1. Bootstrap 簡介

1. **Vscode**
    (1) **Atom One Dark Theme**
    (2) **IntelliSense for CSS class names in HTML**
    (3) **AutoFileName**
    (4) **Bootstrap 5 & Font Awesome Snippets**
    (5) **Chinese (Traditional) Language Pack for Visual Studio Code**
    (6) **Chinese Lorem**
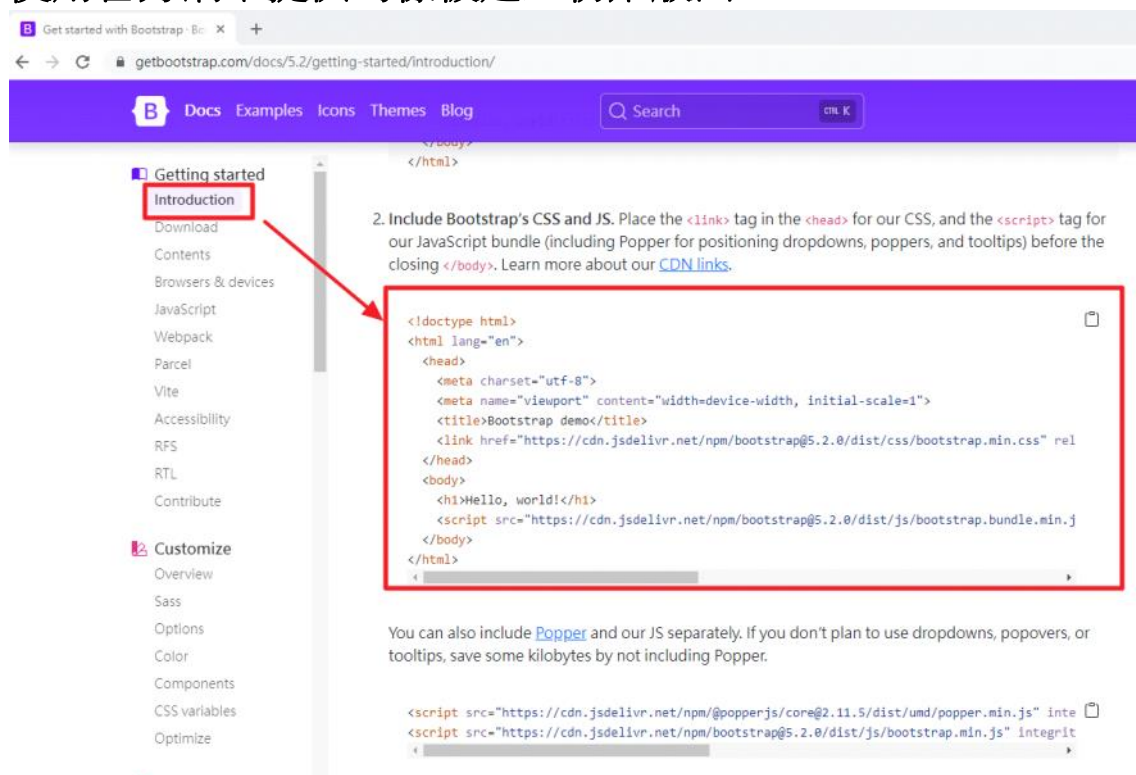   (7) **Fake Image Snippet Collection**
    (8) **Live Server**
    (9) **indent-rainbow**
    (10) **Font Awesome Auto-complete & Preview**

2. Bootstrap是一組用於網站和網路應用程式開發的開源前端框架，包括HTML、CSS及JavaScript的框架，提供字體排印、表單、按鈕、導航及其他各種元件及Javascript擴充套件，旨在使動態網頁和Web應用的開發更加容易。
3. 使用官方網站提供的樣板建立初始版面

修改為**zh-TW** 繁體中文(zh-CN 簡體中文)

```
1  <!doctype html>
2  <html lang="zh-TW">
3  <head>
4      <meta charset="utf-8">
5      <meta name="viewport" content="width=device-width, initial-s
6      <title>Bootstrap demo</title>
7      <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dis
8          integrity="sha384-gH2yIJqKdNHPEq0n4Mqa/HGKIhSkIHeL5AyhkY
9  </head>
10 <body>
11     <h1>Hello, world!</h1>
12     <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/di
13         integrity="sha384-A3rJD856KowSb7dwlZdYEkO39Gagi7vIsF0jrR
14         crossorigin="anonymous"></script>
15 </body>
16 </html>
```

