BootStrap

- ## INTRODUCTION

What is BootStrap?

Bootstrap is the most popular **CSS Framework** for developing responsive and mobile-first websites.
It is a free, open source front-end development framework for the creation of websites and web apps.
It provides a collection of pre-designed HTML, CSS, and JavaScript components, such as navigation bars, buttons, forms, modals, and more, that can be easily incorporated into a project.
It also has browser compatibility for supported browsers.

Where to code ?

Visual Studio Code is a source code editor developed by Microsoft.

Advantages of BootStrap:

1. It has a Mobile First approach
   The developers are encouraged to prioritize mobile compatibility and then work on larger screens. Thus, leading to faster website loading on mobile devices.
1. Rich Library
   Bootstrap has a very rich library where numerous pre-designed components are available including bars, buttons, forms, etc.
1. Customizable
   While Bootstrap offers default design, it is highly customizable in terms of colour, topography, spacing and other elements. In addition, SASS (Syntactically Awesome Stylesheets) can be used to further customize Bootstrap.
1. Cross Browser

Bootstrap can run equally well on variety of platforms. This compatibility ensures a more consistent user experience across different browser environments.

1. Grid System

   Bootstrap provides a grid system that helps to simplify the layout of your website.

1. Rapid Prototyping

   Interactive prototypes with functionality can be easily created with the help of Bootstrap's components and grid system.

1. JavaScript Plugins

   It includes various JavaScript plugins such as tooltips and modals that increase the interactivity and functionality of the website.

Disadvantages of BootStrap:

1. Extra Code

   Bootstrap includes a lot of JavaScript and CSS codes and for the user to excess on a small feature might end up in having unnecessary code affecting page loads.

1. Override Issues

   Customizing Bootstrap styles might override with the default styles and this might lead to CSS specificity conflicts.

1. Lack of Uniqueness

   Websites are similar as Bootstrap is extensively used to design websites.

1. Version Updates

   Because of extensive version updates, code might have to changed according to the availability of different features .
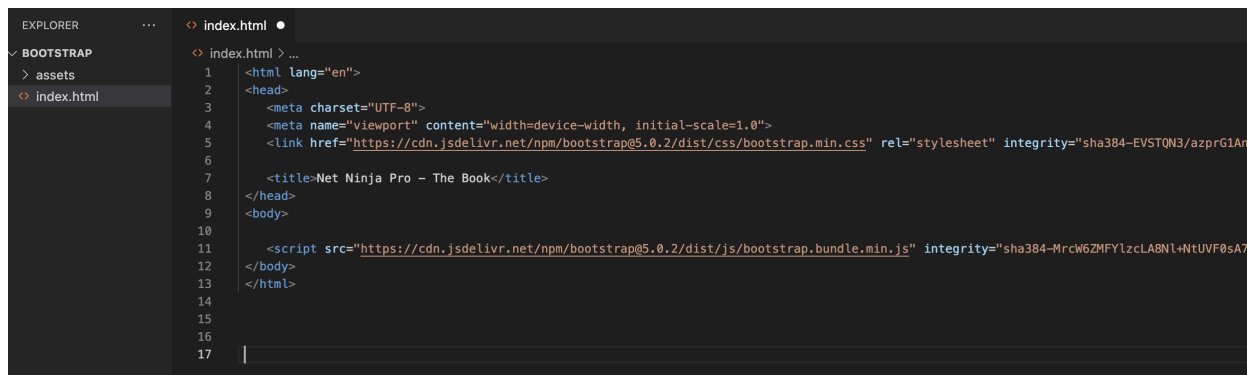
- BootStrap DOWNLOAD

