

Bootstrap

1. What is Bootstrap?

Bootstrap is just one of the common front-end frameworks that come in handy when developing responsive web sites that are mobile-first in nature and are built within a very short time.

It includes built-in CSS classes, and JavaScript elements and therefore you do not need to develop everything in JavaScript.

Its history goes back to 2011 when Twitter engineers built it, but currently, it has become open-source libraries and appears as a wide-spread tool.

2. Why Bootstrap?

Accelerates the process of development: there is no necessity to code layouts and elements of the user interface.

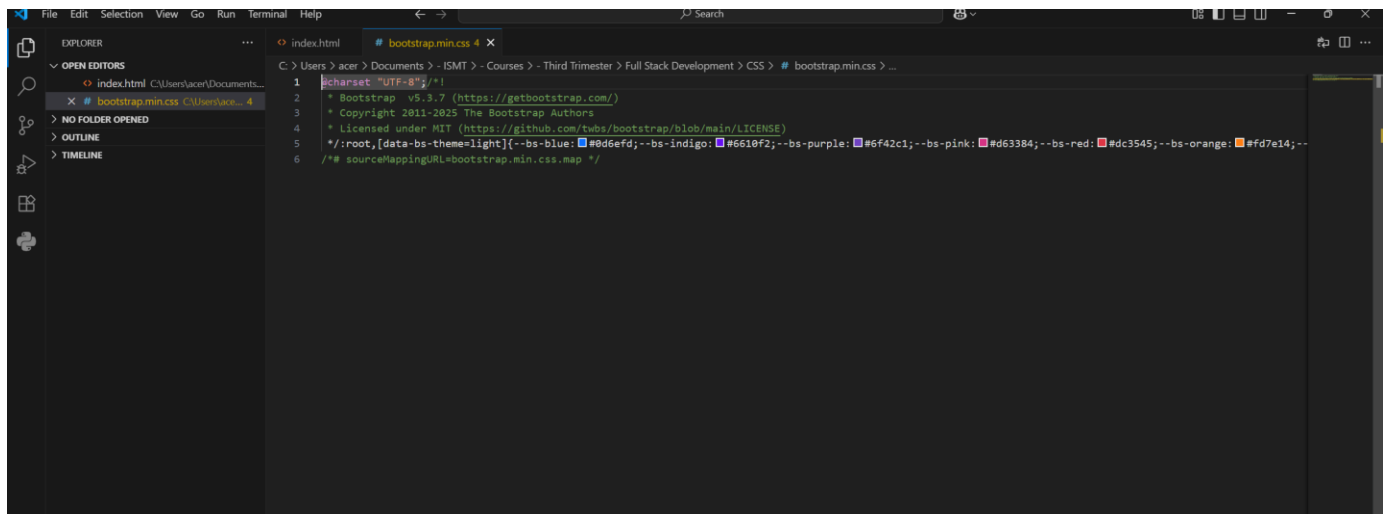
Built-in responsive design-works automatically on various screen sizes.

Uniform appearance- employs regular design language.

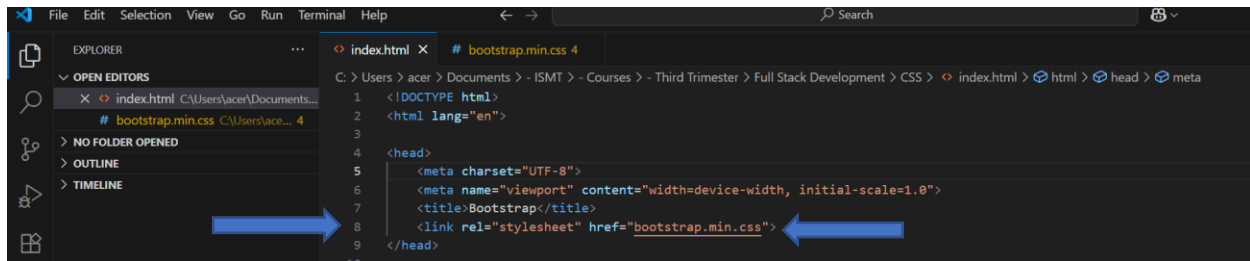
Cross-browser compatible- works very well on all the main browsers.

