


Trường ĐH CNTT TP.HCM Khoa: CNTT Bộ môn: Khoa học máy tính <b>THIẾT KẾ WEB</b>	<b>BÀI 13</b> <b>BOOTSTRAP</b>	
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## A. MỤC TIÊU:

- Giới thiệu tổng quát về Bootstrap
- Cài đặt Bootstrap
- Sử dụng Grid System
- Sử dụng Component Button
- Sử dụng Component Card
- Sử dụng Component image

## B. NỘI DUNG THỰC HÀNH

### 1. Cơ sở lý thuyết

#### 1.1. Kiến thức cần nhớ

- Sử dụng bootstrap online

```
<!--Bootstrap 4-->
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css" />
<script src="https://code.jquery.com/jquery-3.2.1.slim.min.js"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.9/umd/popper.min.js"></script>
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.min.js"></script>
```

- Sử dụng Bootstrap offline

```
<!--Bootstrap offline-->
<link rel="stylesheet" href="css/bootstrap.min.css"/>
<script src="js/bootstrap.min.js"></script>
<script src="js/jquery.min.js"></script>
```

- Responsive Grid

- + Extra small (xs) – below 576px
- + Small (sm) – between 576px and 768px
- + Medium (md) – between 768px and 992px
- + Large (lg) – between 992px and 1200px
- + Extra Large (xl) – over 1200px
- + Extra extra large (xxl) – over 1400px

- Component Button: btn-primary, btn-secondary, btn-success, btn-danger, btn-warning, btn-info, btn-light, btn-dark, btn-link, outline-primary, btn-lg, btn-sm, btn-block
- Component Card: card-body, card-text, card-img-top, card-header, card-title, ...
- Component image: rounded, float, img-thumbnail,

#### 1.2. Giới thiệu bài tập mẫu

**Bài 0.** Tạo trang **Bai0.html** như sau:



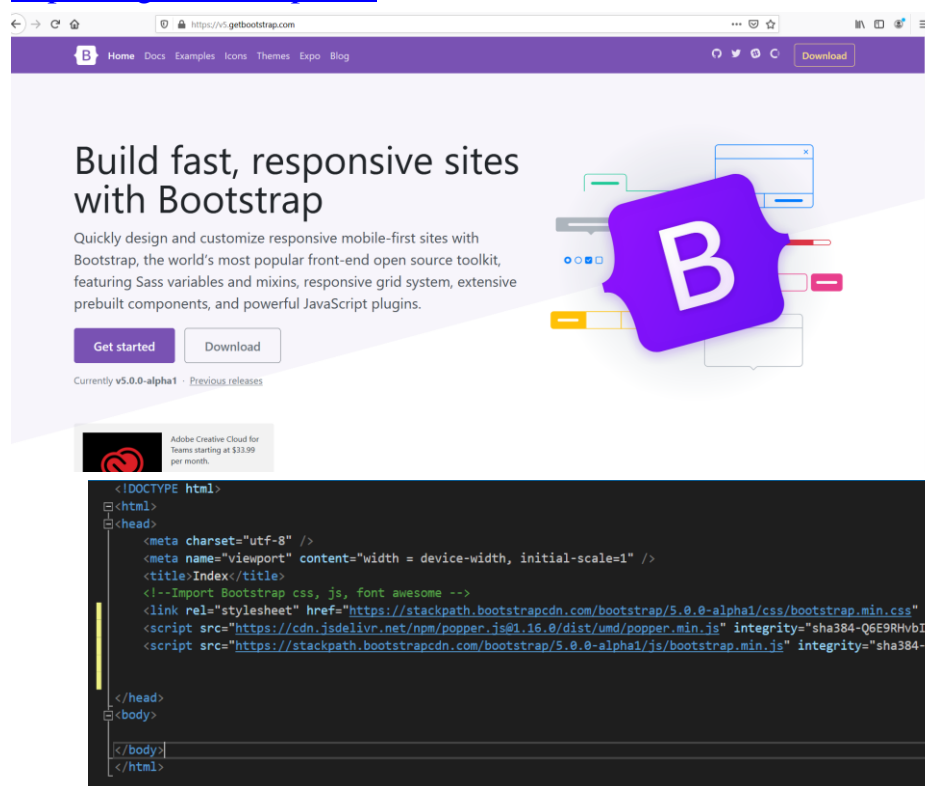
## Yêu cầu:

- Không sử dụng bootstrap
- Đưa ra nhận xét

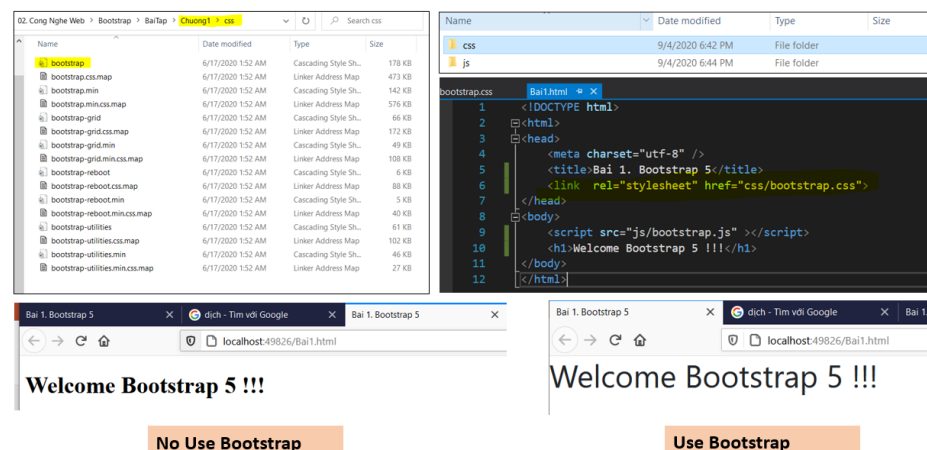
## Bài 1: Cài đặt và sử dụng bootstrap

### Cách 1: Sử dụng thư viện CDN

<http://v5.getbootstrap.com>



### Cách 2: Tải về và dùng trực tiếp tại local

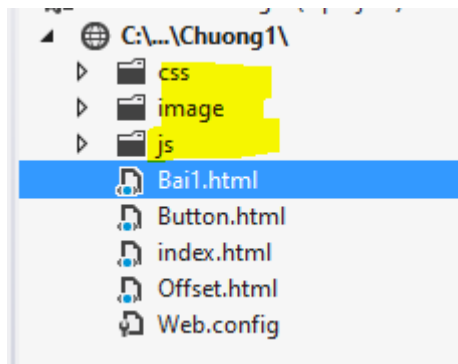


**Bài 2:** Tạo trang Bai2.html sử dụng Bootstrap offline như sau

← → ↻ ⓘ localhost:5947/Chuong1/Bai1.html

# Welcome Bootstrap 5 !!!

**Yêu cầu tổ chức web như sau:**



```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8" />
  <title>Bai 2. Bootstrap 5</title>
  <link rel="stylesheet" href="css/bootstrap.css">
</head>
<body>
  <script src="js/bootstrap.js" ></script>
  <h1>Welcome Bootstrap 5 !!!</h1>
</body>
</html>
```

**Bài 3:** Tạo trang Bai3.html sử dụng Grid system như sau:

Column 1	Column 2
Column 3	Column 4
Column 5	

**Hướng dẫn:**

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <meta charset="utf-8" />
5   <title>Bai 3. Grid System</title>
6   <link rel="stylesheet" href="css/bootstrap.css">
7   <script src="js/bootstrap.js" ></script>
8 </head>
9 <body>
10   <div class="container">
11     <div class="row">
12       <div class="col-md-3 bg-primary"> <p>Column 1 </p></div>
13       <div class="col-md-9 bg-secondary"> <p>Column 2</p></div>
14     </div>
15     <div class="row">
16       <div class="col-md bg-success"> <p>Column 3</p></div>
17       <div class="col-md bg-warning"> <p>Column 4</p></div>
18       <div class="col-md bg-primary"> <p>Column 5</p></div>
19     </div>
20   </div>
21 </body>
22 </html>
```

**Bài 4:** Tạo trang Bai4.html sử dụng Grid system và Bootstrap online như sau:

← → ↻ ⓘ localhost:5947/Chuong1/index.html

Container Grid System				
1	2	3		
a		b		
x	y	z	w	

**Hướng dẫn:**

