

# **PRAKTIKUM PEMROGRAMAN FRAMEWORK**

## **MODUL 1 PENGENALAN FRAMEWORK CSS (BOOTSTRAP)**



Disusun Oleh:  
Purnama Anaking, S.Kom., M.Kom.

**PROGRAM STUDI S1 SISTEM INFORMASI  
FAKULTAS TEKNOLOGI INFORMASI DAN BISNIS  
INSTITUT TEKNOLOGI TELKOM SURABAYA  
2023**

# DAFTAR ISI

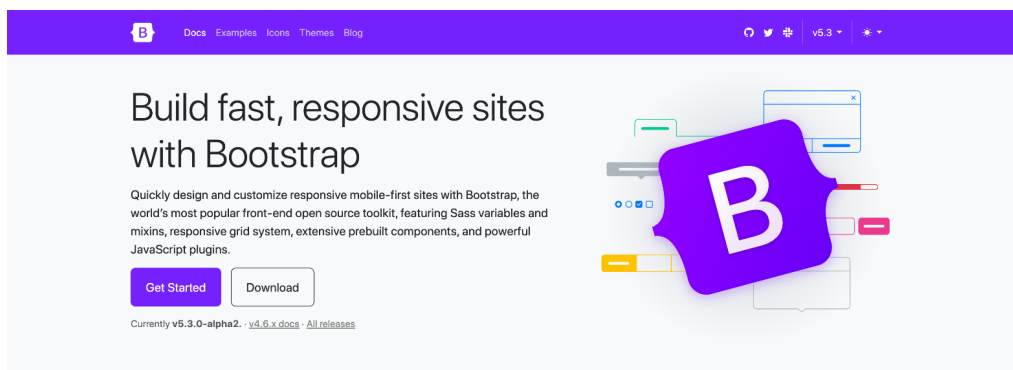
DAFTAR ISI	2
1. Install dan Jalankan Visual Studio Code	4
2. Struktur Direktori	4
3. Struktur Dasar HTML dengan Bootstrap via CDN	5
5. Main Section	8
6. Bootstrap Icons Section	9
7. Bootstrap Themes Section	10
8. Footer Section	11
9. File CSS	12
10. Tugas	13

# MODUL 1

## PENGENALAN FRAMEWORK CSS (BOOTSTRAP)

Pada praktikum kali ini kita akan mulai mempelajari tentang salah satu framework CSS yaitu Bootstrap. Penerapan fitur bootstrap diberikan dan dikemas dalam bentuk studi kasus tertentu. Kegiatan ini dilakukan agar mahasiswa mampu membangun website sederhana dengan memanfaatkan fitur-fitur bootstrap yang ada.

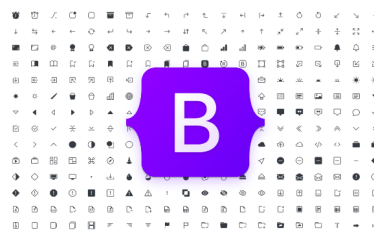
Studi kasus yang diberikan adalah membuat atau meng-cloning website bootstrap menggunakan framework bootstrap. Hasil akhir yang diinginkan adalah sebuah tampilan website seperti di bawah ini.



### Personalize it with Bootstrap Icons

[Bootstrap Icons](#) is an open source SVG icon library featuring over 1,800 glyphs, with more added every release. They're designed to work in any project, whether you use Bootstrap itself or not. Use them as SVGs or icon fonts—both options give you vector scaling and easy customization via CSS.

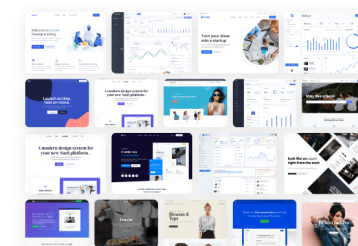
[Get Bootstrap Icons →](#)



### Make it yours with official Bootstrap Themes

Take Bootstrap to the next level with premium themes from the [official Bootstrap Themes marketplace](#). Themes are built on Bootstrap as their own extended frameworks, rich with new components and plugins, documentation, and powerful build tools.

[Browse Bootstrap Themes →](#)



#### Bootstrap

Designed and built with all the love in the world by the Bootstrap team with the help of our contributors.