4. 加入第一個bootstrasp元件 Button

```
bs5-1-1.html > ⬡ html > ⬡ body
  1  <!doctype html>
  2  <html lang="zh-TW">
  3  <head>
  4      <meta charset="utf-8">
  5      <meta name="viewport" content="width=device-width, initial-scale=1">
  6      <title>Bootstrap demo</title>
  7      <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/css/bootstrap.min.css" rel="styles
  8          integrity="sha384-gH2yIJqKdNHPEq0n4Mqa/HGKIhSkIHeL5AyhkYV8i59U5AR6csBvApHHNl/vI1Bx" crossori
  9  </head>
 10  <body>
 11      <h1>Hello, world!</h1>
 12      <button type="button" class="btn btn-primary">Primary</button>
 13      <button type="button" class="btn btn-secondary">Secondary</button>
 14      <button type="button" class="btn btn-success">Success</button>
 15      <button type="button" class="btn btn-danger">Danger</button>
 16      <button type="button" class="btn btn-warning">Warning</button>
 17      <button type="button" class="btn btn-info">Info</button>
 18      <button type="button" class="btn btn-light">Light</button>
 19      <button type="button" class="btn btn-dark">Dark</button>
 20      <button type="button" class="btn btn-link">Link</button>
 21      <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/js/bootstrap.bundle.min.js"
 22          integrity="sha384-A3rJD856KowSb7dwlZdYEkO39Gagi7vIsF0jrRAoQmDKKtQBHUuLZ9AsSv4jD4Xa"
 23          crossorigin="anonymous"></script>
 24  </body>
 25  </html>
```


若css沒有正確載入

```
bs5-1-1.html > ⬡ html
  1  <!doctype html>
  2  <html lang="zh-TW">