```

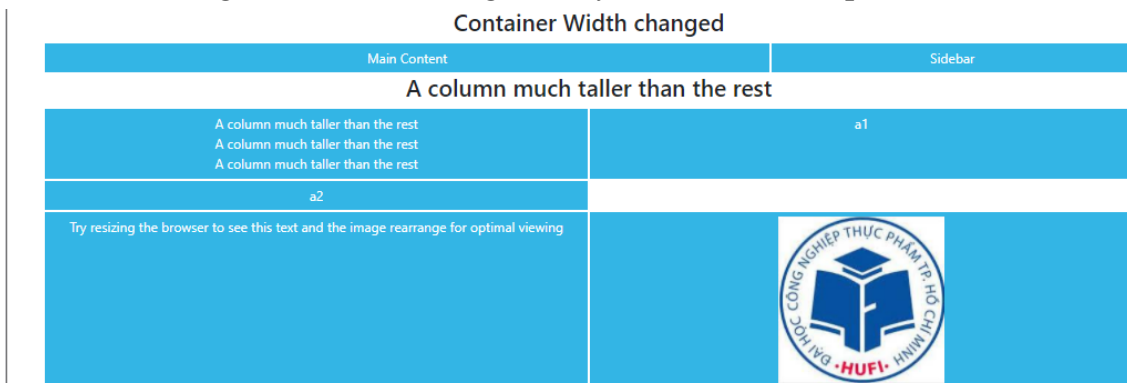
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1" />
  <title>Index</title>
  <!--Import Bootstrap css, js, font awesome -->
  <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/5.0.0-alpha1/css/bootstrap.min.css" integrity="sha384-r4NyP46KrjDleawBgD5tp8Y7UzmlA05oP" />
  <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.0/dist/umd/popper.min.js" integrity="sha384-Q6E9RHvbiIyZfJoft+2mJbHaEWldlvI9IOy5n3zV9zzTtmI3UksdQRvvoxM" />
  <script src="https://stackpath.bootstrapcdn.com/bootstrap/5.0.0-alpha1/js/bootstrap.min.js" integrity="sha384-oesi62h0Lfzrys4LxRF630JCXdxDipiYMBnvTl9Y9/TRlW5x1KJ" />
  <style>
    [class*="col"] {
      padding:5px;
      background-color:#33b5e5;
      border:2px solid #fff;
      color:#fff;
      text-align:center;
    }
    .responsive {
      max-width:100%;
      height:auto;
    }
  </style>

  <body>
    <h3 align="center">Container Grid System</h3>
    <div class="container-md">
      <div class="row">
        <div class="col-sm">1</div>
        <div class="col-sm">2</div>
        <div class="col-sm">3</div>
      </div>
      <div class="row">
        <div class="col-sm">a</div>
        <div class="col-sm">b</div>
      </div>
      <div class="row">
        <div class="col-sm">x</div>
        <div class="col-sm">y</div>
        <div class="col-sm">z</div>
        <div class="col-sm">w</div>
      </div>
    </div>
  </body>

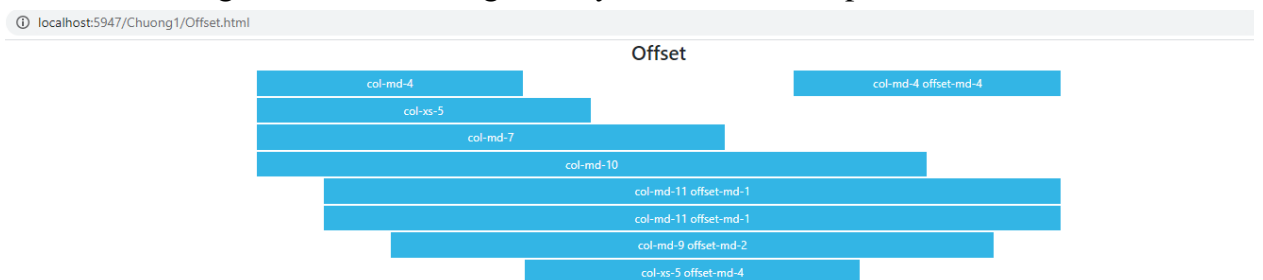
```

## 2. Bài tập tại lớp

**Bài 5:** Tạo trang Bai5.html sử dụng Grid system và Bootstrap online như sau:



**Bài 6:** Tạo trang Bai6.html sử dụng Grid system và Bootstrap online + class offset như sau:



**Hướng dẫn:**

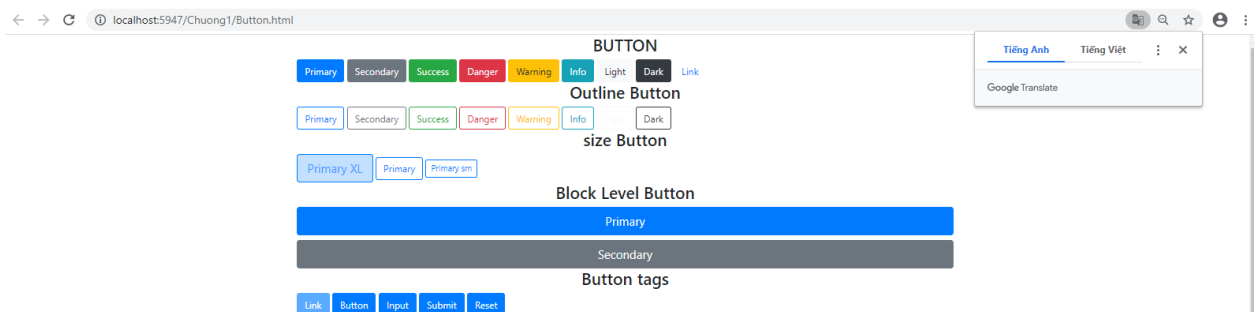
```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <title>Offset</title>
  <!--Bootstrap 4-->
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css"/>
  <script src="https://code.jquery.com/jquery-3.2.1.slim.min.js"></script>
  <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.9/umd/popper.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.min.js"></script>