Code licensed MIT, docs CC BY 3.0.

Currently v5.3.0-alpha2.

#### Links

[Home](#)  
[Docs](#)  
[Examples](#)  
[Icons](#)  
[Themes](#)  
[Blog](#)  
[Swag Store](#)

#### Guides

[Getting started](#)  
[Starter template](#)  
[Webpack](#)  
[Parcel](#)

#### Projects

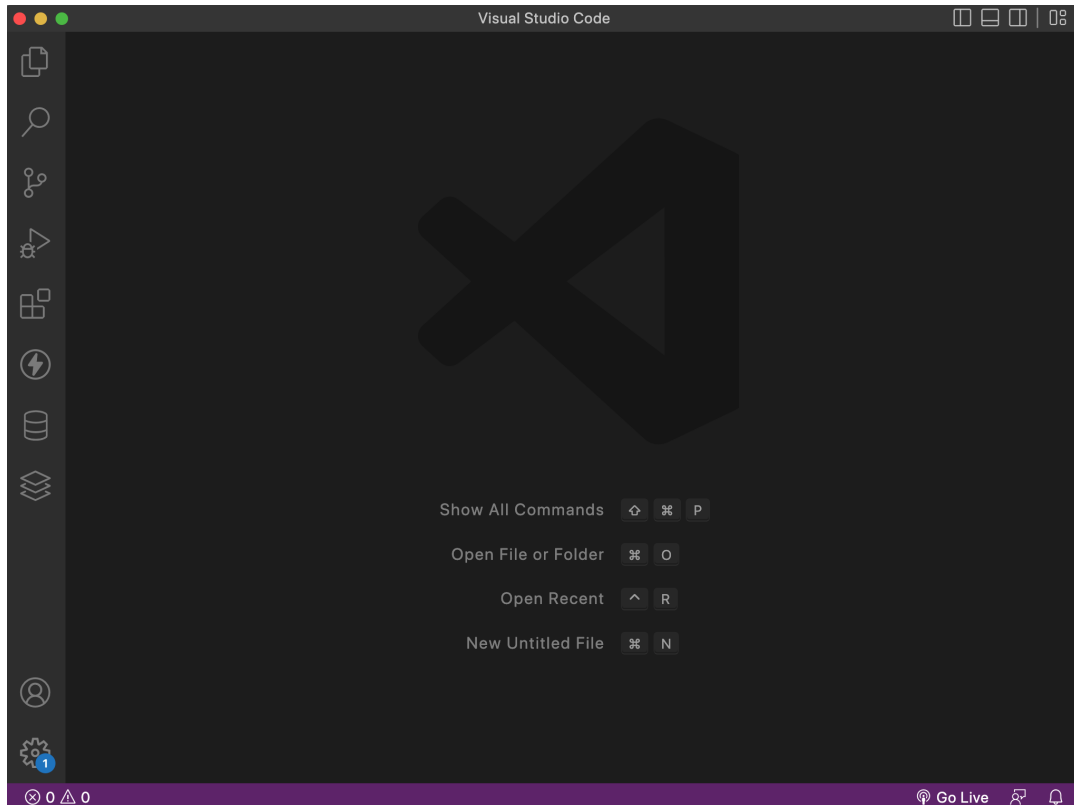
[Bootstrap 5](#)  
[Bootstrap 4](#)  
[Icons](#)  
[RFS](#)  
[npm starter](#)

#### Community

[Issues](#)  
[Discussions](#)  
[Corporate sponsors](#)  
[Open Collective](#)  
[Slack](#)  
[Stack overflow](#)

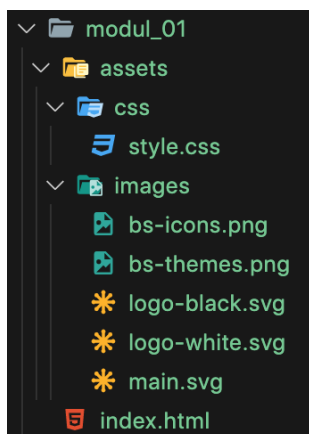
## 1. Install dan Jalankan Visual Studio Code

- Download Visual Studio Code pada link berikut:  
<https://code.visualstudio.com/download>
- Jalankan Visual Studio Code



## 2. Struktur Direktori

- Buat struktur direktori project sesuai dengan gambar di bawah ini.



### 3. Struktur Dasar HTML dengan Bootstrap via CDN

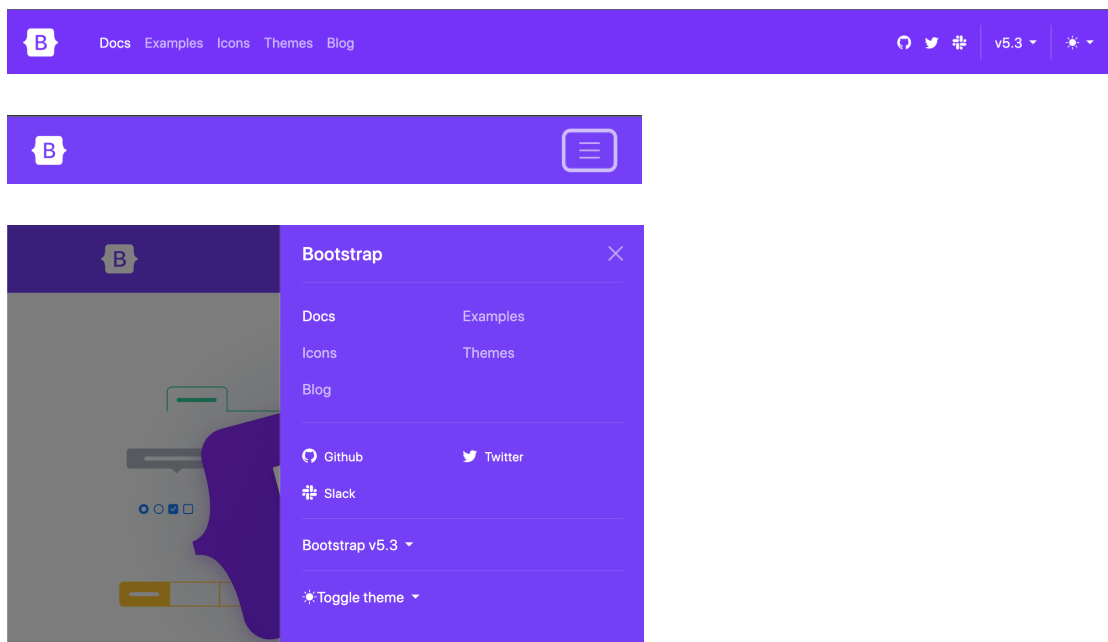
- Buka file index.html, kemudian terapkan kode struktur dasar HTML di bawah ini.

```
<!DOCTYPE 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>Bootstrap Clone</title>
  <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha2/dist/css/bootstrap.min.
css">
  <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap-icons@1.6.0/font/bootstrap-icons.css
">
  <link rel="stylesheet" href="assets/css/style.css">
</head>
<body>

  <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha2/dist/js/bootstrap.bundle
.min.js"></script>
</body>
</html>
```