3. How Bootstrap Works:

We need to link the bootstrap CSS and JavaScript files.



So, here I link it, you can see in the line 8.

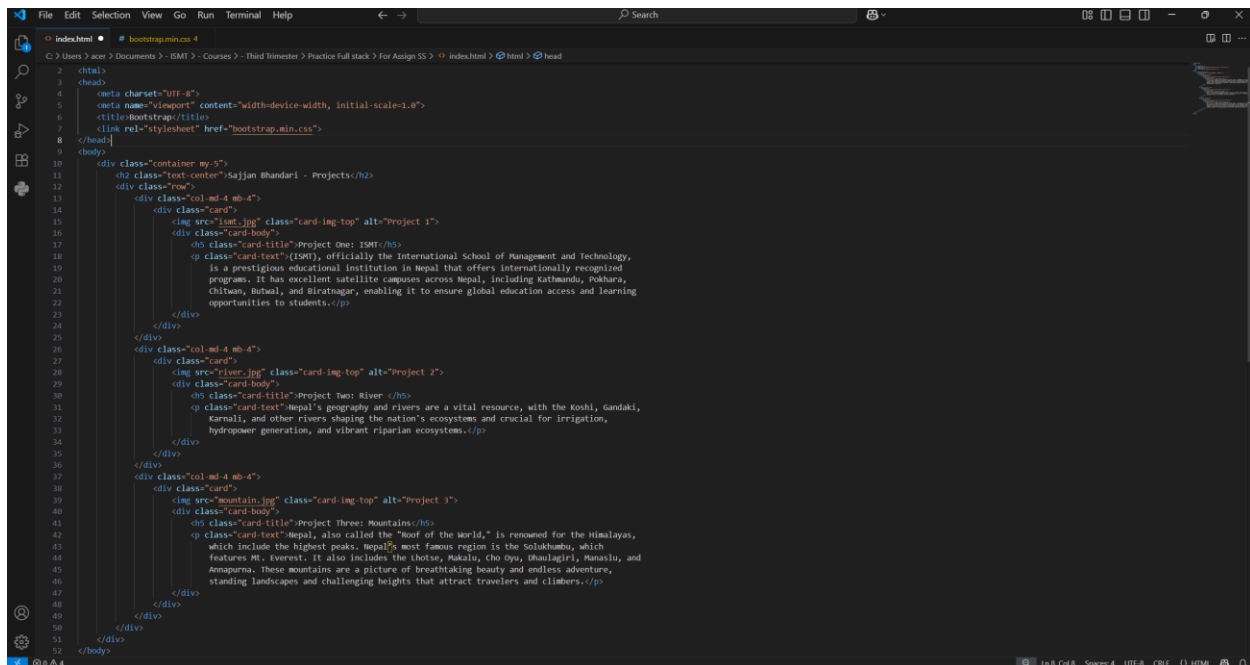


4. Bootstrap Grid System

The grid system is Bootstrap's core layout tool.


- A page is divided into 12 columns.
- You create layouts using rows and columns.
- Responsive classes adjust layout based on screen size:
 - col- → Extra small (mobile)
 - col-sm- → Small devices ($\geq 576\text{px}$)
 - col-md- → Medium ($\geq 768\text{px}$)
 - col-lg- → Large ($\geq 992\text{px}$)
 - col-xl- → Extra-large ($\geq 1200\text{px}$)

5. Examples:




Here is the output:

Sajjan Bhandari - Projects




Project One: ISMT

(ISMT), officially the International School of Management and Technology, is a prestigious educational institution in Nepal that offers internationally recognized programs. It has excellent satellite campuses across Nepal, including Kathmandu, Pokhara, Chitwan, Butwal, and Biratnagar, enabling it to ensure global education access and learning opportunities to students.



