



Giới thiệu Bootstrap framework

NGUYỄN HÀ THANH

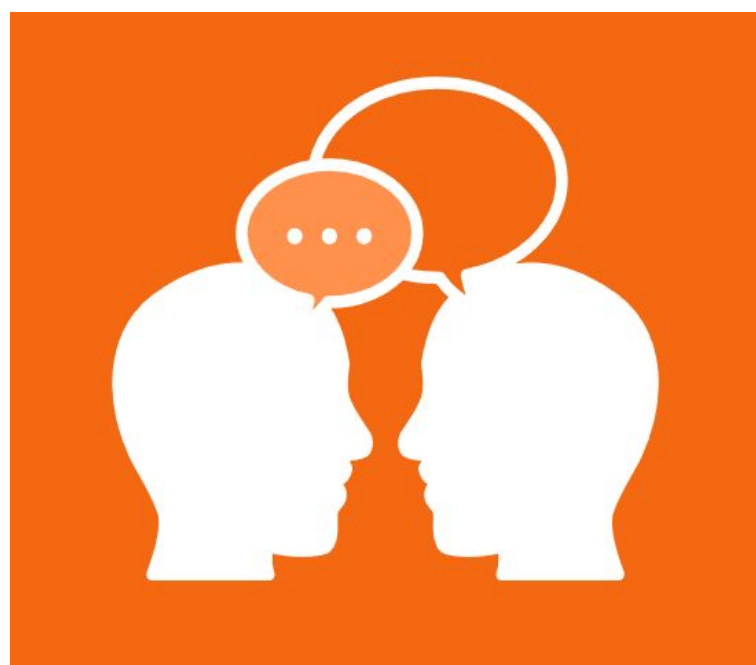
Giảng viên khoa CNTT

Thời gian: 60 phút

Đại Nam, ngày 01 tháng 10 năm 2023

LƯU Ý

**KHÔNG NÓI
CHUYỆN RIÊNG**



**KHÔNG SỬ DỤNG
ĐIỆN THOẠI**



KHÔNG NGỦ GẬT



GHI CHÉP ĐẦY ĐỦ



1, Giới thiệu Bootstrap CSS Framework

2, Hướng dẫn cài đặt

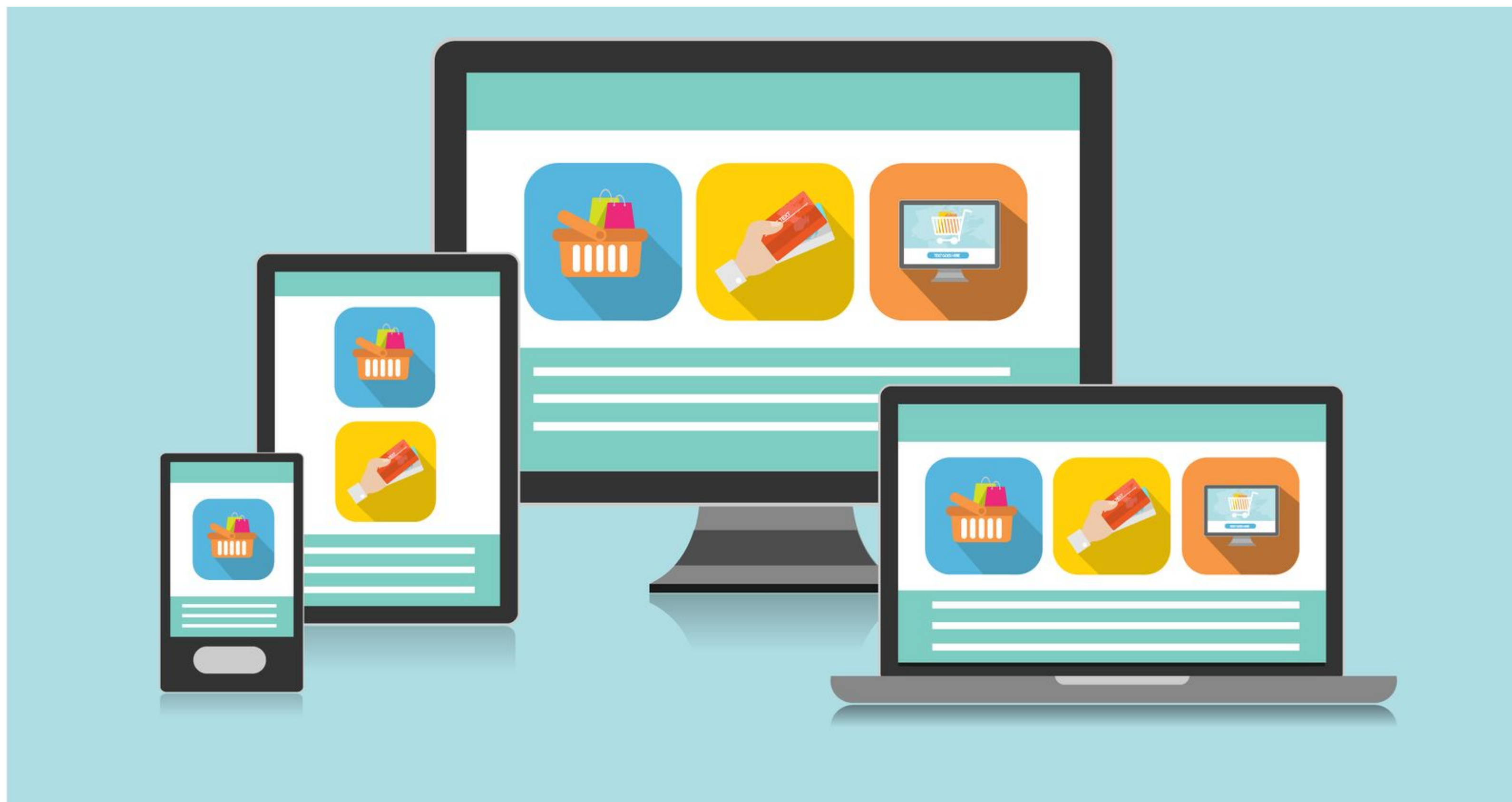
3, Grid System cơ bản

4. Các class thông dụng

5. Thực hành buổi 1 về Bootstrap



Bootstrap là gì?



Từ khoảng 2005 khái niệm Responsive xuất hiện



Bootstrap là một framework CSS hướng tới:

- + Xây dựng giao diện nhanh chóng, dễ dàng, chuyên nghiệp
- + Hỗ trợ xây dựng website responsive
- + Hướng tới mobile-first

Ra đời năm 2011, hoàn toàn miễn phí

Bootstrap 3 (2013) và 4 (2018) sử dụng kèm theo JQuery

Bootstrap 5 (2022) chuyển sang dung JS thay vì JQuery



Cài đặt Bootstrap

Cách 1: download bootstrap và đưa vào dự án link



Cách 2: liên kết resource của bootstrap vào trang link

Đặt độ rộng cho màn hình bằng class **container**

	Extra small <576px	Small ≥576px	Medium ≥768px	Large ≥992px	X-Large ≥1200px	XX-Large ≥1400px
<code>.container</code>	100%	540px	720px	960px	1140px	1320px
<code>.container-sm</code>	100%	540px	720px	960px	1140px	1320px
<code>.container-md</code>	100%	100%	720px	960px	1140px	1320px
<code>.container-lg</code>	100%	100%	100%	960px	1140px	1320px
<code>.container-xl</code>	100%	100%	100%	100%	1140px	1320px
<code>.container-xxl</code>	100%	100%	100%	100%	100%	1320px
<code>.container-fluid</code>	100%	100%	100%	100%	100%	100%



Grid System cơ bản

Bootstrap chia một dòng thành 12 phần

span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1
span 4				span 4				span 4			
span 4				span 8							
span 6						span 6					
span 12											

Độ rộng của cột sẽ quy định bởi chỉ số đi kèm

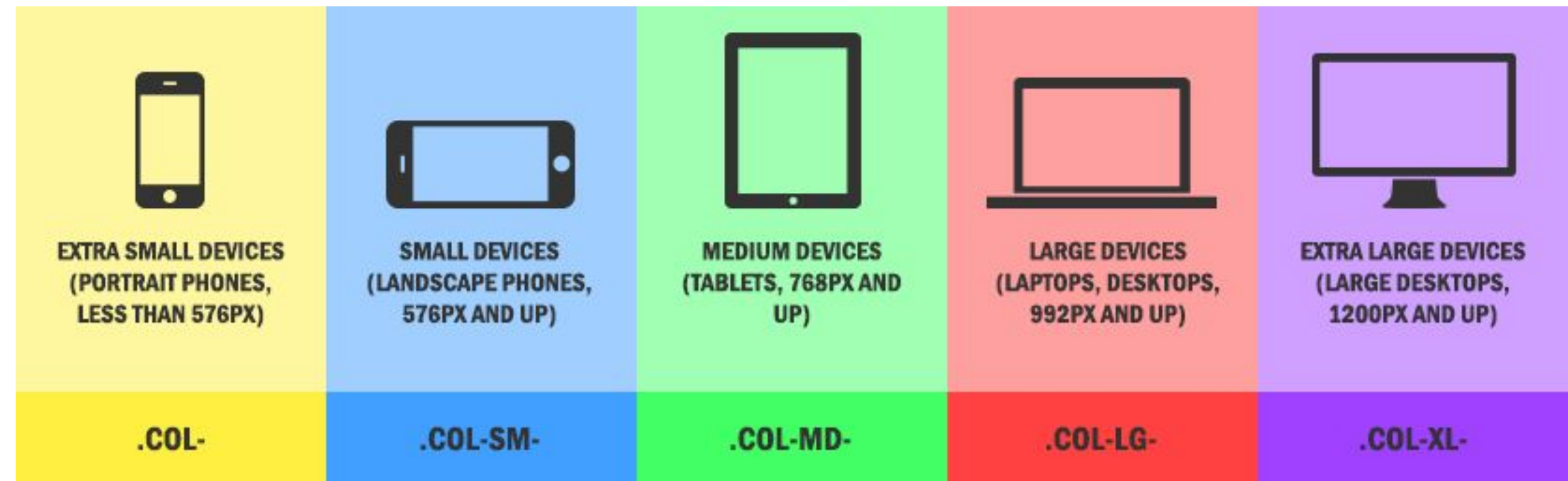
```
<div class="row">  
  <div class="col-4" style="background-color: ■lavender;">col 4</div>  
  <div class="col-8" style="background-color: ■lavenderblush;">col 8</div>  
</div>
```

col 4	col 8
-------	-------

3. Grid system cơ bản

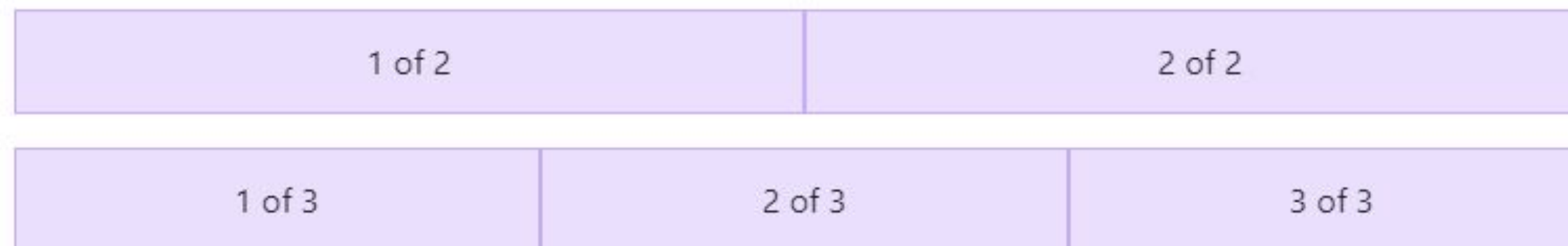
HỌC ĐỂ THAY ĐỔI

Các break point của bootstrap



Breakpoint	Class infix	Dimensions
Extra small	<i>None</i>	<576px
Small	<code>sm</code>	≥576px
Medium	<code>md</code>	≥768px
Large	<code>lg</code>	≥992px
Extra large	<code>xl</code>	≥1200px
Extra extra large	<code>xxl</code>	≥1400px

