RWD

Class 9

@rwdkent

Overview

Turn In Style Tiles and CSS 2 Assignment (30 min)

Layout with Floats and Flexbox (25 min)

Break (5 min)

HTML Layout + Responsive Grids, Images, Media Queries (45 min)

Fonts & Media Queries Assignment (10 min)

Media Queries Hands-On (30 min)

CSS Basics 2 Assignment

www.rwdkent.com/class/assignments/css2

Analytics Overview

Layouts in HTML/CSS (Flexbox and Floats)

The boxes on screen can be positioned next to one another in two main ways: floats and flex box

Floats

By using the "float: value" property in CSS, you can force elements to float over to the left or the right beside another element. Think of a floated image within text.

Lorem Ipsum Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam sodales pretium ipsum. Etiam ut enim augue. Etiam mi tortor, pulvinar at dictum faucibus, mollis eget nunc.
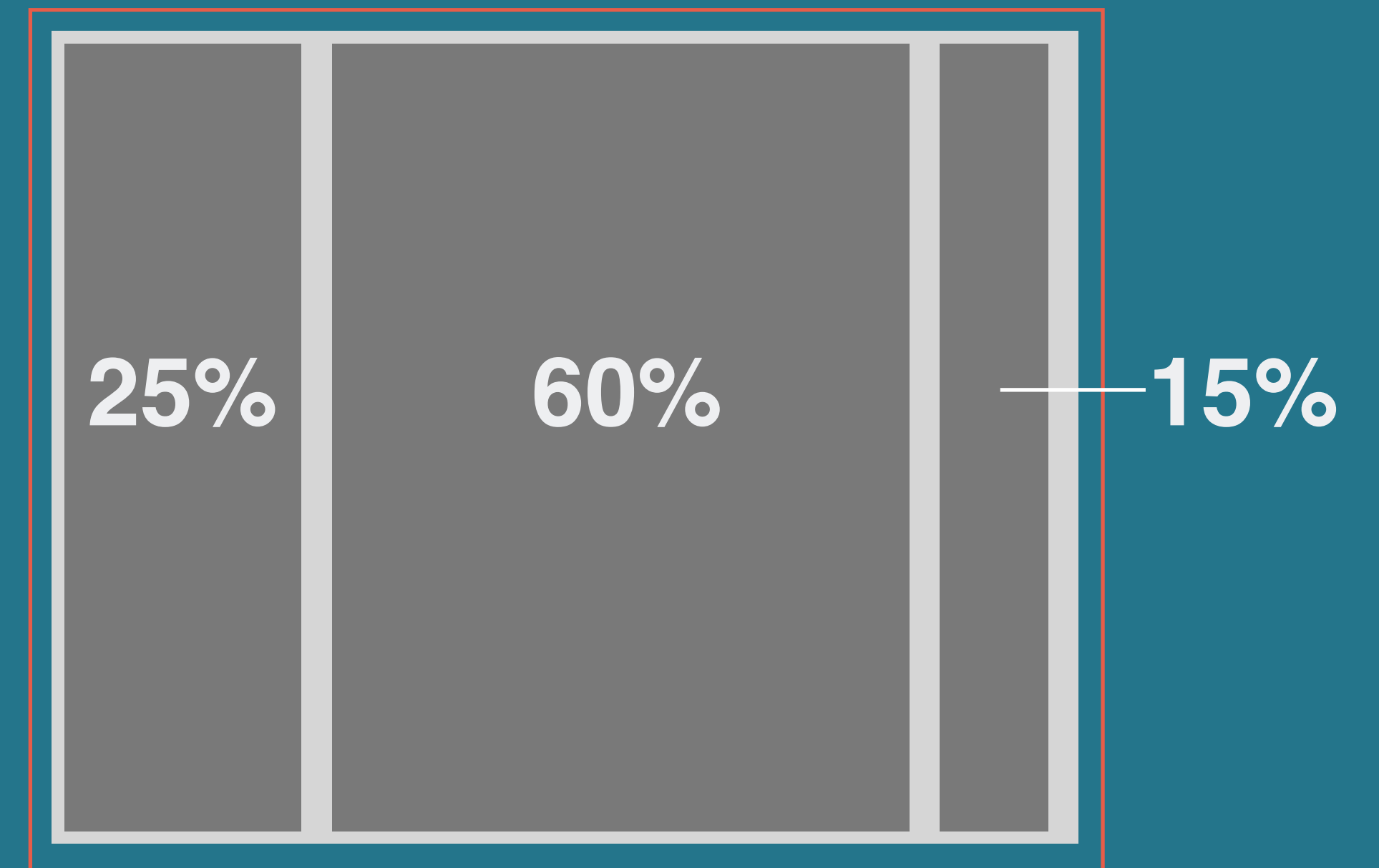
Morbi justo velit, rutrum vel placerat in, adipiscing vitae sapien. Vivamus sit amet lacus enim, vel scelerisque justo. Nunc dignissim vehicula urna ac porta. Suspendisse potenti.