### 4. Navbar Section

- Praktekkan kode HTML di bawah ini pada file index.html yang telah dibuat. Letakkan di dalam block tag **<body>**.



```

<!-- Navbar -->
<nav class="navbar fixed-top navbar-expand-lg bg-purple" data-bs-theme="dark">
  <!-- Container -->
  <div class="container py-2 px-4">
    <!-- Navbar Brand -->
    <a href="#" class="navbar-brand mb-0 h1">
      
    </a>

    <!-- Navbar Toggler -->
    <button type="button" class="navbar-toggler" data-bs-toggle="offcanvas"
data-bs-target="#offcanvasNavbar">
      <span class="navbar-toggler-icon"></span>
    </button>

    <!-- Offcanvas -->
    <div class="offcanvas offcanvas-end bg-purple" id="offcanvasNavbar">
      <!-- Offcanvas Header -->
      <div class="offcanvas-header pb-0 px-4">
        <h5 class="offcanvas-title text-white"
id="offcanvasNavbarLabel">Bootstrap</h5>
        <button type="button" class="btn-close"
data-bs-dismiss="offcanvas" aria-label="Close"></button>
      </div>

      <!-- Offcanvas Body -->
      <div class="offcanvas-body pt-0 px-4">
        <hr class="d-md-none text-white-50"> <!-- Horizontal Line -->

        <!-- Top Menu -->
        <ul class="navbar-nav flex-row flex-wrap">
          <li class="nav-item col-6 col-md-auto"><a href="#"
class="nav-link active">Docs</a></li>
          <li class="nav-item col-6 col-md-auto"><a href="#"
class="nav-link">Examples</a></li>
          <li class="nav-item col-6 col-md-auto"><a href="#"
class="nav-link">Icons</a></li>
          <li class="nav-item col-6 col-md-auto"><a href="#"
class="nav-link">Themes</a></li>
          <li class="nav-item col-6 col-md-auto"><a href="#"
class="nav-link">Blog</a></li>
        </ul>

        <hr class="d-md-none text-white-50"> <!-- Horizontal Line -->

        <!-- Sosial Media -->
        <ul class="navbar-nav flex-row flex-wrap ms-md-auto">
          <li class="nav-item col-6 col-md-auto">
            <a href="#" class="nav-link active">
              <i class="bi-github"></i><small class="ms-2
d-md-none">Github</small>
            </a>
          </li>
          <li class="nav-item col-6 col-md-auto">
            <a href="#" class="nav-link active">

```

```

                <i class="bi-twitter"></i><small class="ms-2
d-md-none">Twitter</small>
            </a>
        </li>
        <li class="nav-item col-6 col-md-auto">
            <a href="#" class="nav-link active">
                <i class="bi-slack"></i><small class="ms-2
d-md-none">Slack</small>
            </a>
        </li>
        <li class="nav-item col-12 col-lg-auto">
            <div class="vr d-none d-lg-flex h-100 mx-lg-2
text-white"></div>
            <hr class="d-lg-none my-2 text-white-50">
        </li>
        <li class="nav-item">
            <!-- Dropdown -->
            <div class="dropdown" data-bs-theme="light">
                <button type="button" class="btn nav-link text-white
dropdown-toggle" data-bs-toggle="dropdown" aria-expanded="false">
                    <span class="d-lg-none">Bootstrap</span> v5.3
                </button>
                <ul class="dropdown-menu dropdown-menu-end">
                    <li><h6 class="dropdown-header">v5
releases</h6></li>
                        <li><button class="dropdown-item active
bg-purple" type="button"><small>Latest (5.3.x) <i
class="bi-check"></i></small></button></li>
                            <li><button class="dropdown-item"
type="button"><small>v5.2.3</small></button></li>
                                <li><button class="dropdown-item"
type="button"><small>v5.1.3</small></button></li>
                                    <li><button class="dropdown-item"
type="button"><small>v5.0.2</small></button></li>
                                        <li><hr class="dropdown-divider"></li>
                                            <li><h6 class="dropdown-header">Previous
releases</h6></li>
                                                <li><button class="dropdown-item"
type="button"><small>v4.6.x</small></button></li>
                                                    <li><button class="dropdown-item"
type="button"><small>v3.4.1</small></button></li>
                                                        <li><button class="dropdown-item"
type="button"><small>v2.3.2</small></button></li>
                                                            <li><hr class="dropdown-divider"></li>
                                                                <li><button class="dropdown-item"
type="button"><small>All versions</small></button></li>
                                                                    </ul>
                                                                </div>
                                                            </li>
                <li class="nav-item col-12 col-lg-auto">
                    <div class="vr d-none d-lg-flex h-100 mx-lg-2
text-white"></div>
                    <hr class="d-lg-none my-2 text-white-50">
                </li>
                <li class="nav-item">
                    <!-- Dropdown -->