  3  <head>
  4      <meta charset="utf-8">
  5      <meta name="viewport" content="width=device-width, initial-scale=1">
  6      <title>Bootstrap demo</title>
  7      <!-- <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/css/bootstrap.min.css" rel="stylesheet"
  8          integrity="sha384-gH2yIJqKdNHPEq0n4Mqa/HGKIhSkIHeL5AyhkYV8i59U5AR6csBvApHHNL/vI1Bx"
  9          crossorigin="anonymous"> -->
  9  </head>
 10  <body>
 11      <h1>Hello, world!</h1>
 12      <button type="button" class="btn btn-primary">Primary</button>
 13      <button type="button" class="btn btn-secondary">Secondary</button>
 14      <button type="button" class="btn btn-success">Success</button>
 15      <button type="button" class="btn btn-danger">Danger</button>
 16      <button type="button" class="btn btn-warning">Warning</button>
 17      <button type="button" class="btn btn-info">Info</button>
 18      <button type="button" class="btn btn-light">Light</button>
 19      <button type="button" class="btn btn-dark">Dark</button>
 20      <button type="button" class="btn btn-link">Link</button>
 21      <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/js/bootstrap.bundle.min.js"
 22          integrity="sha384-A3rJD856KowSb7dwlZdYEkO39Gagi7vIsF0jrRAoQmDKKtQBHUuLZ9AsSv4jD4Xa"
 23          crossorigin="anonymous"></script>
 24  </body>
 25  </html>
```
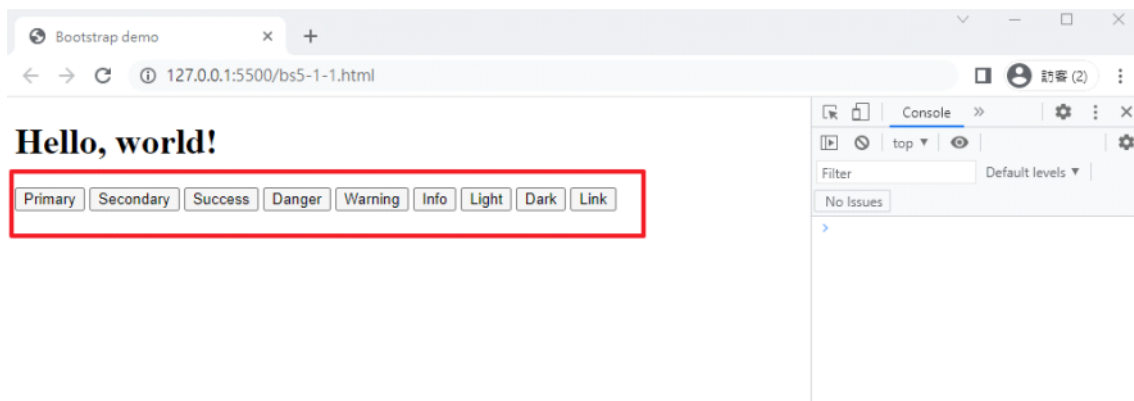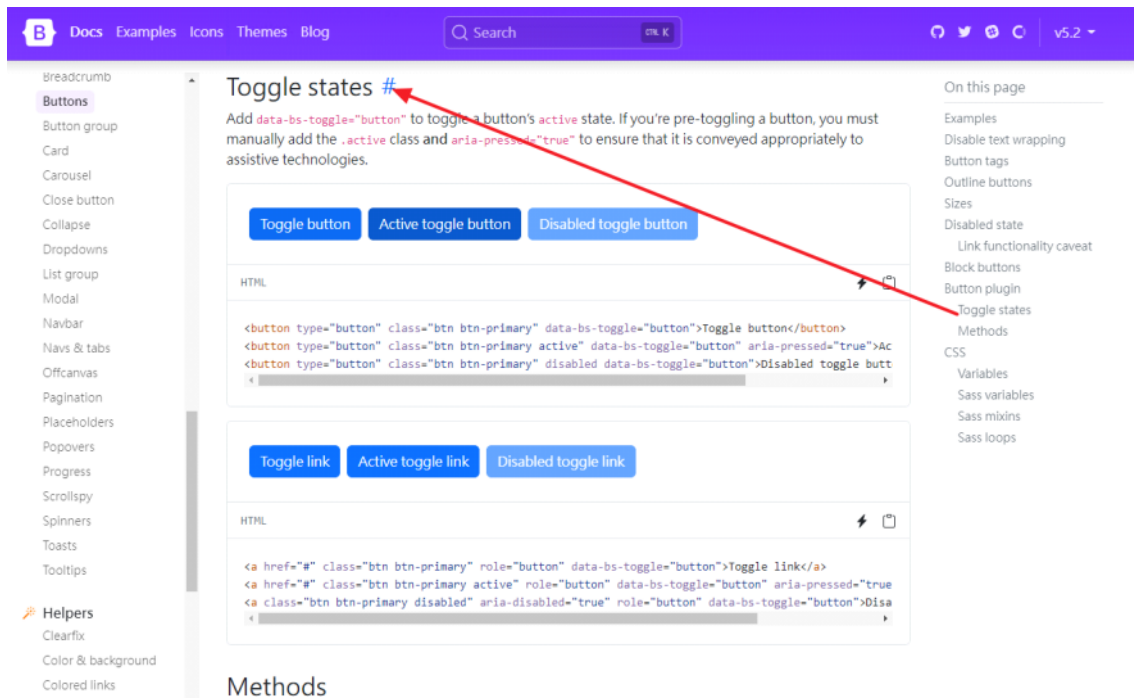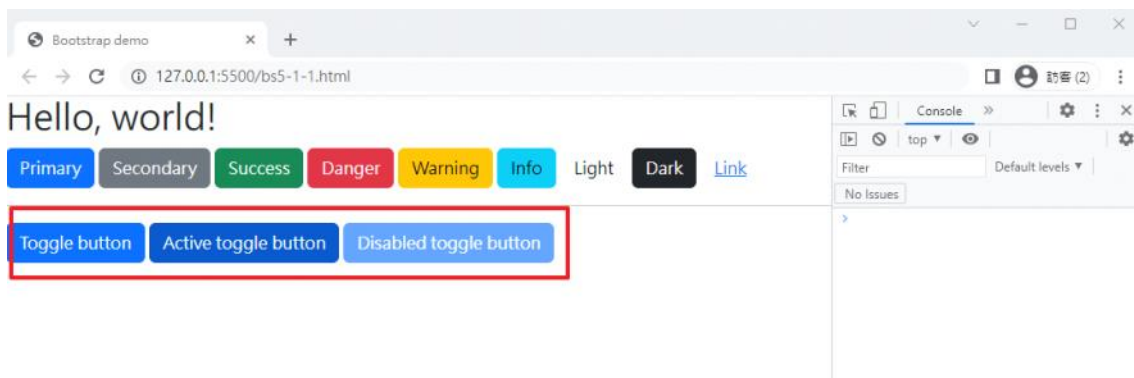
可觀察出相關的顏色已消失