Project Two: River

Nepal's geography and rivers are a vital resource, with the Koshi, Gandaki, Karnali, and other rivers shaping the nation's ecosystems and crucial for irrigation, hydropower generation, and vibrant riparian ecosystems.



Project Three: Mountains

Nepal, also called the "Roof of the World," is renowned for the Himalayas, which include the highest peaks. Nepal's most famous region is the Solukhumbu, which features Mt. Everest. It also includes the Lhotse, Makalu, Cho Oyu, Dhaulagiri, Manaslu, and Annapurna. These mountains are a picture of breathtaking beauty and endless adventure, standing landscapes and challenging heights that attract travelers and climbers.

Another Examples Using Bootstrap:

```
File Edit Selection View Go Run Terminal Help
index.html
C:\Users> cd C:\Users> Documents - ISMT - Courses - Third Trimester > Practice Full stack > For Assign SS > index.html > html > body
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>Bootstrap Example</title>
8   <!-- Bootstrap CSS -->
9   <link href="https://cdn.jsdelivr.net/npm/bootstrap@3.2/dist/css/bootstrap.min.css" rel="stylesheet">
10 </head>
11
12 <body>
13
14 <!-- Navbar -->
15 <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
16   <div class="container">
17     <a class="navbar-brand" href="#">MyWebsite</a>
18     <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarNav">
19       <span class="navbar-toggler-icon"></span>
20     </button>
21     <div class="collapse navbar-collapse" id="navbarNav">
22       <ul class="navbar-nav ms-auto">
23         <li class="nav-item"><a class="nav-link active" href="#">Home</a></li>
24         <li class="nav-item"><a class="nav-link" href="#">About</a></li>
25         <li class="nav-item"><a class="nav-link" href="#">Services</a></li>
26         <li class="nav-item"><a class="nav-link" href="#">Contact</a></li>
27       </ul>
28     </div>
29   </div>
30 </nav>
31
32 <!-- Hero Section -->
33 <div class="bg-light text-center py-5">
34   <h1 class="display-4 fw-bold">Welcome to Bootstrap Example</h1>
35   <p class="lead">A simple responsive layout for assignment demo.</p>
36   <a href="#" class="btn btn-primary btn-lg">Get Started</a>
37 </div>
38
39 <!-- Cards Section -->
40 <div class="container my-5">
41   <div class="row text-center">
42     <div class="col-md-4">
43       <div class="card shadow-sm">
44         <div class="card-body">
45           <h3 class="card-title">Fast</h3>
46           <p class="card-text">Quick to build responsive sites with Bootstrap.</p>
47           <a href="#" class="btn btn-outline-primary">Learn More</a>
48         </div>
49       </div>
50     </div>
51   </div>
52 </div>
```

```
51 <div class="col-md-4">
52 <div class="card shadow-sm">
53 <div class="card-body">
54 <h5 class="card-title">#responsive</h5>
55 <p class="card-text">looks great on desktop, tablet, and mobile.</p>
56 <a href="#" class="btn btn-outline-success">Learn More</a>
57 </div>
58 </div>
59 </div>
60 <div class="col-md-4">
61 <div class="card shadow-sm">
62 <div class="card-body">
63 <h5 class="card-title">#modern</h5>
64 <p class="card-text">Clean design with modern UI components.</p>
65 <a href="#" class="btn btn-outline-danger">Learn More</a>
66 </div>
67 </div>
68 </div>
69 </div>
70 </div>
71
72 <!-- footer -->
73 <footer class="bg-dark text-white text-center py-3">
74 <p class="mb-0">©2025 MyWebsite | Built with Bootstrap</p>
75 </footer>
76
77 <!-- Bootstrap JS -->
78 <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/js/bootstrap.bundle.min.js"></script>
79 </body>
80 </html>
```

Output:

