

Responsive Web Design

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Agenda

1
References

2
Khái niệm

3
Strategies

4
Bootstrap

Responsive Web Design

1

Responsive Web Design

REFERENCES



References



□ Bootstrap

- <http://getbootstrap.com/>
- <http://bootsnipp.com/>

□ Testing Responsive Web

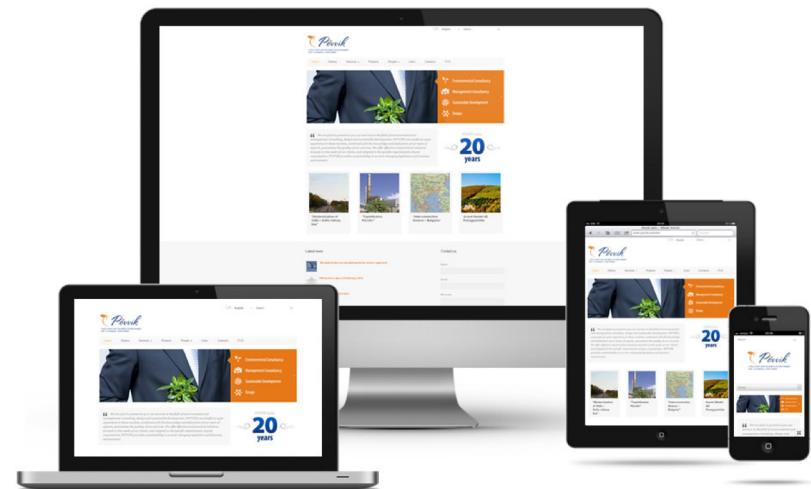
- <http://mattkersley.com/responsive>
- <http://protofluid.com>