Chia đều các cột



HTML

```
<div class="container text-center">
  <div class="row">
    <div class="col">
      1 of 2
    </div>
    <div class="col">
      2 of 2
    </div>
  </div>
  <div class="row">
    <div class="col">
      1 of 3
    </div>
    <div class="col">
      2 of 3
    </div>
    <div class="col">
      3 of 3
    </div>
  </div>
</div>
```


3. Grid system cơ bản

Chỉ định
độ rộng
một số cột

1 of 3	2 of 3 (wider)	3 of 3
1 of 3	2 of 3 (wider)	3 of 3

HTML

```
<div class="container text-center">  
  <div class="row">  
    <div class="col">  
      1 of 3  
    </div>  
    <div class="col-6">  
      2 of 3 (wider)  
    </div>  
    <div class="col">  
      3 of 3  
    </div>  
  </div>  
  <div class="row">  
    <div class="col">  
      1 of 3  
    </div>  
    <div class="col-5">  
      2 of 3 (wider)  
    </div>  
    <div class="col">  
      3 of 3  
    </div>  
  </div>  
</div>
```

Chỉ định
độ rộng
vừa đủ
content

Variable width content

Use `col-{breakpoint}-auto` classes to size columns based on the natural width of their content.

1 of 3

Variable width content

3 of 3

1 of 3

Variable width content

3 of 3

HTML

```
<div class="container text-center">
  <div class="row justify-content-md-center">
    <div class="col col-lg-2">
      1 of 3
    </div>
    <div class="col-md-auto">
      Variable width content
    </div>
    <div class="col col-lg-2">
      3 of 3
    </div>
  </div>
  <div class="row">
    <div class="col">
      1 of 3
    </div>
    <div class="col-md-auto">
      Variable width content
    </div>
    <div class="col col-lg-2">
      3 of 3
    </div>
  </div>
</div>
```

Sếp chồng

col-sm-8

col-sm-4

col-sm

col-sm

col-sm

HTML

```
<div class="container text-center">  
  <div class="row">  
    <div class="col-sm-8">col-sm-8</div>  
    <div class="col-sm-4">col-sm-4</div>  
  </div>  
  <div class="row">  
    <div class="col-sm">col-sm</div>  
    <div class="col-sm">col-sm</div>  
    <div class="col-sm">col-sm</div>  
  </div>  
</div>
```