   Visual Studio Code Download

- Getting Started with Bootstrap

   12. Include Bootstrap files
      - Open VS Code
      - Create an empty folder
      - Create a file called index.html in this above folder. (In this file type doc and press enter to initialize the file.)
      - Adding the Bootstrap framework to the webpage:
         CDN is used in this project.
         CDN Link
         (Copy and paste the CDN links in the head and take the JavaScript and paste it at the bottom of the body.)
      - Download the extension "Live Server".

```
EXPLORER                  ···    <> index.html  ●

∨ BOOTSTRAP                       <> index.html > ...
  > assets                        1    <html lang="en">
  <> index.html                   2    <head>
                                  3      <meta charset="UTF-8">
                                  4      <meta name="viewport" content="width=device-width, initial-scale=1.0">
                                  5      <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-EVSTQN3/azprG1An
                                  6
                                  7      <title>Net Ninja Pro - The Book</title>
                                  8    </head>
                                  9    <body>
                                  10
                                  11     <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js" integrity="sha384-MrcW6ZMFYlzcLA8Nl+NtUVF0sA7
                                  12   </body>
                                  13   </html>
                                  14
                                  15
                                  16
                                  17   |
```

   12. Grid System
      When you create a grid it goes inside a container.
      Bootstrap's grid system uses a 12 column layout. (i.e all the columns add up to 12)

```
<div class="container-lg my-5">
<h2>basic grid</h2>
<div class="row">
<div class="col">
<div class="p-5 bg-primary text-light">col 1</div>
</div>
<div class="col">
<div class="p-5 bg-primary text-light">col 2</div>
</div>
<div class="col">
```

```
<div class="p-5 bg-primary text-light">col 3</div>
</div>
</div>
</div>
```


- # Bootstrap Components
  - ## Buttons
    The base class added to all buttons is "btn".
    The basic buttons can be customized by adding colours to the
    buttons or changing their sizes, etc.

```
#Primary coloured button
<button class="btn btn-primary">primary button</button>
```



```
#Large Button
<button class="btn btn-lg btn-danger">large danger button</button>
//Can be written as button.btn.btn-lg.btn-danger and then pressing enter
```


  - ## Utilities Classes
    It has a lot of components but few include font weight and box
    shadow components.

```
#Box Shadow
<div class="m-3 p-3 shadow">element with a medium box shadow</div>
```

element with a medium box shadow

```
#Font Weight
<p class="fw-bold">bold text</p>
```

bold text

- Page Layout
  - Containers

    Containers are fundamental building blocks of Bootstrap that contain, pad and align your content with a given device or viewport.
    Required while using the Bootstrap grid system.
    (The alignment of the text i.e the container changes as the size of the window changes so as to maintain central alignment.)

```
<div class="container my-5">
<h2>normal container</h2>
<p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Facere laborum
repudiandae doloribus accusamus eos quaerat aperiam rem temporibus magni saepe est
officiis incidunt dignissimos, ipsa minus molestias optio perspiciatis ipsum!</p>
</div>
```

normal container

Lorem ipsum dolor sit amet consectetur adipisicing elit. Facere laborum repudiandae doloribus accusamus eos quaerat aperiam rem temporibus magni saepe est officiis incidunt dignissimos, ipsa minus molestias optio perspiciatis ipsum!

- Forms

  Bootstrap provides styles for form controls like input fields, text areas, and buttons.

```
<form>
<div class="form-group">
```

```
<label for="username">Username</label>
<input type="text" class="form-control" id="username" placeholder="Enter your username">
</div>
<div class="form-group">
<label for="password">Password</label>
<input type="password" class="form-control" id="password" placeholder="Enter your password">
</div>
<button type="submit" class="btn btn-primary">Submit</button>
</form>
```

Username

Enter your username

Password

Enter your password

Submit

- ○ NavBars

  Create navigation bars using the '.navbar' class.

  Add menu items using 'navbar-nav'

```
<nav class="navbar navbar-expand-lg navbar-light bg-light">
<a class="navbar-brand" href="#">
<span class="fw-bold text-secondary">ACM-W BPDC</span></a>
<button class="navbar-toggler" type="button" data-toggle="collapse" data-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 ml-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>
<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>
</nav>
```

ACM-W BPDC   Home About Services Contact

- ○ Cards

  Cards are versatile containers for displaying content.