2

Responsive Web Design

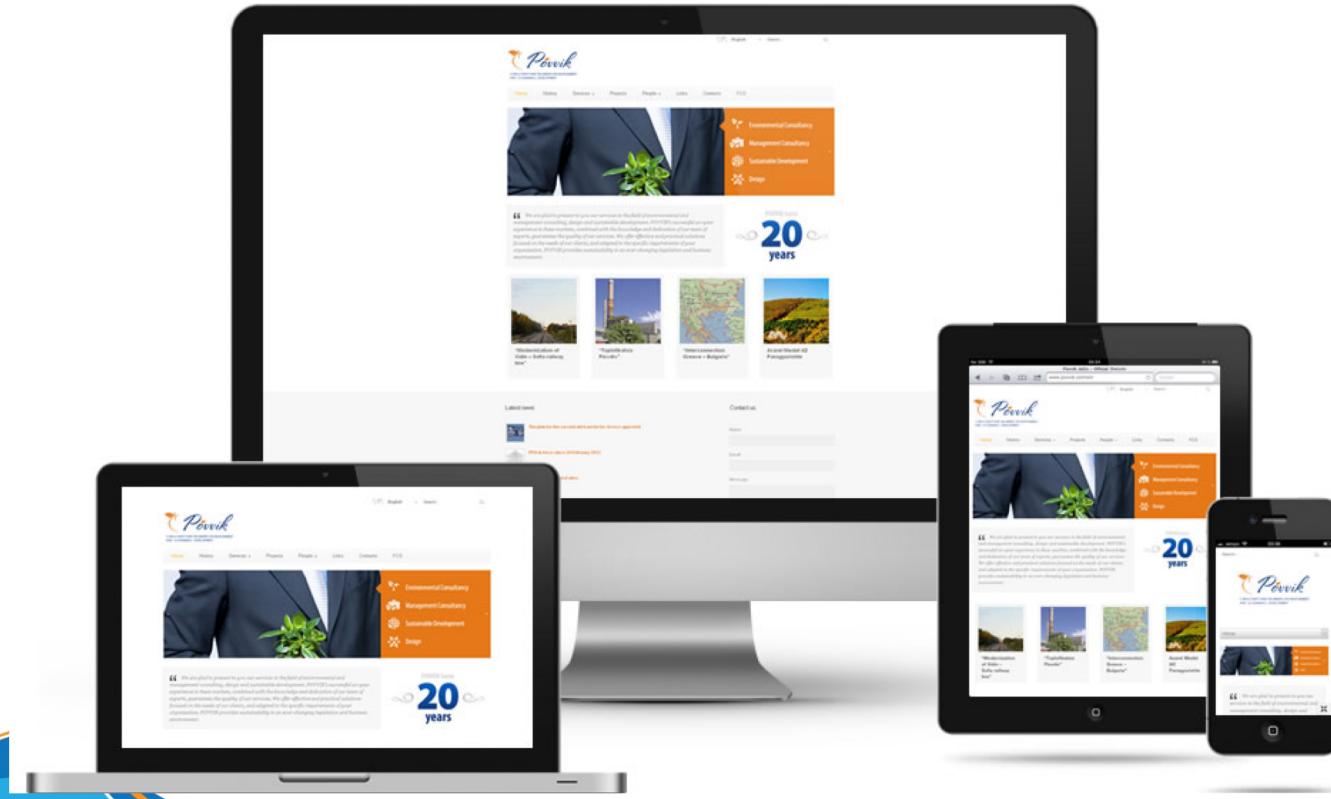
RESPONSIVE WEB DESIGN



Responsive Web Design



- Design should look good on different devices



3

Responsive Web Design

STRATEGIES



Strategies



1. Fluid & Flexible Layouts

- Elements can automatically resize, hide, shrink, or enlarge

2. Flexible Images

- Images can scale nicely to fit any browser size

3. CSS3 Media Queries

- Define different styles for different browser sizes





- Setting the view port to give the browser instructions on how to control the page's dimensions and scaling

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

- Set the width property to 100%, the image will be responsive and scale up and down

```

```

CSS3 Queries



□ 1. Use media attribute

```
1 <link rel="stylesheet" media="screen" href="style.css" />
2
3 <link rel="stylesheet" media="only screen and
4   (min-width:320px) and (max-width:568px)" href="mobile.css" />
5
6 <link rel="stylesheet" media="only screen and
7   (min-width:768px) and (max-width:980px)" href="tablet.css" />
```



□ 2. Use media query

```
1 @media(max-width: 600px) {  
2     /* Styles go here */  
3 }  
4  
5 @media(min-width: 700px) {  
6     /* Styles go here */  
7 }  
8  
9 @media only screen and (min-width: 320px) and (max-width: 568px) {  
10    /* Styles go here */  
11 }  
12  
13 @media only screen and (min-width: 768px) and (max-width: 980px) {  
14    /* Styles go here */  
15 }
```

4

Responsive Web Design

BOOTSTRAP





Bootstrap



- The most popular HTML, CSS, and JavaScript framework for developing responsive, mobile-first websites
 - Save time
 - Easy to use
 - Customizable
 - Responsiveness



Bootstrap Components



- Alerts
- Badge
- Breadcrumb
- Buttons
- Card
- Carousel
- Collapse
- Dropdowns
- Forms
- Jumbotron
- Modal
- Navbar
- Pagination
- Progress
- Scrollspy
- ...

How to use Bootstrap



```
<!doctype html>
<html lang="en">
  <head>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1,
shrink-to-fit=no">

    <!-- Bootstrap CSS -->
    <link rel="stylesheet" href="css/bootstrap.min.css" >

    <title>Hello, world!</title>
  </head>
  <body>
    <h1>Hello, world!</h1>

    <!-- Optional JavaScript -->
    <!-- jQuery first, then Popper.js, then Bootstrap JS -->
    <script src="js/jquery-3.2.1.min.js" ></script>
    <script src="js/popper.min.js" ></script>
    <script src="js/bootstrap.min.js" ></script>
  </body>
</html>
```