col-sm-8

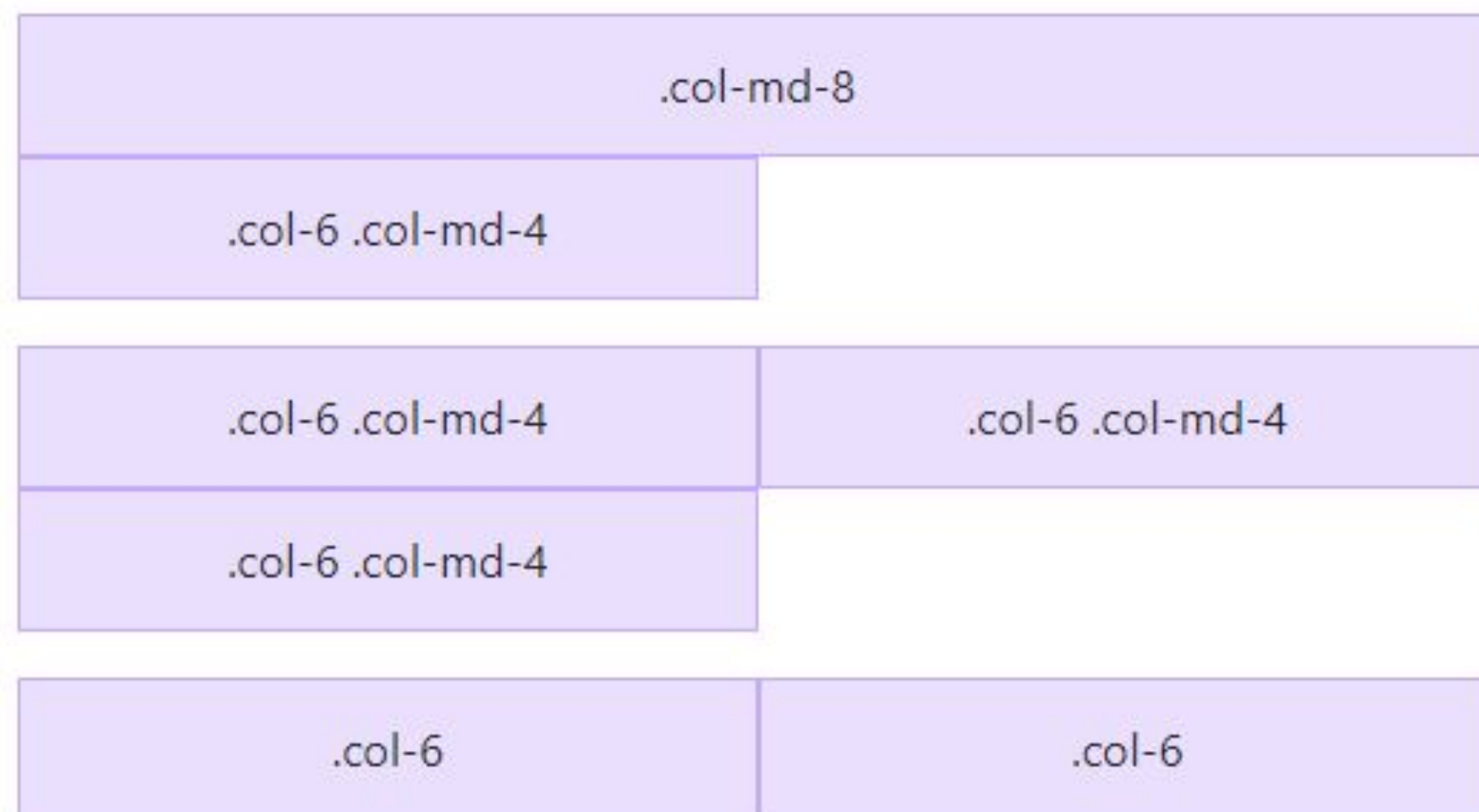
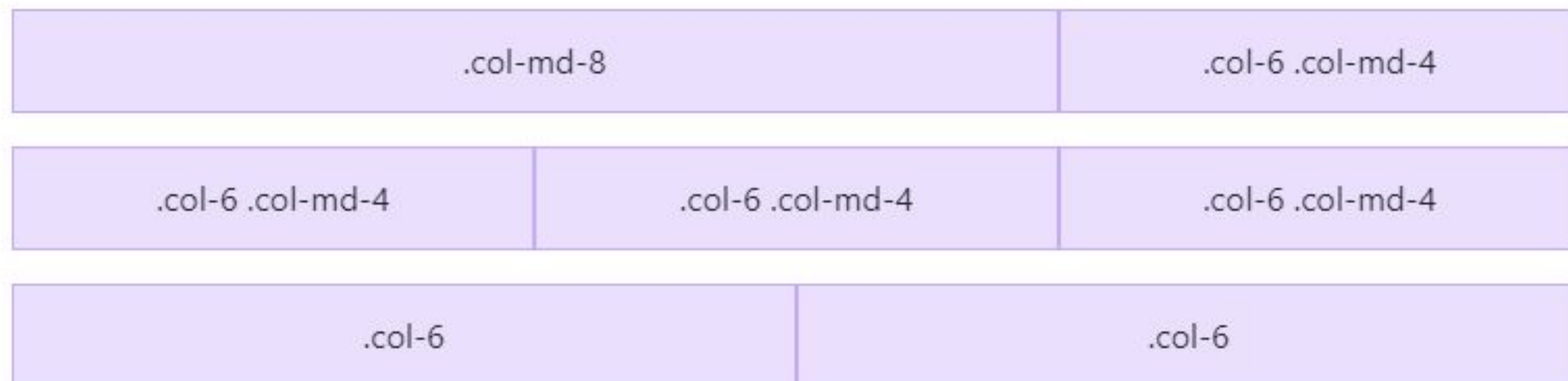
col-sm-4

col-sm

col-sm

col-sm

Sếp
chồng
nhiều bậc



Chỉ định
nhanh số
cột

Column	Column
Column	Column

HTML



```
<div class="container text-center">
  <div class="row row-cols-2">
    <div class="col">Column</div>
    <div class="col">Column</div>
    <div class="col">Column</div>
    <div class="col">Column</div>
  </div>
</div>
```