  Use ".card" to create a card container.

```
<div class="card m-5" style="width: 18rem;">
<img src="acmwlogo.png">
<div class="card-body">
<h5 class="card-title">ACM-W BPDC </h5>
<p class="card-text">Association for Computing Machinery Women chapter (ACM-W) is
here for the betterment of women in computing.</p>
<a href="#" class="btn btn-primary">Learn More</a>
</div>
</div>
```

ACM-W BPDC

Association for Computing
Machinery Women chapter (ACM-
W) is here for the betterment of
women in computing.

Learn More

○ Modal Dialogs

Modals are pop-up dialogs for displaying additional content.
Create modals using .modal and trigger them with JavaScript.

```
<button type="button" class="btn btn-primary" data-bs-toggle="modal" data-bs-
target="#exampleModal">
Open Modal
</button>
<div class="modal fade" id="exampleModal" tabindex="-1" aria-labelledby="modal-
title" aria-hidden="true">
<div class="modal-dialog">
<div class="modal-content">
<div class="modal-header">
<h5 class="modal-title" id="modal-title">
Get the Latest Updates</h5>
<button tvpe="button" class="btn-close" data-bs-dismiss="modal" aria-label="close">
</button>
</div>
<div class="modal-body">
<p>Lorem ipsum dolor sit amet consectetur, adipisicing elit. Corrupti cupiditate
quis voluptate facere iure. Soluta accusantium praesentium ex similique explicabo,
```

```
facere minima eos est temporibus rem in esse beatae delectus!</p>
<label for="modal-email" class="form-label">Your email address</label>
<input type="text" class="form-control" id="modal-email"
placeholder="e.g.mario@example.com">
</div>
<div class="modal-footer">
<button class="btn btn-primary">Submit</button>
</div>
</div>
</div>
</div>
```


- ## PROJECT INTRODUCTION

    This project is a sample website for ACM-W BPDC. This website highlights various features of Bootstrap.