  <style>
    [class *="col"] {
      padding: 5px;
      background-color: #33b5e5;
      border: 2px solid #fff;
      color: #fff;
      text-align: center;
    }
  </style>
</head>
<body>
  <h3 align="center"> Offset </h3>
  <div class="container">
    <div class="row">
      <div class="col-md-4">col-md-4</div>
      <div class="col-md-4 offset-md-4">col-md-4 offset-md-4</div>
    </div>
    <div class="row">
      <div class="col-md-5">col-md-5</div>
    </div>
    <div class="row">
      <div class="col-md-7">col-md-7</div>
      <div class="col-md-10">col-md-10</div>
      <div class="col-md-11 offset-md-1">col-md-11 offset-md-1</div>
      <div class="col-md-11 offset-md-1">col-md-11 offset-md-1</div>
      <div class="col-md-9 offset-md-2">col-md-9 offset-md-2</div>
      <div class="col-md-5 offset-md-4">col-md-5 offset-md-4</div>
    </div>
  </div>

```

**Bai 7:** Tạo trang Bai7.html sử dụng component Button và Bootstrap online như sau:



**Hướng dẫn:**

```

Bai1.html Button.html ↗ ✕
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <title>Button</title>
  <!--Bootstrap 4-->
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css" />
  <script src="https://code.jquery.com/jquery-3.2.1.slim.min.js"></script>
  <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.9/umd/popper.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.min.js"></script>

  <style>
    [class *= "col"] {
      padding: 5px;
      background-color: #33b5e5;
      border: 2px solid #fff;
      color: #fff;
      text-align: center;
    }
  </style>
</head>