若**js**沒有正確載入

觀察按鈕變化**,**狀態無法保留

5. CSS的class使用規則

```html
<!doctype html>
<html lang="zh-TW">
<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>Bootstrap demo</title>
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/css/bootstrap.min.css" rel="sty
        integrity="sha384-gH2yIJqKdNHPEq0n4Mqa/HGKIhSkIHeL5AyhkYV8i59U5AR6csBvApHHNl/vI1Bx" cross
</head>
<body>
    <button type="button" class="btn btn-primary">Primary</button>
    <hr>
    <button type="button" class="btn" class="btn-primary">Primary</button>
    <!-- <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/js/bootstrap.bundle.min.j
        integrity="sha384-A3rJD856KowSb7dwlZdYEkO39Gagi7vIsF0jrRAoQmDKKtQBHUuLZ9AsSv4jD4Xa"
        crossorigin="anonymous"></script> -->
</body>
</html>
```
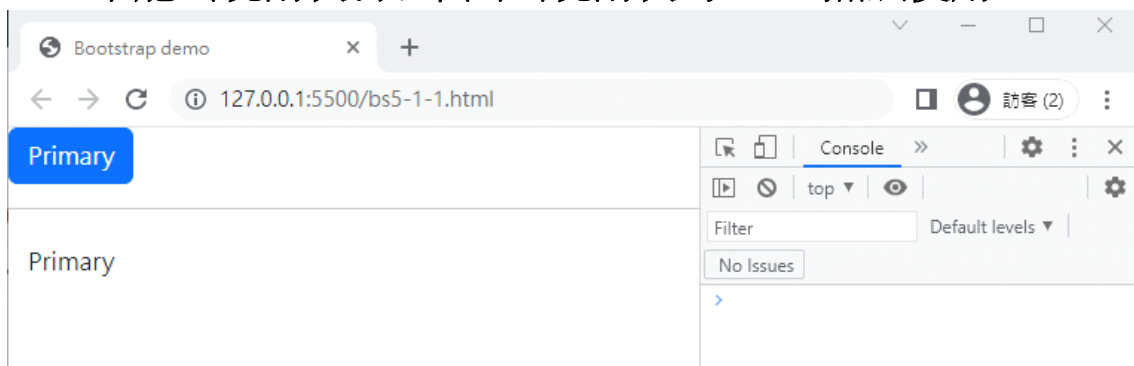
class不能出現兩次，如下圖出現兩次的button無法使用!