- ## PROJECT CODE

```html
<!-- index.html -->

<html lang="en">
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>ACM-W BPDC </title>
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.1/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
+0n0xVW2eSR5OomGNYDnhzAbDsOXxcvSN1TPprVMTNDbiYZCxYbOOl7+AMvyTG2x"
crossorigin="anonymous">
<link rel="stylesheet" href="style.css">
<style>
section{
padding: 60px 0;
}
</style>
</head>
<body>

<!-- navbar -->
<nav class="navbar navbar-expand-md navbar-light pt-5 pb-4">
<div class="container-xxl">
<!-- navbar brand / title -->
<a class="navbar-brand" href="#intro">
<span class="text-secondary fw-bold">
ACM-W BPDC
</span>
</a>
<!-- toggle button for mobile nav -->
<button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-
target="#main-nav" aria-controls="main-nav" aria-expanded="false" aria-label="Toggle
navigation">
<span class="navbar-toggler-icon"></span>
</button>

<!-- navbar links -->
<div class="collapse navbar-collapse justify-content-end align-center" id="main-
nav">
<ul class="navbar-nav">
<li class="nav-item">
```

```html
<a class="nav-link" href="#topics">About </a>
</li>
<li class="nav-item">
<a class="nav-link" href="#reviews">Reviews</a>
</li>
<li class="nav-item">
<a class="nav-link" href="#contact">Get in Touch</a>
</li>
<li class="nav-item d-md-none">
<a class="nav-link" href="#pricing">Membership</a>
</li>
<li class="nav-item ms-2 d-none d-md-inline">
<a class="btn btn-secondary" href="#pricing">Enroll Now</a>
</li>
</ul>
</div>
</div>
</nav>

<!-- main image & intro text -->
<section id="intro">
<div class="container-lg">
<div class="row g-4 justify-content-center align-items-center">
<div class="col-md-5 text-center text-md-start">
<h1>
<div class="display-2 text-pink-600">Advancing Women</div>
<div class="display-2">In Computing</div>
<div class="display-5 text-muted">Register for ACM-W Now!</div>
</h1>
<p class="lead my-4 text-dark">Access to special interest AI
and Competitive
Programming Groups</p>
<a href="#pricing" class="btn btn-secondary btn-lg">Enroll Now</a>
</div>
<div class="col-md-5 text-center d-none d-md-block">
<img src="/assets/acmwlogo.png" class="img-fluid" alt="ebook">
</div>
</div>
</div>
</section>

<!-- pricing plans -->
<section id="pricing" class="bg-light mt-5">
<div class="container-lg">
<div class="text-center">
<h2>Membership Plans</h2>
<p class="lead text-muted">Avail our GROUP discounts and join with your friends.</p>
```

```
</div>

<div class="row my-5 g-0 align-items-center justify-content-center">
<div class="col-8 col-lg-4 col-xl-3">
<div class="card border-0">
<div class="card-body text-center py-4">
<h4 class="card-title">3 Members</h4>
<p class="lead card-subtitle"></p>
<p class="display-5 my-4 text-primary fw-bold">35 AED</p>
<p class="card-text mx-5 text-muted d-none d-lg-block">Total for 3 members = 105
AED</p>
<a href="#" class="btn btn-outline-primary btn-lg mt-3">
Avail Now!
</a>
</div>
</div>
</div>

<div class="col-9 col-lg-4">
<div class="card border-primary border-2">
<div class="card-header text-center text-primary">Most Popular</div>
<div class="card-body text-center py-5">
<h4 class="card-title">5 Members</h4>
<p class="lead card-subtitle"></p>
<p class="display-4 my-4 text-primary fw-bold">33 AED</p>
<p class="card-text mx-5 text-muted d-none d-lg-block">Total for 5 members = 165
AED</p>
<a href="#" class="btn btn-outline-primary btn-lg mt-3">
Avail Now!
</a>
</div>
</div>
</div>

<div class="col-8 col-lg-4 col-xl-3">
<div class="card border-0">
<div class="card-body text-center py-4">
<h4 class="card-title">7 Members</h4>
<p class="lead card-subtitle"></p>
<p class="display-5 my-4 text-primary fw-bold">30 AED</p>
<p class="card-text mx-5 text-muted d-none d-lg-block">Total for 7 members = 210
AED</p>
<a href="#" class="btn btn-outline-primary btn-lg mt-3">
Avail Now!
</a>
</div>
</div>
```

```html
</div>
</div>

<div class="row my-5 g-0 align-items-center justify-content-center">
<div class="col-8 col-lg-4 col-xl-3">
<div class="card border-0">
<div class="card-body text-center py-4">
<h4 class="card-title">10 Members</h4>
<p class="lead card-subtitle"></p>
<p class="display-5 my-4 text-primary fw-bold">28 AED</p>
<p class="card-text mx-5 text-muted d-none d-lg-block">Total for 3 members = 280
AED</p>
<a href="#" class="btn btn-outline-primary btn-lg mt-3">
Avail Now!
</a>
</div>
</div>
</div>


</div><!-- end container -->
</section>



<!-- topics at a glance -->


<!-- reviews list -->


<!-- contact form -->


<!-- get updates / modal trigger -->

<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.1/dist/js/bootstrap.bundle.min.js"
integrity="sha384-gtEjrD/SeCtmISkJkNUaaKMoLD0//ElJ19smozuHV6z3Iehds+3Ulb9Bn9Plx0x4"
crossorigin="anonymous"></script>
</body>
</html>



<!-- style.css -->
.display-2{
```

```
color:#d81b60;
}

body{
background-color:#fdc5da;
}
```

Advancing Women In Computing

Register for ACM-W Now!

Access to special interest AI and Competitive Programming Groups

Enroll Now

ebook

Membership Plans

Avail our GROUP discounts and join with your friends.

Most Popular

3 Members

35 AED

Total for 3 members = 105 AED

Avail Now!

5 Members

33 AED

Total for 5 members = 165 AED

Avail Now!

7 Members

30 AED

Total for 7 members = 210 AED

Avail Now!

10 Members

28 AED

Total for 3 members = 280 AED

Avail Now!