 border rounded">
```

```
<h4>Responsive Design</h4>
```

```
<p>
```

```
Automatically adjusts to all screen sizes: mobile, tablet, desktop.
```

```
</p>
<button class="btn btn-primary">Read More</button>
</div>
</div>
```

```
<div class="col-md-4 mb-4">
  <div class="p-4 border rounded">
    <h4>Modern UI</h4>
    <p>
      Build clean, modern interfaces with Bootstrap components.
    </p>
    <button class="btn btn-primary">Read More</button>
  </div>
</div>
</div>
</section>
```

<!-- CARD SECTION -->

```
<section class="container my-5">
  <h2 class="text-center fw-bold mb-5">Popular Courses</h2>

  <div class="row g-4">
    <div class="col-md-4">
      <div class="card shadow">
        
```

```
<div class="card-body">
  <h5 class="card-title">HTML & CSS Basics</h5>
  <p class="card-text">Learn the foundation of web development.</p>
  <a href="#" class="btn btn-dark w-100">Start Now</a>
</div>
</div>
</div>
```

```
<div class="col-md-4">
  <div class="card shadow">
    
    <div class="card-body">
      <h5 class="card-title">JavaScript Essentials</h5>
      <p class="card-text">Master the core concepts of JavaScript.</p>
      <a href="#" class="btn btn-dark w-100">Start Now</a>
    </div>
  </div>
</div>
</div>
```

```
<div class="col-md-4">
  <div class="card shadow">
    
    <div class="card-body">
      <h5 class="card-title">Bootstrap 5 Full Course</h5>
      <p class="card-text">Learn Bootstrap and build real projects.</p>
    </div>
  </div>
</div>
```

```
    <a href="#" class="btn btn-dark w-100">Start Now</a>
  </div>
</div>
</div>
</div>
</section>
```

```
<!-- FOOTER -->
```

```
<footer class="bg-dark text-white text-center py-3 mt-5">
  <p class="mb-0">&copy; 2025 MyWebsite. All Rights Reserved.</p>
</footer>
```

```
<!-- Bootstrap JS -->
```

```
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/js/bootstrap.bundle.min.js"></script>
```

```
</body>
</html>
```