Bootstrap Media query



```
// Extra small devices (portrait phones, less than 576px)
// No media query since this is the default in Bootstrap

// Small devices (landscape phones, 576px and up)
@media (min-width: 576px) { ... }

// Medium devices (tablets, 768px and up)
@media (min-width: 768px) { ... }

// Large devices (desktops, 992px and up)
@media (min-width: 992px) { ... }

// Extra large devices (large desktops, 1200px and up)
@media (min-width: 1200px) { ... }
```

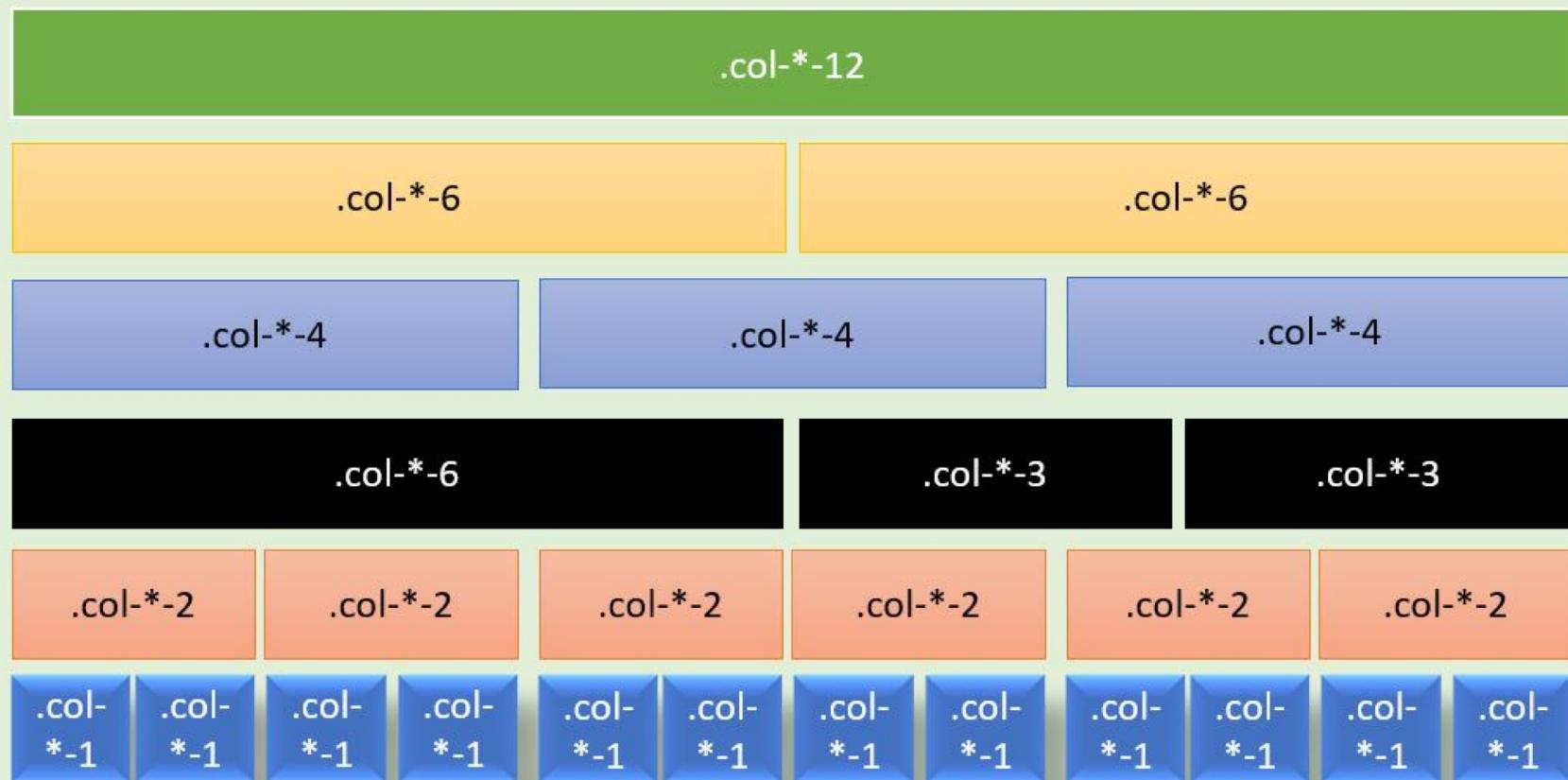


12 Column Grid



.container or .container-fluid

.row



Example



Dawlish Learning Partnership

Home | About Us | Teachers Blog | DLP News | Contact Us

Childcare 

After School and Holiday Clubs 

Life Long Learning 

Training For Work 

Help for Young People and Parents 

Community Access to Schools 

DLP Latest News



Little Dolphin Swim Awards

28th February, 2010

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut molestie libero enim, in accumsan sem. In mi purus, dapibus id imperdiet sit amet, vehicula nec dolor. Pellentesque in.

[Read More >>](#)