```

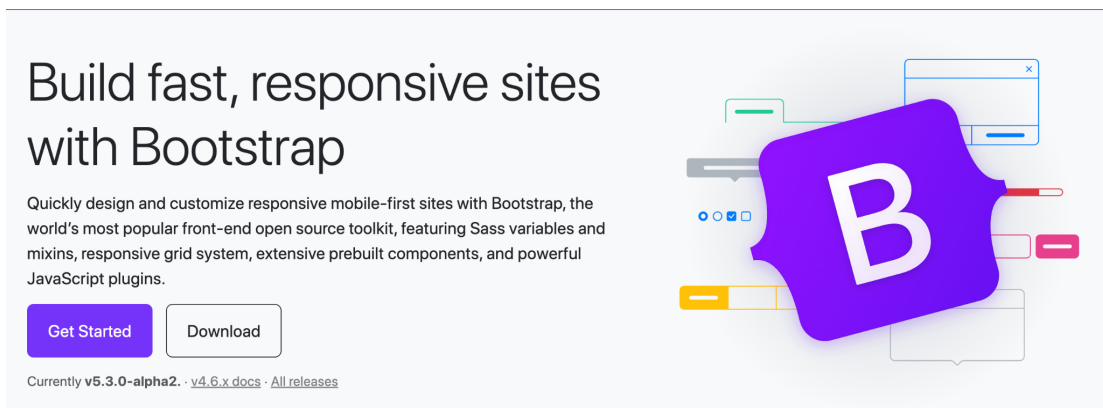
```

        <div class="dropdown" data-bs-theme="light">
            <button type="button" class="btn nav-link text-white
dropdown-toggle" data-bs-toggle="dropdown" aria-expanded="false">
                <i class="bi-brightness-high-fill"></i><span
class="d-lg-none">Toggle theme</span>
            </button>
            <ul class="dropdown-menu dropdown-menu-end">
                <li><button class="dropdown-item active
bg-purple" type="button"><small><i class="bi-brightness-high-fill
me-2"></i>Light</small></button></li>
                <li><button class="dropdown-item"
type="button"><small><i class="bi-moon-stars-fill
me-2"></i>Dark</small></button></li>
                <li><button class="dropdown-item"
type="button"><small><i class="bi-circle-half
me-2"></i>Auto</small></button></li>
            </ul>
        </div>
    </li>
</ul>
</div>
</div>
</div>
</nav>

```

## 5. Main Section

- Praktekkan kode HTML di bawah ini pada file index.html yang telah dibuat. Letakkan di dalam block tag **<body>**.



```

<!-- Main -->
<div class="bg-light mt-5" id="main">
    <!-- Container -->
    <div class="container py-5 px-4">
        <div class="row">
            <div class="col-md-5 order-md-2">
                
            </div>
            <div class="col-md-7 order-md-1">

```



```

        <h1 class="mt-4 display-3">Build fast, responsive sites with
Bootstrap</h1>
        <p class="fs-5 mt-3">Quickly design and customize responsive
mobile-first sites with Bootstrap, the world's most popular front-end open source
toolkit, featuring Sass variables and mixins, responsive grid system, extensive
prebuilt components, and powerful JavaScript plugins.</p>
        <div class="row">
            <div class="d-flex flex-column flex-md-row">
                <button type="button" class="btn bg-purple text-white
btn-lg mb-3 me-md-3 px-4 py-3">Get Started</button>
                <button type="button" class="btn btn-outline-dark btn-lg
mb-3 px-4 py-3">Download</button>
            </div>
        </div>
        <div class="text-muted">
            Currently <strong>v5.3.0-alpha2.</strong> · <a
href="#">v4.6.x docs</a> · <a href="#">All releases</a>
        </div>
    </div>
</div>
</div>
</div>
</div>

```

## 6. Bootstrap Icons Section

- Praktekkan kode HTML di bawah ini pada file index.html yang telah dibuat. Letakkan di dalam block tag **<body>**.



### Personalize it with Bootstrap Icons

[Bootstrap Icons](#) is an open source SVG icon library featuring over 1,800 glyphs, with more added every release. They're designed to work in any project, whether you use Bootstrap itself or not. Use them as SVGs or icon fonts—both options give you vector scaling and easy customization via CSS.

