**Exercise 1.1:**

**Create a basic HTML page and link Bootstrap 5 via CDN**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1">

<title>Bootstrap 5 via CDN</title>

<!-- Bootstrap 5 CSS CDN -->

<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css" rel="stylesheet">

</head>

<body>

<div class="container">

<h1 class="text-primary">Hello, Bootstrap 5!</h1>

</div>

<!-- Bootstrap 5 JS Bundle CDN -->

<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.min.js"></script>

</body> </html>

**Exercise 1.2:**

**Set up a project using downloaded Bootstrap files. Use them in a sample HTML page**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1">

<title>Bootstrap 5 Local</title>

<!-- Local Bootstrap CSS -->

<link href="css/bootstrap.min.css" rel="stylesheet">

</head>

<body>

<div class="container">

<h1 class="text-success">Bootstrap from Local Files</h1>

</div>

<!-- Local Bootstrap JS Bundle -->

<script src="js/bootstrap.bundle.min.js"></script>

</body>

</html>

**Exercise 2.1: Explore the structure**  
/bootstrap/

├── /css/

│ └── bootstrap.min.css → Compiled Bootstrap CSS

├── /js/

│ └── bootstrap.bundle.min.js → Compiled JS (includes Popper)

├── /icons/

### │ └── bootstrap-icons.css → Icon styles (if included) Exercise 2.2: Include Bootstrap's JS Plugins <script src="js/bootstrap.bundle.min.js"></script> Exercise 3.1: 3-column layout

html

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<div class="container">

<div class="row">

<div class="col-12 col-md-6 col-lg-4">Column 1</div>

<div class="col-12 col-md-6 col-lg-4">Column 2</div>

<div class="col-12 col-md-6 col-lg-4">Column 3</div>

</div>

</div>

**Exercise 3.2: Use container, row, col**html

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<div class="container">

<div class="row">

<div class="col-12 col-md-6 col-lg-4">Column 1</div>

<div class="col-12 col-md-6 col-lg-4">Column 2</div>

<div class="col-12 col-md-6 col-lg-4">Column 3</div>

</div>

</div>

**Exercise 4.1: Sidebar + Content**<div class="container">

<div class="row">

<div class="col-md-3 bg-light">Sidebar</div>

<div class="col-md-9">Main Content</div>

</div>

</div>  
  
**Exercise 4.2: Four equal columns**<div class="container">

<div class="row">

<div class="col-sm-3">A</div>

<div class="col-sm-3">B</div>

<div class="col-sm-3">C</div>

<div class="col-sm-3">D</div>

</div>

</div>  
  
  
**Exercise 5.1: Center content**<div class="row justify-content-center align-items-center" style="height:200px;">

<div class="col-4 bg-info">Centered Box</div>

</div>  
  
 **Exercise 5.2: Reorder columns**<div class="row">

<div class="col-md-6 order-md-2 bg-warning">Second on Desktop</div>

<div class="col-md-6 order-md-1 bg-primary text-white">First on Desktop</div>

</div>  
  
  
**Exercise 6.1: Responsive Navbar**

<div class="d-flex flex-column flex-md-row bg-light p-2">

<div class="p-2">Logo</div>

<div class="p-2">Home</div>

<div class="p-2">About</div>

</div> **Exercise 6.2: Card layout**<div class="card d-flex flex-row justify-content-between align-items-center p-3">

<div>Title</div>

<div>Icon</div>

</div>  
  
**Exercise 7.1: Typography utilities**<h1 class="display-1">Display 1</h1>

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

<p class="text-muted">Muted text</p>

<p class="fw-bold">Bold text</p>

**Exercise 7.2: Text transform**<p class="text-uppercase">uppercase text</p>

<p class="text-lowercase">LOWERCASE TEXT</p>

<p class="text-capitalize">capitalize each word</p>

**Exercise 8.1: Registration form**

<form>

<input type="text" class="form-control mb-2" placeholder="Name">

<div class="form-check">

<input class="form-check-input" type="checkbox" value="" id="check1">

<label class="form-check-label" for="check1">Subscribe</label>

</div>

<div class="input-group my-2">

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

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

</div>

</form>  
  
**Exercise 8.2: Login form with form-floating**  
<div class="form-floating mb-3">

<input type="email" class="form-control" id="floatingInput" placeholder="name@example.com">