3. Grid system cơ bản

HỌC ĐỂ THAY ĐỔI

Chỉ định
khoảng
cách giữa
các cột
g, gx, gy

Custom column padding	Custom column padding
Custom column padding	Custom column padding

```
<div class="container">  
  <div class="row g-2">  
    <div class="col-6">  
      <div class="p-3 border bg-light">Custom column padding</div>  
    </div>  
    <div class="col-6">  
      <div class="p-3 border bg-light">Custom column padding</div>  
    </div>  
    <div class="col-6">  
      <div class="p-3 border bg-light">Custom column padding</div>  
    </div>  
    <div class="col-6">  
      <div class="p-3 border bg-light">Custom column padding</div>  
    </div>  
  </div>  
</div>
```

Copy

Thực hành

Cinque Terre

Resize the browser window

The Walk

Transport

History

Gallery

The Walk

The walk from Monterosso to Riomaggiore will take you approximately two hours, give or take an hour depending on the weather conditions and your physical shape.



What?

Cinque Terre comprises five villages: Monterosso, Vernazza, Corniglia, Manarola, and Riomaggiore.

Where?

On the northwest coast of the Italian Riviera, north of the city La Spezia.

Price?

The Walk is free!

This web page is a part of a demonstration of fluid web design made by w3schools.com. Resize the browser window to see the content respond to the resizing.



Các class thông dụng

Điều chỉnh kích thước: **{property} – {value}**

Value = 25, 50, 75, 100, auto

property = w, h

property = mw (max width), min-vw, min-vh, vw, vh **chỉ đi với value là 100**

Điều chỉnh margin, padding:

{property}{sides}-{breakpoint}-{size}

property = m (margin), p (padding)

sides =

t (top),

b (bottom),

s (start = left/right tùy ngôn ngữ),

e (end = right/left tùy ngôn ngữ),

x (cả left và right),

y (cả top và bottom)

size = 0 (0 rem), 1 (0.25rem) , 2 (0.5rem), 3 (1rem), 4 (1.5rem), 5 (3rem), auto

Điều chỉnhText:

- **Căn lề chữ:** text-start, text-center, text-end, text-md-start có thể kết hợp với các breakpoint
- **Chế độ xuống dòng:** text-wrap, text-nowrap kết hợp các thuộc tính background
- **Chữ hoa, chữ thường:** text-lowercase, text-uppercase, text-capitalize
- **Font size:** fs-1 -> fs-6
- **Font-weight:** fw-bold, fw-bolder, fw-normal, fw-light, fw-lighter, fst-italic, fst-normal
- **Line height:** lh-1, lh-sm, lh-base, lh-lg
- **Căn dọc:** align-baseline, align-top, align-middle, align-bottom, align-text-top, align-text-bottom

Màu sắc:

`.text-primary`

`.text-secondary`

`.text-success`

`.text-danger`

`.text-warning`

`.text-info`

`.text-light`

`.text-dark`

`.text-body`

`.text-muted`

`.text-white`

`.text-black-50`

`.text-white-50`

4. Các class thông dụng

Màu nền:

`.bg-primary`

`.bg-secondary`

`.bg-success`

`.bg-danger`

`.bg-warning`

`.bg-info`

`.bg-light`

`.bg-dark`

`.bg-body`

`.bg-white`

`.bg-transparent`

Dựng lại giao diện CV này, tùy biến cho trường hợp hiển thị trên mobile



Michael Kaye

Master's Student
in Finance

Contact Details

0777777777

michael@mkaye.com

Dundee

Core Skills

- Corporate finance
- Bookkeeping processes
- Market research
- Advanced Excel
- International business
- Research and statistics
- Financial statements analysis
- Managerial accounting
- Investment management

Professional Profile

Adaptable accounting and finance student with a keen interest in corporate finance and a sound academic knowledge of accounting. Currently studying towards a master's degree and familiar with financial statements and analysis, advanced corporate finance, managerial accounting, statistics, and business financing. A strong communicator, committed to building relationships with classmates to complete financial projects. Recently certified in corporate finance and proficient in Advanced Excel, demanding attention to detail and strong quantitative and analytical skillsets.