New Pool for Dawlish Community College

Teachers Blog

New CPD Video

27th February 2010



Cras pharetra pharetra ipsum, sit amet semper purus venenatis nec. Sed eros neque, faucibus ut dictum ac, congue ac velit. Mauris et molestie quam. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut molestie libero enim.

[Read More >>](#)



Container

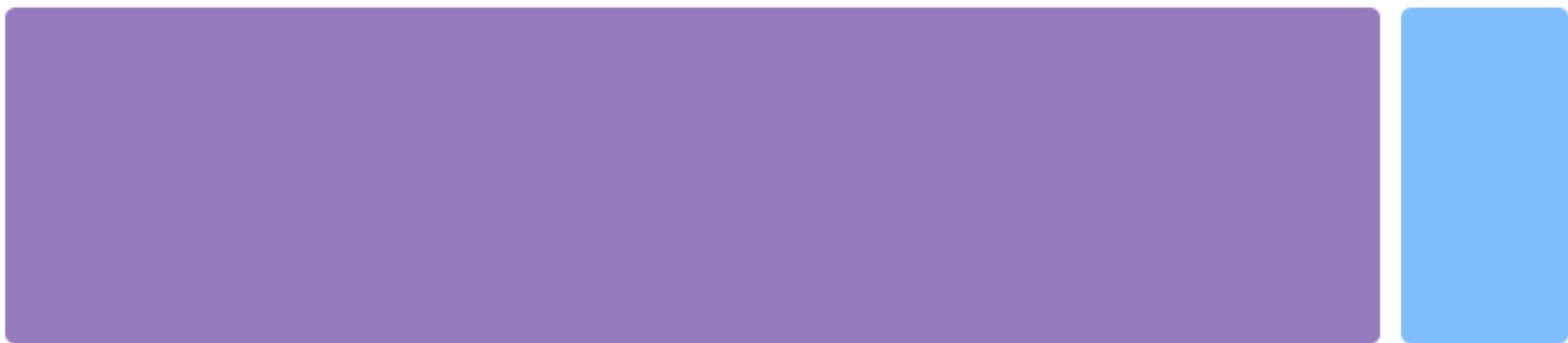


```
<div class="container">  
  <!-- Content here -->  
</div>
```

Copy



Fluid Container



```
<div class="container-fluid">  
  ...  
</div>
```

Copy



Bootstrap Grid System



	Extra small <code><576px</code>	Small <code>≥576px</code>	Medium <code>≥768px</code>	Large <code>≥992px</code>	Extra large <code>≥1200px</code>
Max container width	None (auto)	540px	720px	960px	1140px
Class prefix	<code>.col-</code>	<code>.col-sm-</code>	<code>.col-md-</code>	<code>.col-lg-</code>	<code>.col-xl-</code>
# of columns	12				
Gutter width	30px (15px on each side of a column)				

Equal rows – Equal columns



About us

Lorem ipsum dolor, sit amet, consectetur adipisicing elit. Illo officiis facilis deleniti mollitia.



Working Place

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Reiciendis iste dolore quia esse eaque



Work and paid

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Officia, ad a! Saepe atque autem doloremque,

```
<div class="row equal">
  <div class="col">...</div>
  <div class="col">...</div>
  <div class="col">...</div>

</div>
```



Vertical Align



.align-items-start

.align-items-start

.align-items-start

.align-items-center

.align-items-center

.align-items-center

.align-items-end

.align-items-end

.align-items-end



Vertical Align



.align-self-start

.align-self-center

.align-self-end

Horizontal Align



.justify-content-start

.justify-content-start

.justify-content-center

.justify-content-center

.justify-content-end

.justify-content-end

.justify-content-around

.justify-content-around

.justify-content-between

.justify-content-between





Navbar



Navbar Home Features Pricing Disabled

```
<nav class="navbar navbar-expand-lg navbar-light bg-light">
  <a class="navbar-brand" href="#">Navbar</a>
  <button class="navbar-toggler" type="button" data-toggle="collapse"
  data-target="#navbarNavAltMarkup" aria-controls="navbarNavAltMarkup"
  aria-expanded="false" aria-label="Toggle navigation">
    <span class="navbar-toggler-icon"></span>
  </button>
  <div class="collapse navbar-collapse" id="navbarNavAltMarkup">
    <div class="navbar-nav">
      <a class="nav-item nav-link active" href="#">Home
      <span class="sr-only">(current)</span></a>
      <a class="nav-item nav-link" href="#">Features</a>
      <a class="nav-item nav-link" href="#">Pricing</a>
      <a class="nav-item nav-link disabled" href="#">Disabled</a>
    </div>
  </div>
</nav>
```

Copy



Navbar



Navbar



Home

Features

Pricing

Disabled





Responsive Image



```

```

Copy



Thumbnail



```

```



Colors



.text-primary

.text-secondary

.text-success

.text-danger

.text-warning

.text-info

.text-light

.text-dark

.text-muted

.text-white

.bg-primary

.bg-secondary

.bg-success

.bg-danger

.bg-warning

.bg-info

.bg-light

.bg-dark

.bg-white



Buttons



Primary Secondary

Success

Danger

Warning

Info

Light

Dark

Link

Copy

```
<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>
```



Spacing



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

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`
- `l` - for classes that set `margin-left` or `padding-left`
- `r` - for classes that set `margin-right` or `padding-right`
- `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



Spacing



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`



Spacing



Centered element

```
<div class="mx-auto" style="width: 200px;">  
  Centered element  
</div>
```

Copy

Carousel



STRAWBERRY PICKING
IN BUNDABERG QLD

.. GET YOUR 2ND YEAR VISA DAYS DON

HOURLY RATES \$22.18/HR AND
CONTRACT AWARD RATE

VARIOUS FARM WORK AVAILABLE ALL YEAR AROUND WILL
INCLUDE PICKING AND PACKING OF STRAWBERRIES. PICKING
ZUCCHINI, TOMATOES, MANGOES AND LYCHEES

[Book a room](#)



Jumbotron



Hello, world!

This is a simple hero unit, a simple jumbotron-style component for calling extra attention to featured content or information.

It uses utility classes for typography and spacing to space content out within the larger container.

[Learn more](#)



Card



Featured

Special title treatment

With supporting text below as a natural lead-in to additional content.

[Go somewhere](#)

2 days ago

Summary



□ Responsive Web Design

□ Strategies

- Fluid & Flexible Layout
- Flexible Image
- CSS3 Queries

□ Bootstrap

- 12 Column Grid
- Components