<label for="floatingInput">Email address</label>

</div>

**Exercise 9.1: Buttons**

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

<button class="btn btn-outline-success">Outline Success</button>

**Exercise 9.2: Button groups and toggles**

<div class="btn-group">

<button class="btn btn-secondary">Left</button>

<button class="btn btn-secondary">Right</button>

</div>

<div class="btn-group" role="group">

<input type="checkbox" class="btn-check" id="btncheck1" autocomplete="off">

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

</div>

**Exercise 10.1: Navbar**

<nav class="navbar navbar-expand-lg navbar-light bg-light">

<a class="navbar-brand" href="#">Logo</a>

<div class="collapse navbar-collapse">

<ul class="navbar-nav me-auto">

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

</ul>

<form class="d-flex">

<input class="form-control me-2" type="search" placeholder="Search">

</form>

</div>

</nav>

**Exercise 10.2: Tabs and pills**

<ul class="nav nav-tabs">

<li class="nav-item">

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

</li>

</ul>

<ul class="nav nav-pills mt-2">

<li class="nav-item">

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

</li>

</ul>

**Exercise 11.1: Profile card**

<div class="card" style="width: 18rem;">

<img src="profile.jpg" class="card-img-top" alt="...">

<div class="card-body">

<h5 class="card-title">User Name</h5>

<p class="card-text">Profile description.</p>

</div>

</div>

**Exercise 11.2: Media object**

<div class="d-flex">

<img src="img.jpg" class="me-3" style="width:64px;" alt="">

<div><h5>Heading</h5>

<p>Content beside image.</p>

</div>

</div>

### Exercise 12.1: Margins and padding

### <div class="m-3 p-2 bg-light">Box with margin 3 and padding 2</div>

### Exercise 12.2: Pricing section

### <div class="p-5 m-3 bg-info text-white text-center">

### <h2>$29/month</h2>

### </div>

### Exercise 13.1: Dashboard

### <div class="bg-primary text-white p-3">Primary Section</div>

### <div class="bg-warning p-3">Warning Section</div>

### Exercise 13.2: Gradient

### <div class="bg-dark bg-gradient text-white p-4">Dark Gradient</div>

### Exercise 14.1: Show/Hide <div class="d-none d-md-block">Visible on medium and up</div>

### Exercise 14.2: Responsive Sidebar

### <div class="d-none d-md-block bg-secondary text-white p-3">Sidebar</div>

### Exercise 15.1: Border utilities <img src="profile.jpg" class="border border-primary border-3 rounded-circle" style="width:100px;">

### Exercise 15.2: Shadow

### <div class="card shadow-lg rounded-pill p-3">Shadow Card</div>

### Exercise 16.1: Fixed footer

### <div class="position-fixed bottom-0 bg-dark text-white w-100 text-center p-2">Footer</div>

### Exercise 16.2: Badge overlay

### <div class="position-relative d-inline-block">

### <img src="product.jpg" style="width:200px;">

### <span class="position-absolute top-0 start-100 translate-middle badge rounded-pill bg-danger">New</span>

### </div>

### Exercise 17.1: Social icons

### <link href="https://cdn.jsdelivr.net/npm/bootstrap-icons/font/bootstrap-icons.css" rel="stylesheet">

### <i class="bi bi-facebook"></i>

### Exercise 17.2: Icon-only button

### <button class="btn btn-primary"><i class="bi bi-house"></i></button>

### Exercise 18.1: Modal

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

### <div class="modal fade" id="exampleModal">

### <div class="modal-dialog">

### <div class="modal-content p-3">Modal Content</div>

### </div>

### </div>

### Exercise 18.2: Accordion

### <div class="accordion" id="accordionExample">

### <div class="accordion-item">

### <h2 class="accordion-header">

### <button class="accordion-button" type="button" data-bs-toggle="collapse" data-bs-target="#collapseOne">Item #1</button>

### </h2>

### <div id="collapseOne" class="accordion-collapse collapse show">

### <div class="accordion-body">Content 1</div>

### </div>

### </div>

### </div>

### Exercise 19.1: Sass project with npm

npm install bootstrap

**Sass Structure:**

/scss/

└── custom.scss

**custom.scss**

@import "node\_modules/bootstrap/scss/bootstrap";

### Exercise 19.2: Customize colors

**\_variables.scss**

$primary: #ff5722;

$border-radius: 1.5rem;

**Then import it before Bootstrap:**

@import "variables";

@import "bootstrap";

Then compile with:

sass scss/custom.scss css/custom.css