6. 快速建立一個**BS**網頁
加入**navbar**

並選擇相關配色

```
bs5-1-1.html > html
1   <!doctype html>
2   <html lang="zh-TW">
3   <head>
4       <meta charset="utf-8">
5       <meta name="viewport" content="width=device-width, initial-scale=1">
6       <title>Bootstrap demo</title>
7       <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/css/bootstra
8           integrity="sha384-gH2yIJqKdNHPEq0n4Mqa/HGKIhSkIHeL5AyhkYV8i59U5AR6csB
9   </head>
10  <body>
11      <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
12 >    <div class="container-fluid">...
49      </div>
50      </nav>
51      <!-- <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/js/bo
52          integrity="sha384-A3rJD856KowSb7dwlZdYEkO39Gagi7vIsF0jrRAoQmDKKtQBHUu
53          crossorigin="anonymous"></script> -->
54  </body>
55  </html>
```


加入card 並更新圖片位址
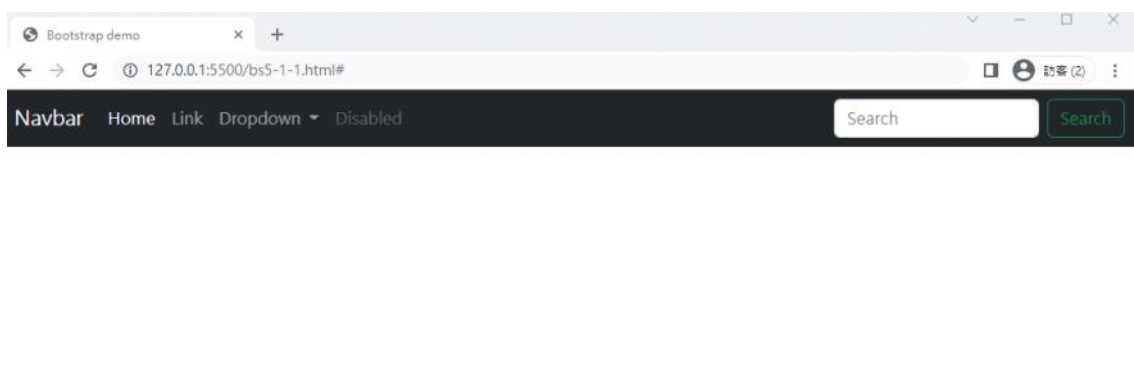
```html
<body>
    <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
        <div class="container-fluid">...
        </div>
    </nav>
    <div class="container">
        <div class="row row-cols-1 row-cols-md-2 g-4">
            <div class="col">
                <div class="card">
                    <img src="https://images.unsplash.com/photo-1660866838212-df428c885827?ixlib=rb-1.2.1&
                        ixid=MnwxMjA3fDB8MHxwaG90by1wYWdlfHx8fGVufDB8fHx8&auto=format&fit=crop&w=1470&q=80"
                        class="card-img-top" alt="...">
                    <div class="card-body">
                        <h5 class="card-title">Card title</h5>
                        <p class="card-text">This is a longer card with supporting text below as a natural lead-
                            to additional
                            content. This content is a little bit longer.</p>
                    </div>
                </div>
            </div>
            <div class="col">
                <div class="card">...
                </div>
            </div>
            <div class="col">...
            </div>
            <div class="col">...
            </div>
        </div>
    </div>
```
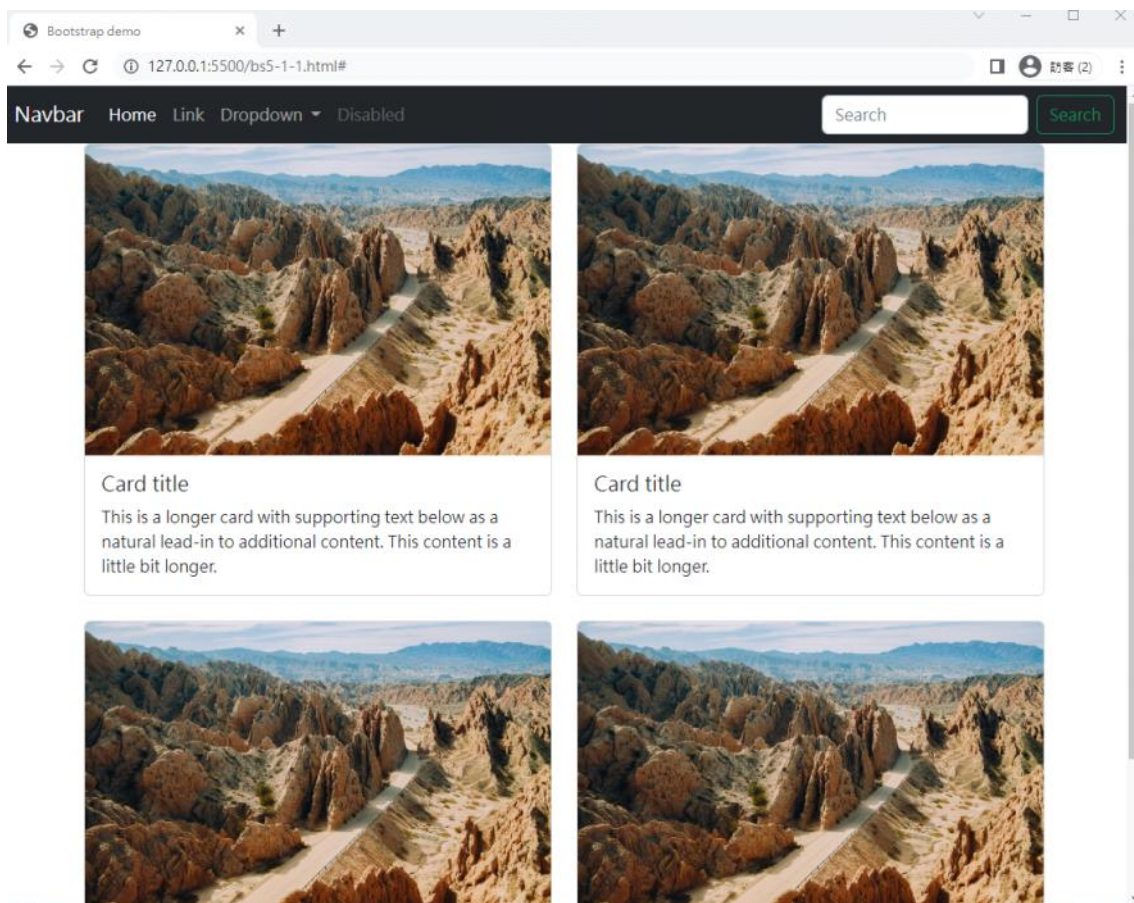

加入**spacing**相關設定調整間隔

Notation

Spacing utilities that apply to all breakpoints, from xs to xxl, have no breakpoint abbreviation in them. This is because those classes are applied from min-width: 0 and up, and thus are not bound by a media query. The remaining breakpoints, however, do include a breakpoint abbreviation.

The classes are named using the format {property}{sides}-{size} for xs and {property}{sides}-{breakpoint}-{size} for sm, md, lg, xl, and xxl.

Where *property* is one of:

- m - for classes that set margin
- p - for classes that set padding

Where *sides* is one of:

- t - for classes that set margin-top or padding-top
- b - for classes that set margin-bottom or padding-bottom
- s - (start) for classes that set margin-left or padding-left in LTR, margin-right or padding-right in RTL
- e - (end) for classes that set margin-right or padding-right in LTR, margin-left or padding-left in RTL
- x - for classes that set both *-left and *-right
- y - for classes that set both *-top and *-bottom
- blank - for classes that set a margin or padding on all 4 sides of the element

Where *size* is one of:

- 0 - for classes that eliminate the margin or padding by setting it to 0
- 1 - (by default) for classes that set the margin or padding to $spacer * .25
- 2 - (by default) for classes that set the margin or padding to $spacer * .5
- 3 - (by default) for classes that set the margin or padding to $spacer
- 4 - (by default) for classes that set the margin or padding to $spacer * 1.5
- 5 - (by default) for classes that set the margin or padding to $spacer * 3
- auto - for classes that set the margin to auto

(You can add more sizes by adding entries to the $spacers Sass map variable.)