Praesent nisi dolor, ornare quis sodales id, lacinia ut mauris.

```
img {
  float: left;
  width: 50px;
}
```

Floats

By using this property, we can create complex float-based column layouts, each column at various sizes.

25% **60%** **15%**

Floats

```
.section1 {          .section2 {          .section3 {
 float: left;          float: left;          float: left;
 width: 25%;           width: 50%;           width: 15%;
}                     }                     }
```

Problem: Floated columns don't know when to end ("clear") so we must use a clearfix.

http://codepen.io/challahan/professor/amrpWE/

Pros of Float Layouts

Tried and true - used on most websites today

Works in older browsers

Pros of Float Layouts

Requires hacks for simple layout functionality (clearfix, equal height columns, etc.)

Much more code to accomplish same thing in flex box

So What's Flexbox?

Flex the size of boxes within a container to create advanced layouts.

Pros of Flexbox

Allows for advanced flexible layouts
Direction agnostic
Allows for equal height columns
Doesn't need clear fix

Cons of Flexbox

Incompatible with older browsers (requires fallback using floats - IE11 and up)

Newer technology, so older sites may not use it.

How Does Flexbox Work?

Start by telling a "container" box element to display: flex. This will make all of its children display as flexible items.

http://codepen.io/challahan/professor/YGgNxR/

When Can I Use Flexbox?

TODAY!

Can I use   flexbox   ? ⚙ Settings

1 result found

Flexible Box Layout Module 📄 - CR

Method of positioning elements in horizontal or vertical stacks.
Support includes the support for the all properties prefixed with
`flex` as well as `display: flex`, `display: inline-flex`, `align-content`, `align-items`, `align-self`, `justify-content` and `order`.

U.S.A.	85.34% + 11.92% = 97.26%
unprefixed:	83.82% + 9.31% = 93.14%
Global	82.33% + 14.72% = 97.05%
unprefixed:	81.46% + 4.44% = 85.91%

`Current aligned` Usage relative Date relative   `Show all`

IE	Edge *	Firefox	Chrome	Safari	Opera	iOS Safari *	Opera Mini *	Android Browser *	Chrome for Android
			49						
			51			8.4			
		47	52			9.2			
8	13	48	53	9.1		9.3			
11	14	49	54	10	40	10	all	53	53
		50	55	TP	41				
		51	56		42				
		52	57						

Break

HTML Layout, Flexible Grids and Media Queries

HTML 5 Elements

Indicate the purpose of elements

Help describe structure

Easily style without adding classes (less DIVs)

HTML 5 Elements

```
<body>
<div id="page">
<div id="header">
<div id="nav">

<div id="content">
<div class="article">



<div class="article">



<div id="sidebar">

<div id="footer">
```

HTML 5 Elements

```
<body>
<div id="page">
<header id="header">
<div>id="nav">
<div id="content">
<div class="article">


<div class="article">


<div id=
"sidebar">

<footer id="footer">
```

HTML 5 Elements

header   aside

footer   section

nav (use ul)   hgroup

article   figure

Responsive Web Design

Percentage-Based Grids
Flexible Images
Media Queries

Percentage-Based Grids

target / context = result

http://codepen.io/challahan/professor/EVEGMv

http://codepen.io/challahan/professor/WQzPbQ/?editors=1100

Fluid Images

http://codepen.io/challahan/professor/yYKZbb/

```
img {
    max-width: 100%;
}
```

Media Query

```
@media screen and (min-width: 600px) {
    /* Stuff Goes Here */
}


@media screen and (max-width: 1200px) {
    /* Stuff Goes Here */
}
```

Media Query

```css
@media screen and (min-width: 600px) and (max-width: 1200px) {
    /* Stuff Goes Here */
}


@media screen and (min-height: 600px) {
    /* Stuff Goes Here */
}
```
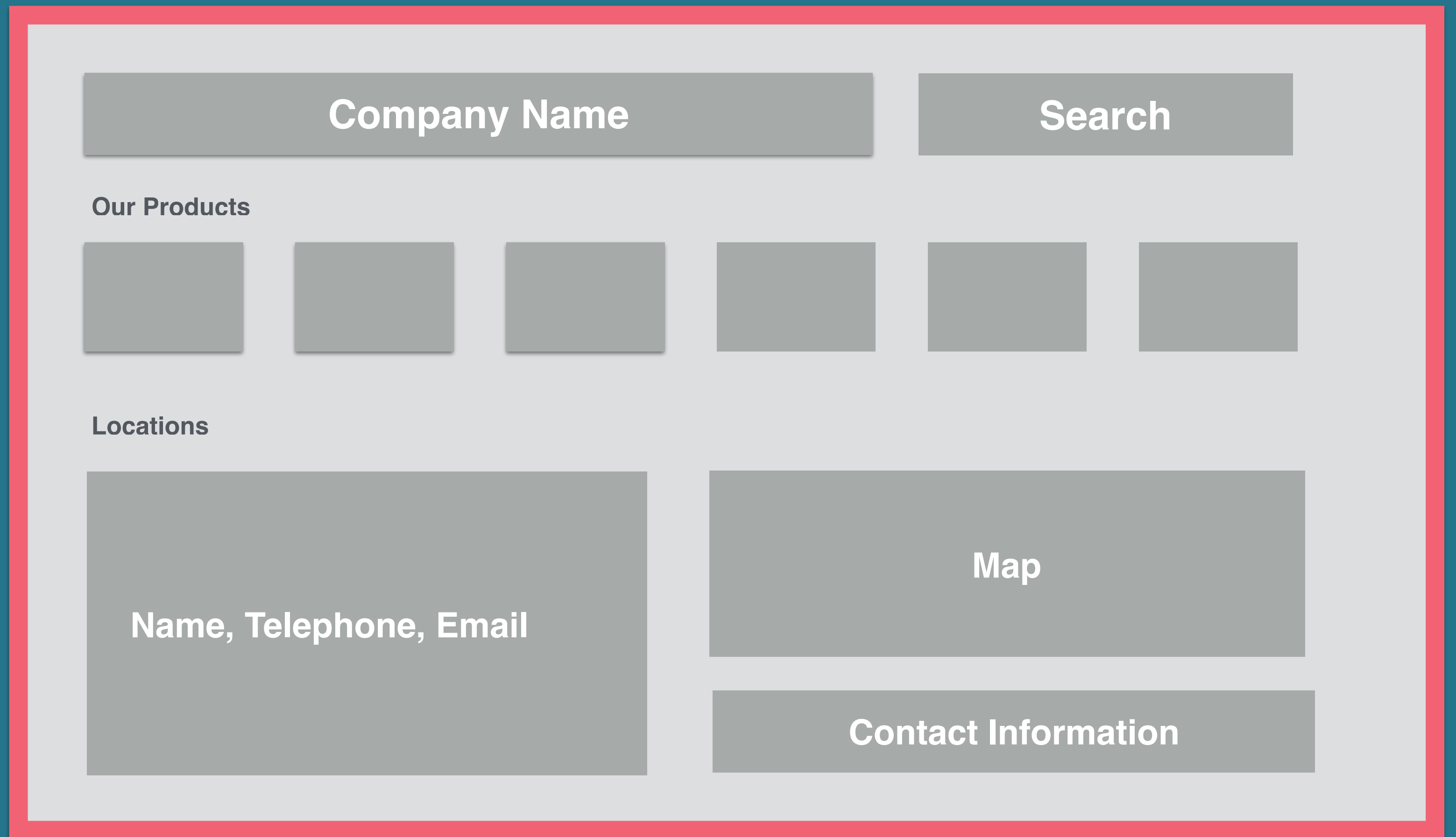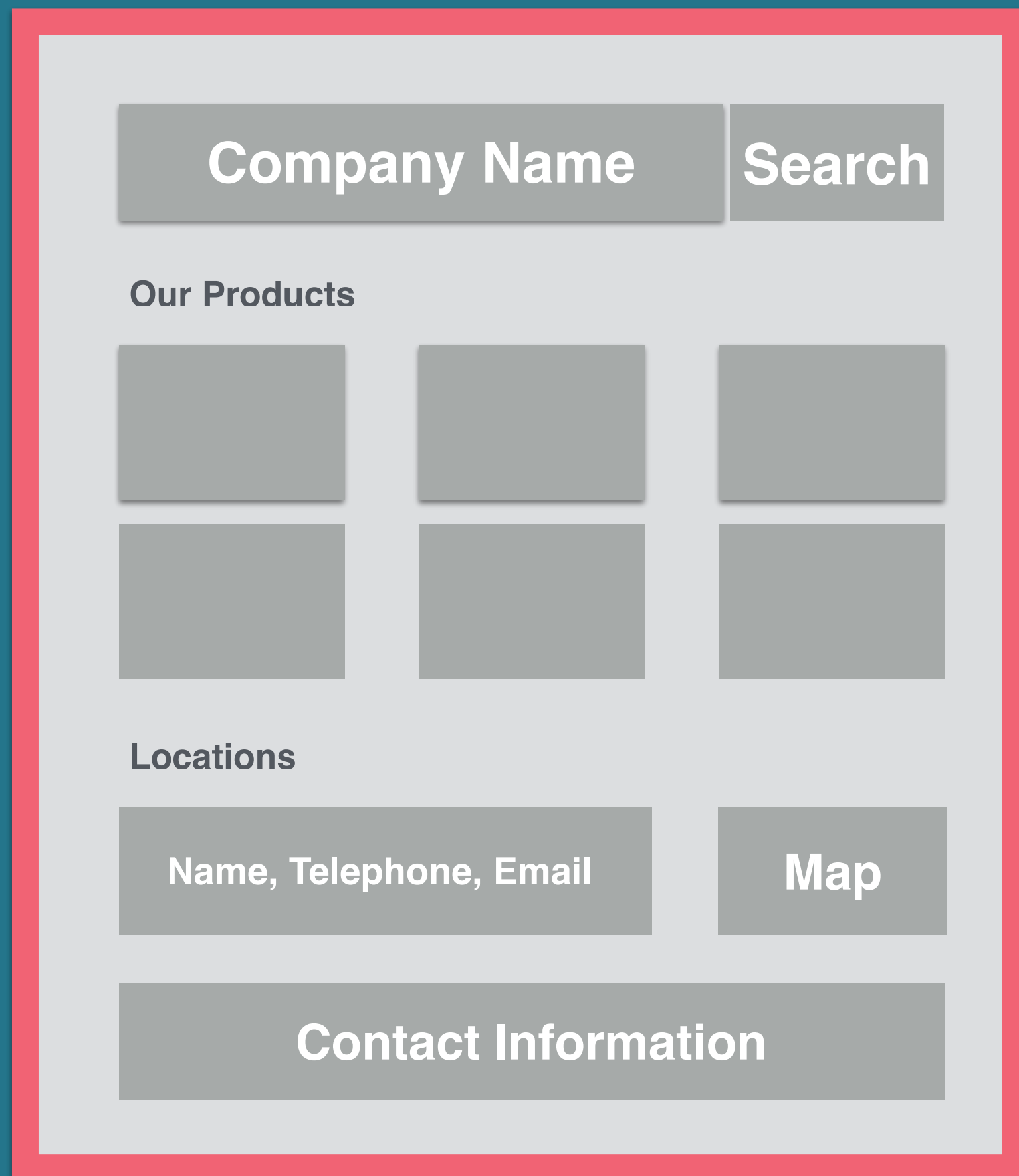
Breakpoint

Size at which the page layout or design "breaks"

Can have multiple breakpoints per layout

Let design (not device) dictate breakpoints

Company Name | **Search**

Our Products

Locations

Name, Telephone, Email | **Map**

Contact Information

Company Name | **Search**

Our Products

Locations

Name, Telephone, Email | **Map**

Contact Information

∧

Breakpoint: 1000px wide

Media Query

width	device-aspect ratio
height	color
device-width	color-index
device-height	monochrome
orientation	resolution
aspect-ratio	scan

Magic Meta Tag

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

Example: http://codepen.io/challahan/professor/yYKZbb/

No Media Query

0   Infinity

http://codepen.io/challahan/
professor/yawgyZ/

@media screen and (max-width: 600px) { }

0   600px   Infinity

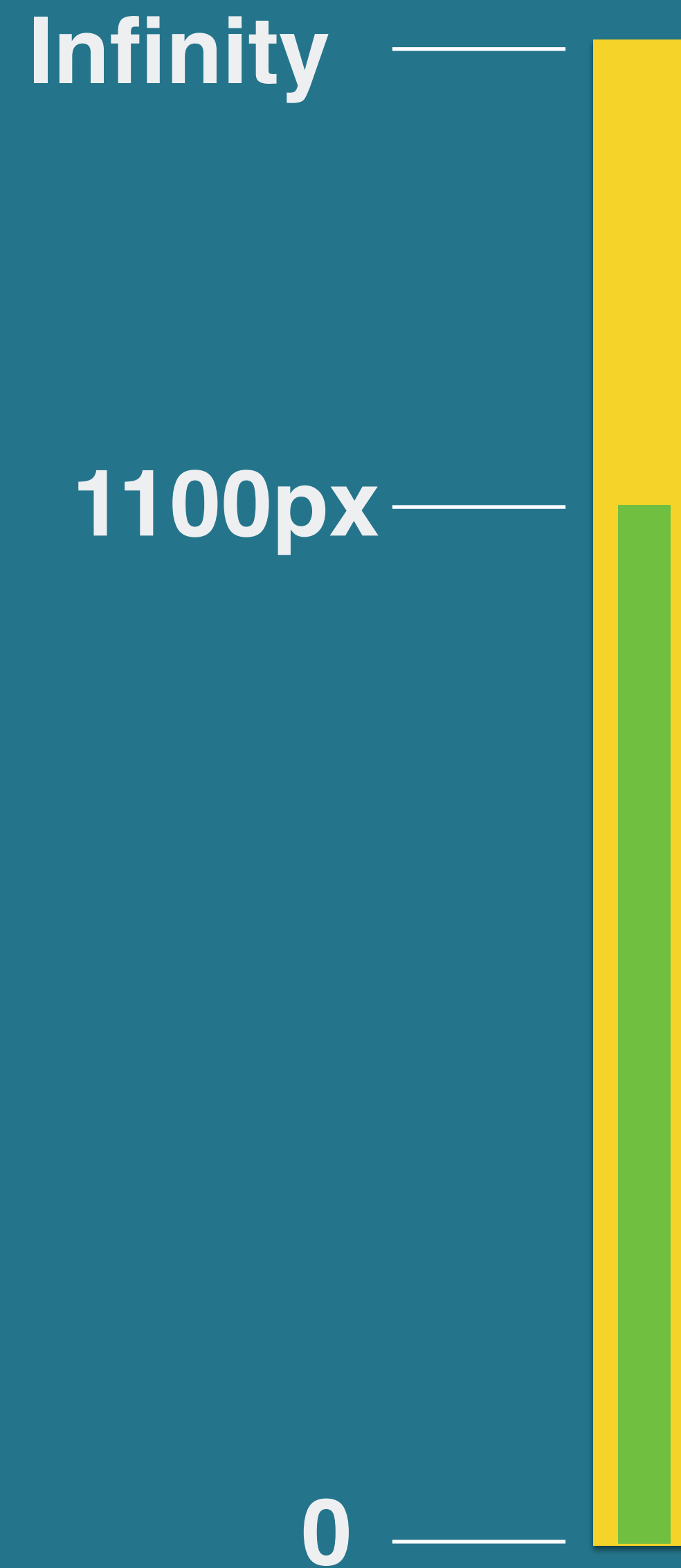# @media screen and (min-width: 1200px) { }

0   1200px   Infinity

@media screen and (min-width: 800px) and (max-width: 1000px) { }

| 0 | 800px | 1000px | Infinity |

@media screen and (min-height: 500px) { }

Infinity

500px

0
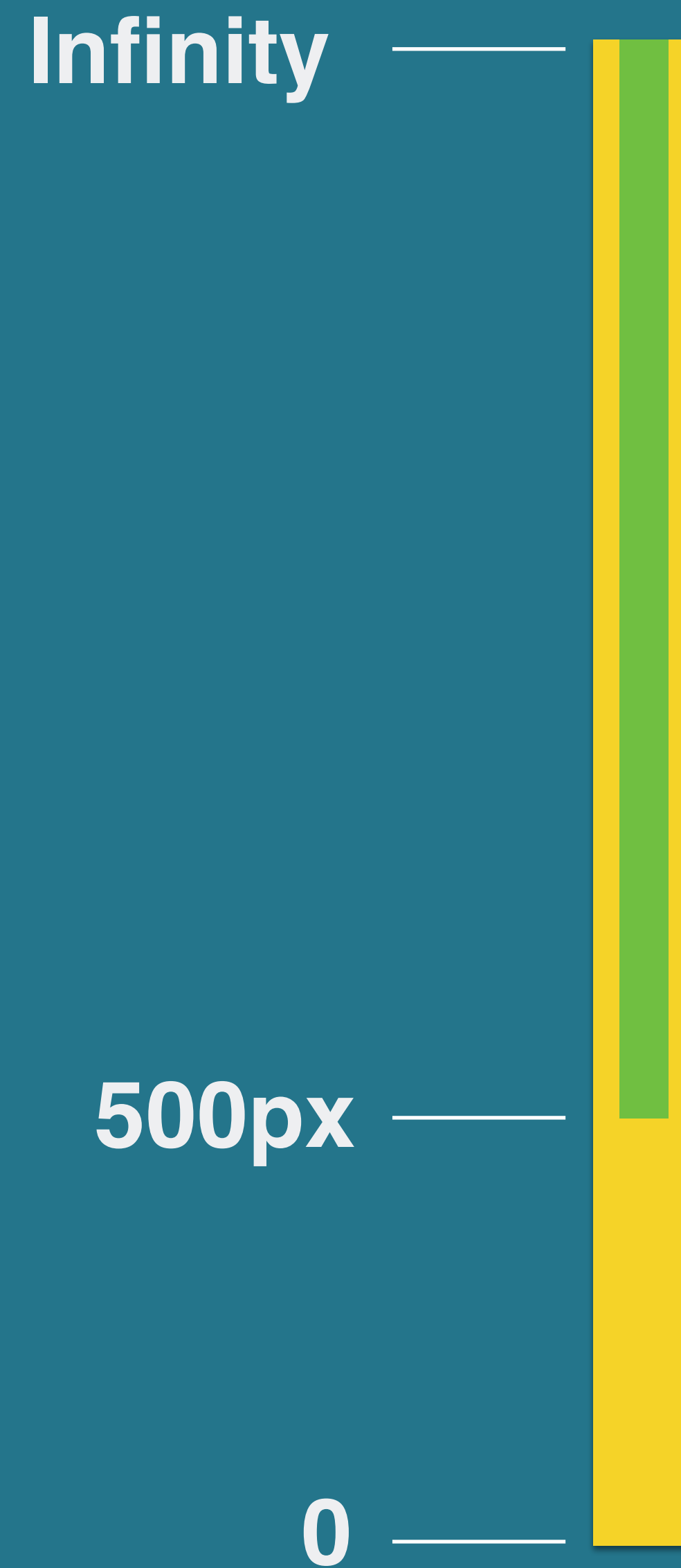
@media screen and (max-height: 1100px) { }

Infinity

1100px

0

Fonts & Media Queries Assignment

www.rwdkent.com/class/assignments/layout

For Next Time

Responsive Web Design - Ch. 5 Becoming Responsive
HTML Wireframes by Brad Frost
Atomic Web Design by Brad Frost
Responsive Deliverables by Dave Rupert

Fonts/Media Queries Assignment

Special Guest: ipsoCreative (Bonus for Questions)