[Get Bootstrap Icons](#) →



```

<!-- Bootstrap Icons -->
<div id="bs-icons">
    <!-- Container -->
    <div class="container py-5 px-4">
        <div class="row">
            <div class="col-lg-6">
                <div class="mb-3">
                    <i class="bi bi-subtract fs-2 bg-warning py-2 px-3 rounded-3
text-white"></i>
                </div>
                <h2 class="display-5 mb-3">Personalize it with <br/>Bootstrap
Icons</h2>
                <p class="fs-5"><a href="#">Bootstrap Icons</a> is an open source

```

SVG icon library featuring over 1,800 glyphs, with more added every release. They're designed to work in any project, whether you use Bootstrap itself or not. Use them as SVGs or icon fonts--both options give you vector scaling and easy customization via CSS.

```
<a class="icon-link icon-link-hover lead fw-semibold mb-5"
href="#">
    Get Bootstrap Icons
    <i class="bi bi-arrow-right mb-2"></i>
</a>
</div>
<div class="col-lg-6">
    
</div>
</div>
</div>
</div>
```

## 7. Bootstrap Themes Section

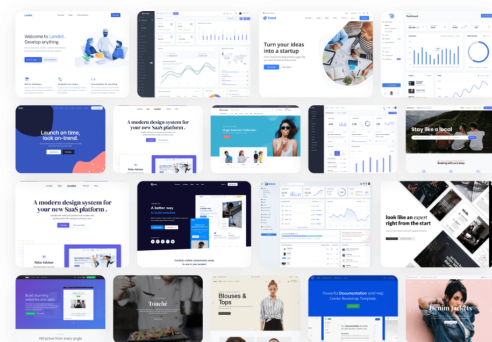
- Praktekkan kode HTML di bawah ini pada file index.html yang telah dibuat. Letakkan di dalam block tag **<body>**.



### Make it yours with official Bootstrap Themes

Take Bootstrap to the next level with premium themes from the [official Bootstrap Themes marketplace](#). Themes are built on Bootstrap as their own extended frameworks, rich with new components and plugins, documentation, and powerful build tools.

[Browse Bootstrap Themes](#) →



```
<!-- Bootstrap Official Themes -->
<div id="bs-themes">
    <!-- Container -->
    <div class="container py-5 px-4">
        <div class="row">
            <div class="col-lg-6">
                <div class="mb-3 mt-5">
                    <i class="bi bi-droplet-fill fs-2 bg-info py-2 px-3 rounded-3
text-white"></i>
                </div>
                <h2 class="display-5">Make it yours with official Bootstrap
Themes</h2>
                <p class="fs-5">Take Bootstrap to the next level with premium
themes from the <a href="#">official Bootstrap Themes marketplace</a>. Themes are
built on Bootstrap as their own extended frameworks, rich with new components and
plugins, documentation, and powerful build tools.</p>
                <a class="icon-link icon-link-hover lead fw-semibold mb-5"
href="#">
```

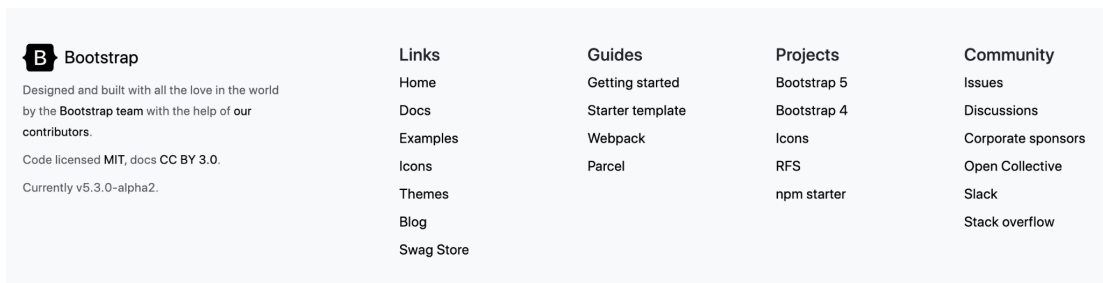
```

        Browse Bootstrap Themes
        <i class="bi bi-arrow-right mb-2"></i>
      </a>
    </div>
  </div>
  <div class="col-lg-6">
    
  </div>
</div>
</div>
</div>