Education

- **MSc Accounting and Finance (graduating 2023)** | Dundee University | Sep 2021 |
Key modules: Financial Statements & Analysis, Advanced Corporate Finance, Advanced Market Research, Management & Organisation.
- **Level 3 Certificate in Corporate Finance** | The Chartered Institute for Securities & Investment | May 2022 |
Syllabus: The Regulatory Environment in the UK, The FCA Conduct of Business Source Book, Corporate Governance & Business Ethics, Takeovers & Mergers, Prospectuses, Equity Capital Markets, Quantitative Methods for Corporate Finance, Finance Statements Analysis, Capital Structure, Introduction to Business Valuations, Corporate Transactions, Corporate Finance Documentation.
- **Investment Management Certificate** | CFA Society | May 2021 |
Syllabus: Financial Markets & Institutions, Ethics & Investment Professionalism, The Regulation of Financial Markets & Institutions, Legal Concepts, Client Advice, Taxation in the UK, Quantitative Methods, Micro-economics, Macro-economics, Accounting, Equities, Fixed Income, Derivatives, Alternative Investments, Portfolio Management, Investment Products, Investment Performance Management.
- **BA International Business (2:1)** | Dundee University | Sep 2018 - May 2021 |
Key modules: Finance, Corporate Finance, Foundations of Accounting, Managerial Accounting, Statistics I, Statistics II, Business Finance.
- **4 x A Levels (grades AABB)** | Dundee Sixth Form | Sep 2016 - May 2018 |
- **12 x GCSEs (grades A-C)** | Dundee School | Sep 2014 - May 2016 |

Additional

Software

MS Office, Sage, Thomson Reuters

Languages

English (native)



Michael Kaye

Master's Student
in Finance

Contact Details

0777777777
michael@mkaye.com
Dundee

Core Skills

- Corporate finance
- Bookkeeping processes
- Market research
- Advanced Excel
- International business
- Research and statistics
- Financial statements analysis
- Managerial accounting
- Investment management

Professional Profile

Adaptable accounting and finance student with a keen interest in corporate finance and a sound academic knowledge of accounting. Currently studying towards a master's degree and familiar with financial statements and analysis, advanced corporate finance, managerial accounting, statistics, and business financing. A strong communicator, committed to building relationships with classmates to complete financial projects. Recently certified in corporate finance and proficient in Advanced Excel, demanding attention to detail and strong quantitative and analytical skillsets.

Education

- **MSc Accounting and Finance (graduating 2023)** | Dundee University | Sep 2021 |
Key modules: Financial Statements & Analysis, Advanced Corporate Finance, Advanced Market Research, Management & Organisation.
- **Level 3 Certificate in Corporate Finance** | The Chartered Institute for Securities & Investment | May 2022 |
Syllabus: The Regulatory Environment in the UK, The FCA Conduct of Business Source Book, Corporate Governance & Business Ethics, Takeovers & Mergers, Prospectuses, Equity Capital Markets, Quantitative Methods for Corporate Finance, Finance Statements Analysis, Capital Structure, Introduction to Business Valuations, Corporate Transactions, Corporate Finance Documentation.
- **Investment Management Certificate** | CFA Society | May 2021 |
Syllabus: Financial Markets & Institutions, Ethics & Investment Professionalism, The Regulation of Financial Markets & Institutions, Legal Concepts, Client Advice, Taxation in the UK, Quantitative Methods, Micro-economics, Macro-economics, Accounting, Equities, Fixed Income, Derivatives, Alternative Investments, Portfolio Management, Investment Products, Investment Performance Management.
- **BA International Business (2:1)** | Dundee University | Sep 2018 - May 2021 |
Key modules: Finance, Corporate Finance, Foundations of Accounting, Managerial Accounting, Statistics I, Statistics II, Business Finance.
- **4 x A Levels (grades AABB)** | Dundee Sixth Form | Sep 2016 - May 2018 |
- **12 x GCSEs (grades A-C)** | Dundee School | Sep 2014 - May 2016 |

Additional

Software

MS Office, Sage, Thomson Reuters

Languages

English (native)



Xin cảm ơn!

Nguyễn Hà Thanh

Giảng viên khoa CNTT

Zalo: 0985 308 801