Utilities
  API
  Background
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  Float
  Interactions
  Opacity
  Overflow
  Position
  Shadows
  Sizing
  Spacing
  Text
  Vertical align
  Visibility

Extend
  Approach
  Icons

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```html
<body>
    <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
        <div class="container-fluid">···
        </div>
    </nav>
    <div class="container my-4">
        <div class="row row-cols-1 row-cols-md-2 g-4">···
        </div>
    </div>
    <!-- <script src="https://cdn.jsdelivr.net/npm/bootstrap@5
        integrity="sha384-A3rJD856KowSb7dwLZdYEkO39Gagi7vIsF0j
        crossorigin="anonymous"></script> -->
</body>
```
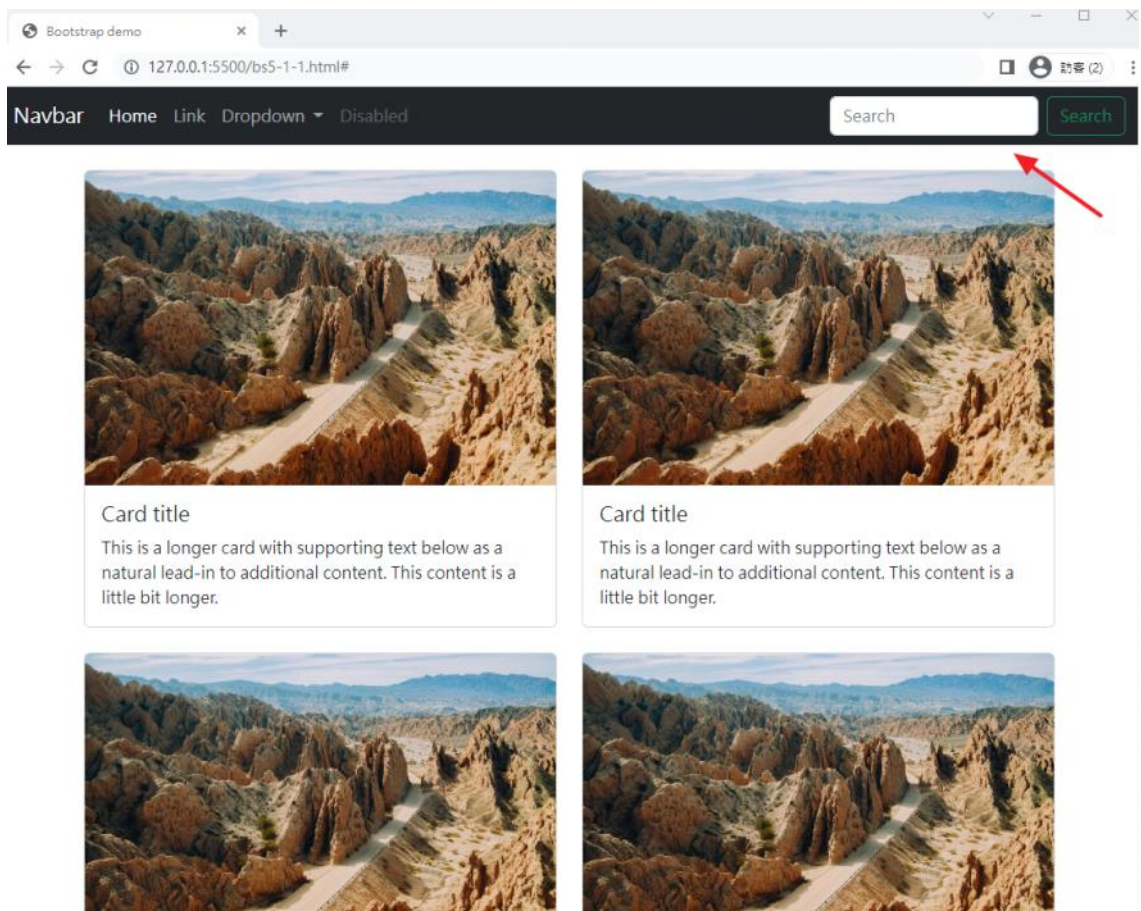
加入footer並設定顏色

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

    <div class="container my-4">…
    </div>

    <div class="footer bg-secondary p-4">
        <p>這是footer</p>
    </div>
    <!-- <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.
         integrity="sha384-A3rJD856KowSb7dwlZdYEkO39Gagi7vIsF0jrRA
         crossorigin="anonymous"></script> -->
</body>
```
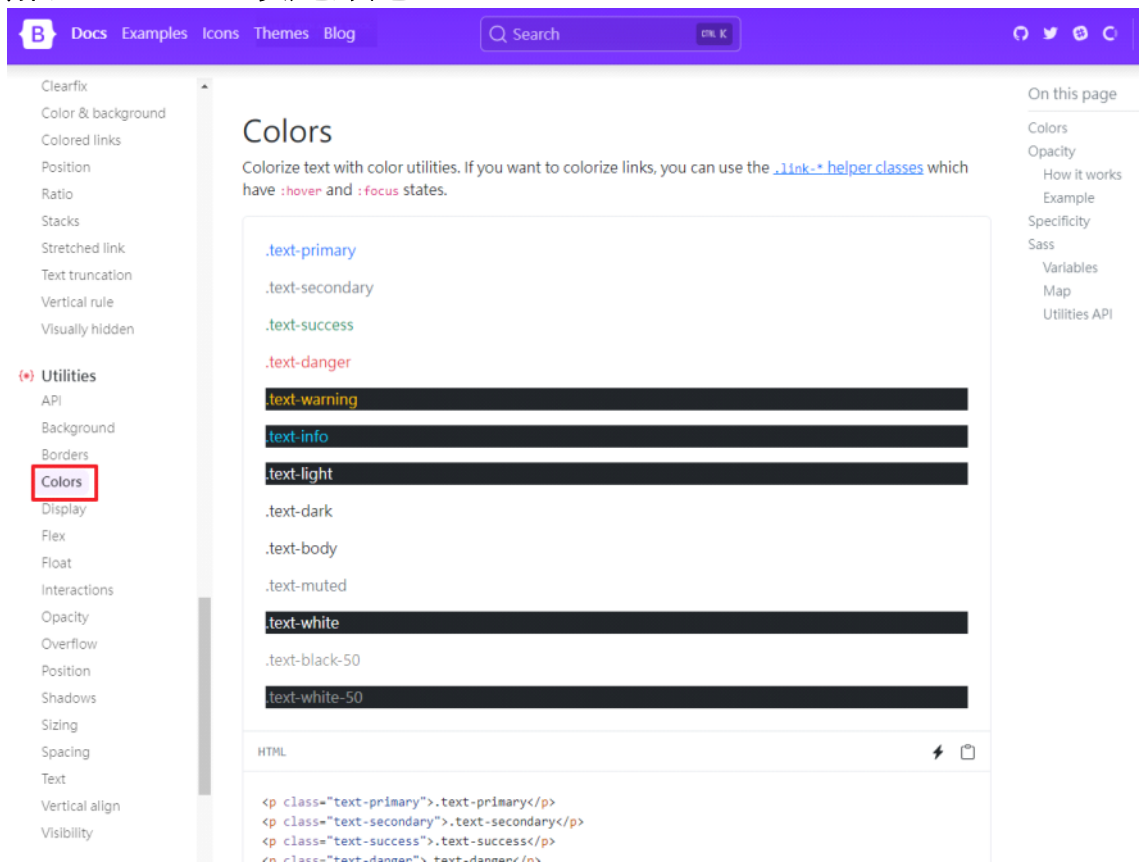
發現**footer**下方間隔比較大, 這是因為**<p>**下方**margin**造成