```

## 8. Footer Section

- Praktekkan kode HTML di bawah ini pada file index.html yang telah dibuat. Letakkan di dalam block tag **<body>**.



```

<!-- Footer -->
<div id="footer" class="bg-light py-5">
  <!-- Container -->
  <div class="container py-5 px-4">
    <div class="row">
      <div class="col-lg-3 mb-5">
        <a href="#" class="logo text-decoration-none">
          <div class="d-flex">
            
            <div class="fs-5 ms-2 text-black">Bootstrap</div>
          </div>
        </a>
        <div class="mt-2 text-muted">
          <small>Designed and built with all the love in the world by
the <a href="#" class="text-black">Bootstrap team</a> with the help of <a
href="#" class="text-black">our contributors</a>.</small>
        </div>
        <div class="mt-2 text-muted">
          <small>Code licensed <a href="#" class="text-black">MIT</a>,
docs <a href="#" class="text-black">CC BY 3.0</a>.</small>
        </div>
        <div class="mt-2 text-muted">
          <small>Currently v5.3.0-alpha2.</small>
        </div>
      </div>
      <div class="col-6 col-lg-2 offset-lg-1 mb-5">

```

```

<h5>Links</h5>
<ul class="list-unstyled">
  <li class="mb-2"><a href="#">Home</a></li>
  <li class="mb-2"><a href="#">Docs</a></li>
  <li class="mb-2"><a href="#">Examples</a></li>
  <li class="mb-2"><a href="#">Icons</a></li>
  <li class="mb-2"><a href="#">Themes</a></li>
  <li class="mb-2"><a href="#">Blog</a></li>
  <li class="mb-2"><a href="#">Swag Store</a></li>
</ul>
</div>
<div class="col-6 col-lg-2 mb-5">
  <h5>Guides</h5>
  <ul class="list-unstyled">
    <li class="mb-2"><a href="#">Getting started</a></li>
    <li class="mb-2"><a href="#">Starter template</a></li>
    <li class="mb-2"><a href="#">Webpack</a></li>
    <li class="mb-2"><a href="#">Parcel</a></li>
  </ul>
</div>
<div class="col-6 col-lg-2 mb-5">
  <h5>Projects</h5>
  <ul class="list-unstyled">
    <li class="mb-2"><a href="#">Bootstrap 5</a></li>
    <li class="mb-2"><a href="#">Bootstrap 4</a></li>
    <li class="mb-2"><a href="#">Icons</a></li>
    <li class="mb-2"><a href="#">RFS</a></li>
    <li class="mb-2"><a href="#">npm starter</a></li>
  </ul>
</div>
<div class="col-6 col-lg-2 mb-5">
  <h5>Community</h5>
  <ul class="list-unstyled">
    <li class="mb-2"><a href="#">Issues</a></li>
    <li class="mb-2"><a href="#">Discussions</a></li>
    <li class="mb-2"><a href="#">Corporate sponsors</a></li>
    <li class="mb-2"><a href="#">Open Collective</a></li>
    <li class="mb-2"><a href="#">Slack</a></li>
    <li class="mb-2"><a href="#">Stack overflow</a></li>
  </ul>
</div>
</div>
</div>
</div>
</div>

```

## 9. File CSS

- Praktekkan kode CSS di bawah ini pada file style.css yang telah dibuat.

```

.bg-purple {
  background-color: #7533F9 !important;
}

```

```

#main a {
    color: gray;
}

#main a:hover {
    color: rgb(73, 73, 73);
}

#footer a {
    text-decoration: none;
    color: black;
}

#footer a:hover {
    text-decoration: underline;
    color: var(--bs-primary) !important;
}

```

## 10. Tugas

1. Praktekkan seluruh poin praktikum yang ada di atas secara **INDIVIDU**.
2. Implementasikan Bootstrap pada sebuah project web statis sederhana.
  - a. Bisa berupa web personal, company profile, atau cloning website yang sudah ada sebelumnya.
  - b. Minimal 1 halaman web.
  - c. Dilakukan secara **INDIVIDU**.
3. Dokumentasikan hasil praktikum dan soal no.2 tersebut (**screenshot kode program, output pada browser, penjelasan kode program yang ditulis**) dalam bentuk Laporan Praktikum.
4. Kumpulkan Laporan Praktikum (**.pdf**) dan file HTML yang telah dibuat di dalam praktikum + tugas praktikum (no. 2) via E-Learning dalam format **.zip** paling lambat sebelum jadwal praktikum minggu depan.