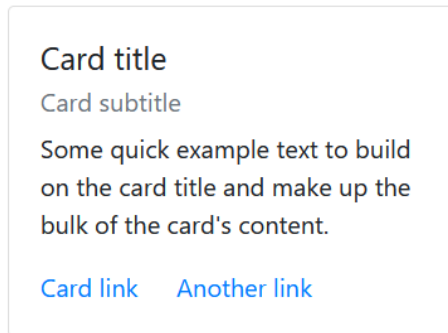
```

```

Bai1.html Button.html ↗ ✕
<body>
  <h3 align="center"> BUTTON </h3>
  <div class="container">
    <button type="button" class="btn btn-primary">Primary</button>
    <button type="button" class="btn btn-secondary">Secondary</button>
    <button type="button" class="btn btn-success">Success</button>
    <button type="button" class="btn btn-danger">Danger</button>
    <button type="button" class="btn btn-warning">Warning</button>
    <button type="button" class="btn btn-info">Info</button>
    <button type="button" class="btn btn-light">Light</button>
    <button type="button" class="btn btn-dark">Dark</button>
    <button type="button" class="btn btn-link">Link</button>
  </div>
  <h3 align="center"> Outline Button </h3>
  <div class="container">
    <button type="button" class="btn btn-outline-primary">Primary</button>
    <button type="button" class="btn btn-outline-secondary">Secondary</button>
    <button type="button" class="btn btn-outline-success">Success</button>
    <button type="button" class="btn btn-outline-danger">Danger</button>
    <button type="button" class="btn btn-outline-warning">Warning</button>
    <button type="button" class="btn btn-outline-info">Info</button>
    <button type="button" class="btn btn-outline-light">Light</button>
    <button type="button" class="btn btn-outline-dark">Dark</button>
  </div>
  <h3 align="center"> size Button </h3>
  <div class="container">
    <button type="button" class="btn btn-outline-primary btn-lg">Primary XL</button>
    <button type="button" class="btn btn-outline-primary ">Primary</button>
    <button type="button" class="btn btn-outline-primary btn-sm">Primary sm</button>
  </div>
  <h3 align="center"> Block Level Button </h3>
  <div class="container">
    <button type="button" class="btn btn-primary btn-lg btn-block">Primary </button>
    <button type="button" class="btn btn-secondary btn-lg btn-block ">Secondary</button>
  </div>
  <h3 align="center"> Button tags</h3>
  <div class="container">
    <a class="btn btn-primary disabled" href="#" role="button">Link</a>
    <button class="btn btn-primary" type="submit">Button</button>
    <input class="btn btn-primary" type="button" value="Input">
    <input class="btn btn-primary" type="submit" value="Submit">
    <input class="btn btn-primary" type="reset" value="Reset">
  </div>

```

**Bai 8:** Tạo trang Bai8.html sử dụng component Card và Bootstrap online như sau:

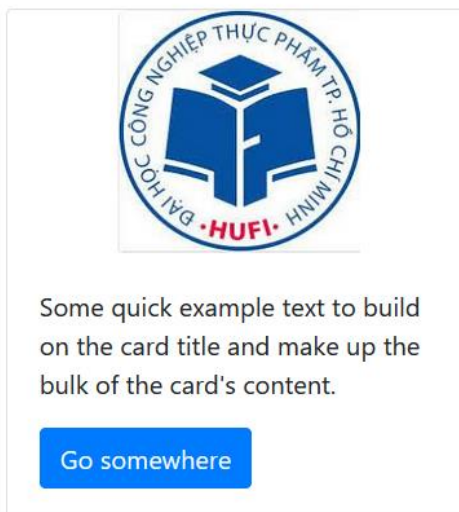


### Hướng dẫn:

```
<h3 align="center">Title Text Link</h3>
<div class="container">
  <div class="card" style="width: 18rem;">
    <div class="card-body">
      <h5 class="card-title">Card title</h5>
      <h6 class="card-subtitle mb-2 text-muted">Card subtitle</h6>
      <p class="card-text">Some quick example text to build on the card title and make up the bulk of the card's content.</p>
      <a href="#" class="card-link">Card link</a>
      <a href="#" class="card-link">Another link</a>
    </div>
  </div>
</div>
```

```
<h3 align="center">Title Text Link</h3>
<div class="container">
  <div class="card" style="width: 18rem;">
    <div class="card-body">
      <h5 class="card-title">Card title</h5>
      <h6 class="card-subtitle mb-2 text-muted">Card subtitle</h6>
      <p class="card-text">Some quick example text to build on the card title and make up the bulk of the card's content.</p>
      <a href="#" class="card-link">Card link</a>
      <a href="#" class="card-link">Another link</a>
    </div>
  </div>
</div>
```

**Bai 9:** Tạo trang Bai9.html sử dụng component Card và Bootstrap online như sau:

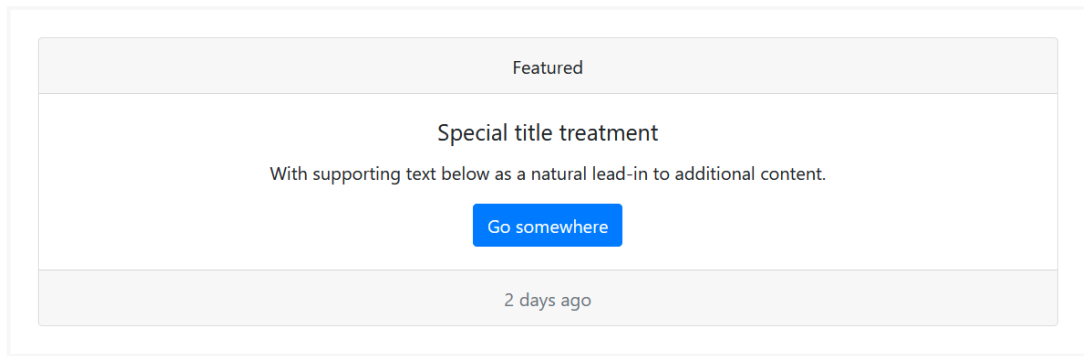


### Hướng dẫn:

```
<h3 align="center">Card Image</h3>
<div class="container">
  <div class="card" style="width: 18rem;">
    <center></center>
    <div class="card-body">
      <p class="card-text">Some quick example text to build on the card title and make up the bulk of the card's content.</p>
      <a href="#" class="btn btn-primary">Go somewhere</a>
    </div>
  </div>
</div>
```



**Bài 10:** Tạo trang Bai10.html sử dụng component Card và Bootstrap online như sau:



**Hướng dẫn:**

Sử dụng

class="card-header"

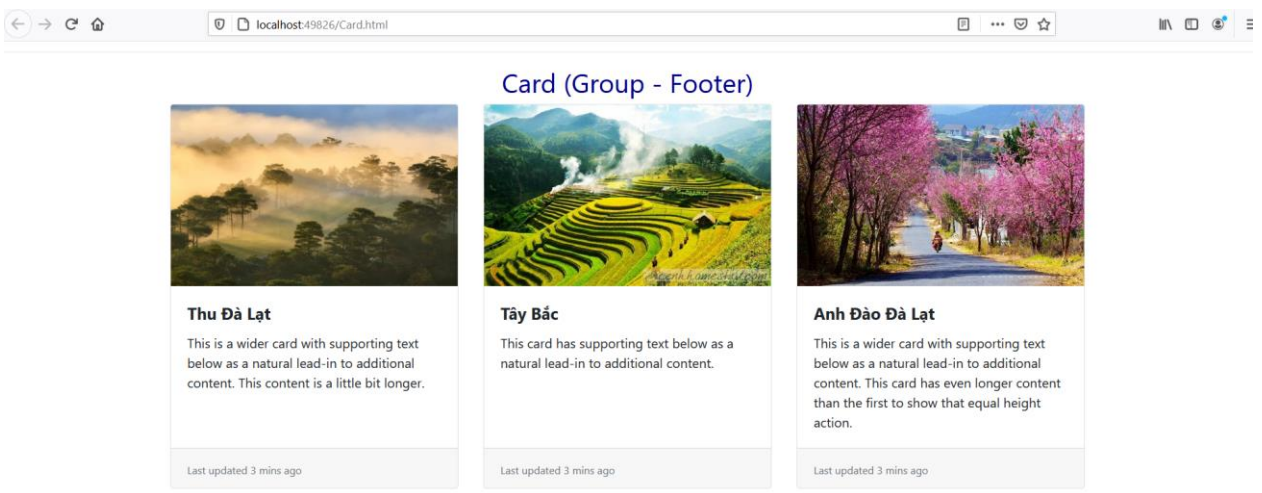
class="card-footer text-muted"

**Bài 11:** Tạo trang Bai11.html sử dụng component - Card và Bootstrap online như sau:



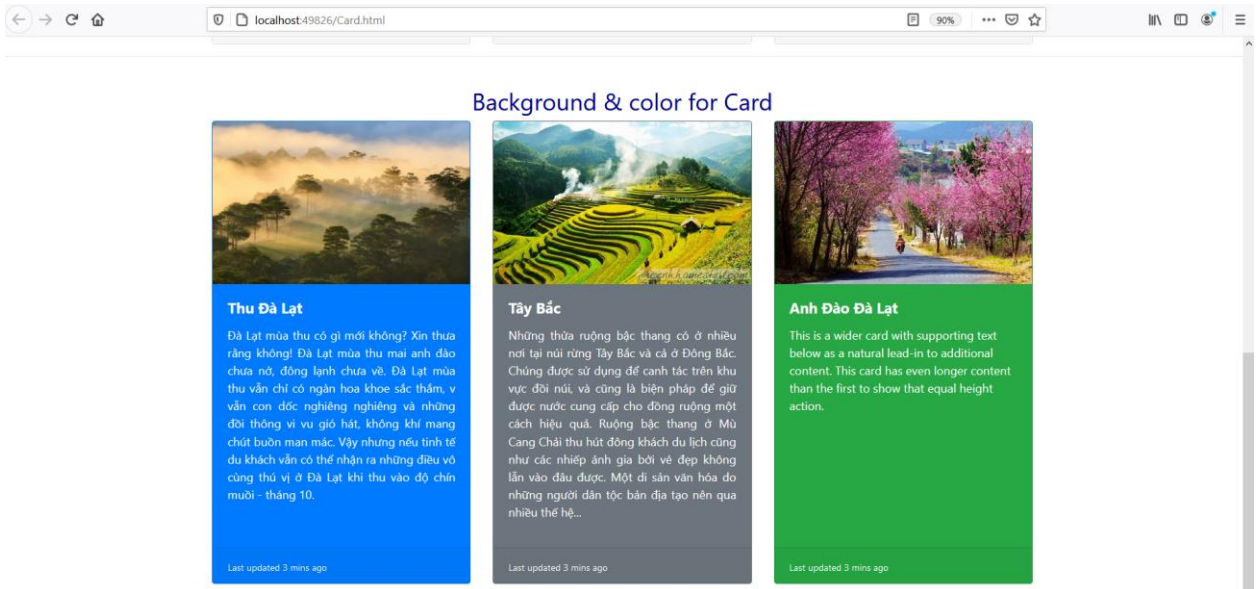
**Bài 12:** Tạo trang Bai12.html sử dụng component - Card group & card footer và Bootstrap online như sau:

**Hướng dẫn:** sử dụng các class: container, row, col, card, card-body, card-title, card-text, card, card-footer, text-muted



**Bài 14:** Tạo trang Bai14.html sử dụng component - Card group & card footer và Bootstrap online như sau:

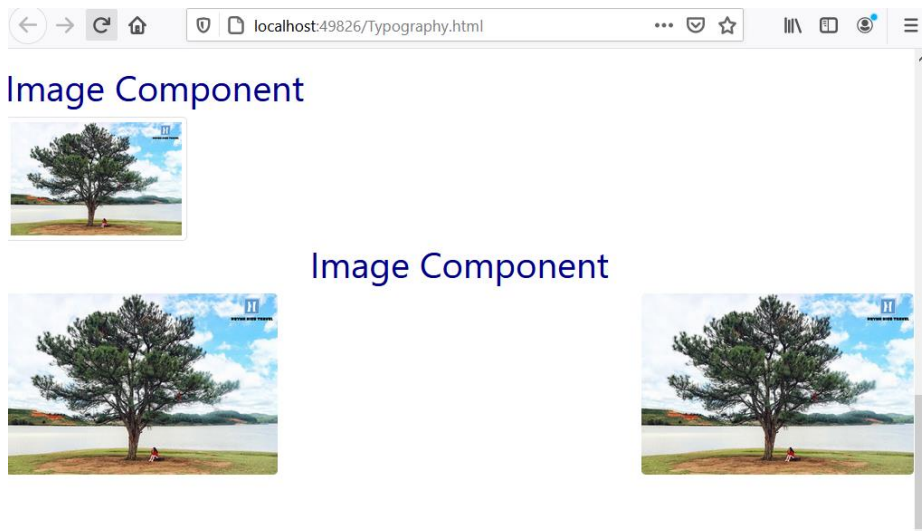




**Hướng dẫn:** sử dụng các class: container, row, col, card, card-body, card-title, card-text, card, card-footer, text-white, bg-primary, bg-secondary, bg-success, bg-danger, bg-warning, bg-info, bg-light, bg-dark,...

### 3. Bài tập về nhà

**Bài 15:** Tạo trang Bai15.html sử dụng component - Responsive Image và Bootstrap online như sau:



**Bài 16:** Tạo trang Bai16.html sử dụng Component - Table responsive và Bootstrap online như sau:

← → ↻ 🏠 🔒 📄 localhost:49826/Table.html ... 📄 📄 📄 📄

### Table

#	First	Last	Handle
1	Mark	Otto	@mdo
2	Jacob	Thornton	@fat
3	Larry the Bird		@twitter

### Table Responsive

#	Heading	Heading	Heading	Heading	Heading	Heading
1	cell	cell	cell	cell	cell	cell
2	cell	cell	cell	cell	cell	cell
3	cell	cell	cell	cell	cell	cell
4	cell	cell	cell	cell	cell	cell
5	cell	cell	cell	cell	cell	cell

Thử resize WebBrowser để thấy hiệu quả của table responsive