<p> 設定mb-0

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

    <div class="container my-4">…
    </div>

    <div class="footer bg-secondary p-4">
        <p class="mb-0">這是footer</p>
    </div>
    <!-- <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.
        integrity="sha384-A3rJD856KowSb7dwlZdYEkO39Gagi7vIsF0j
        crossorigin="anonymous"></script> -->
</body>
```
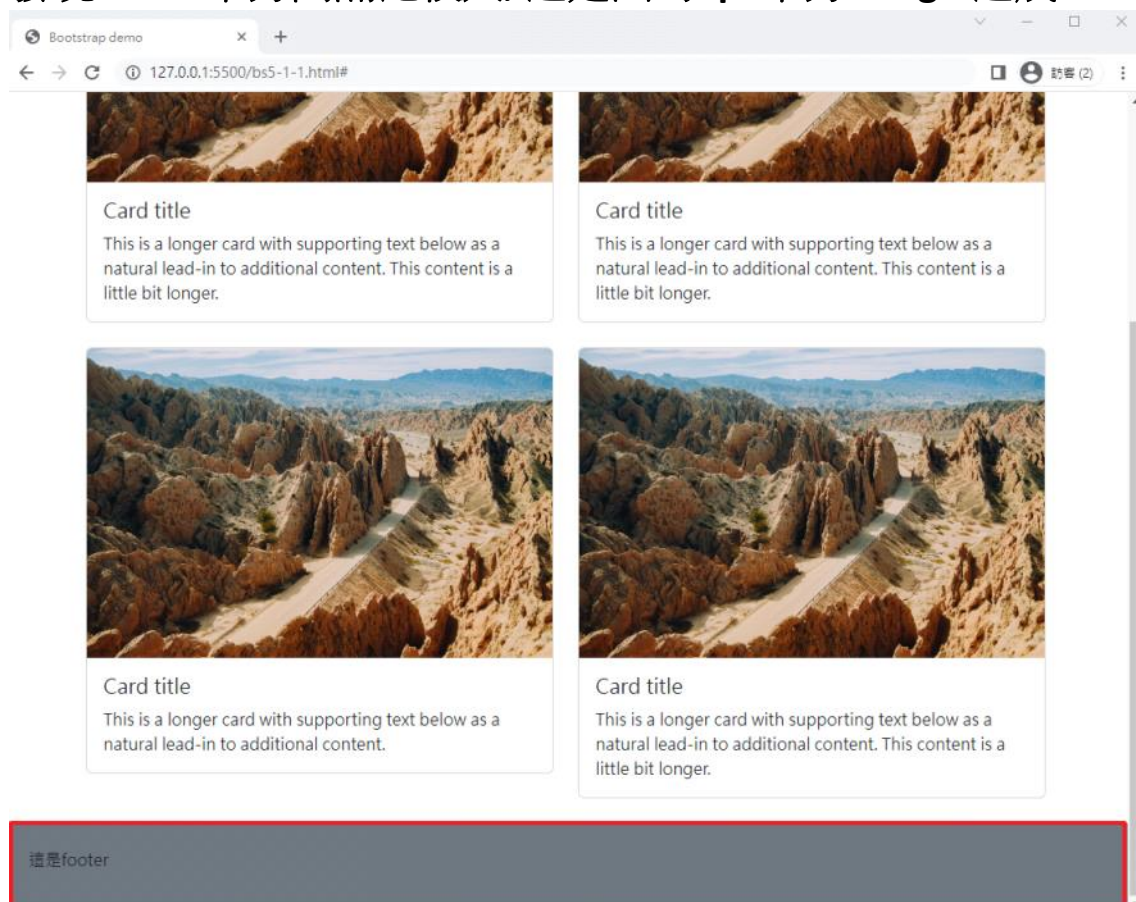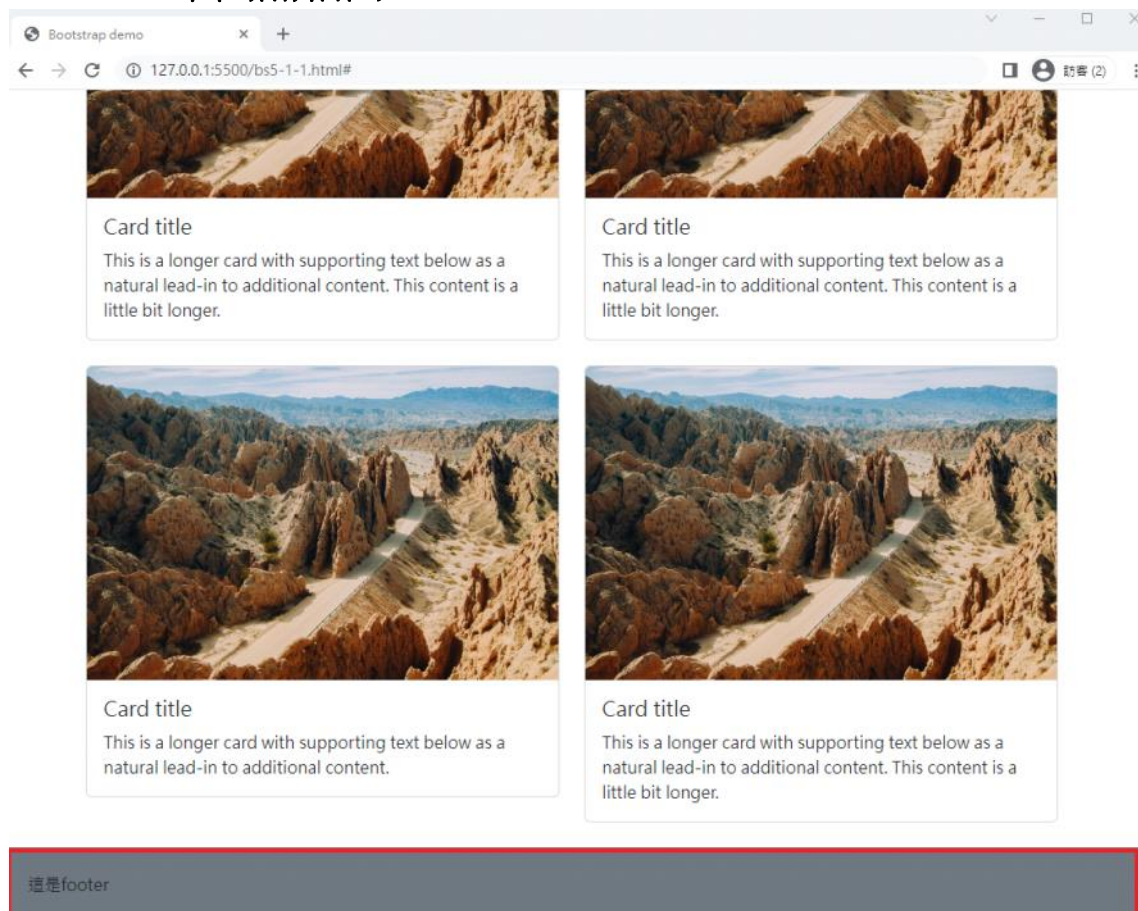
footer 上下間隔相同

加上**container** 與內容卡片對齊

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


    <div class="container my-4">…
    </div>


    <div class="footer bg-secondary p-4">
        <div class="container">
            <p class="mb-0">這是footer</p>
        </div>
    </div>
    <!-- <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2
        integrity="sha384-A3rJD856KowSb7dwlZdYEkO39Gagi7vIsF0jrR
        crossorigin="anonymous"></script> -->
</body>
```