



RWD

Class 6

@rwdkent

Overview

CSS Box Model Video + Review
(30 min)

CSS Basics 2 (15 min)

Responsive Markup (30 min)

Break (10 min)

Responsive Markup Hands-On
(1 hour)

Fonts & Media Queries
Assignment (15 min)



Finish Box Model Video



**Every element on the
page is a box.**



Border/Padding/Margin



BORDER

MARGIN

PADDING



Important Image CSS

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

I recommend adding this to every stylesheet.



Important Box-Sizing CSS

Take padding and borders into
account when calculating box size

```
* {box-sizing: border-box}
```

I recommend adding this to every stylesheet.



DIV and SPAN

Generic ways of grouping elements or words together to relate them or apply style.



HTML 5 Elements

header

footer

nav (use ul)

article

aside

section

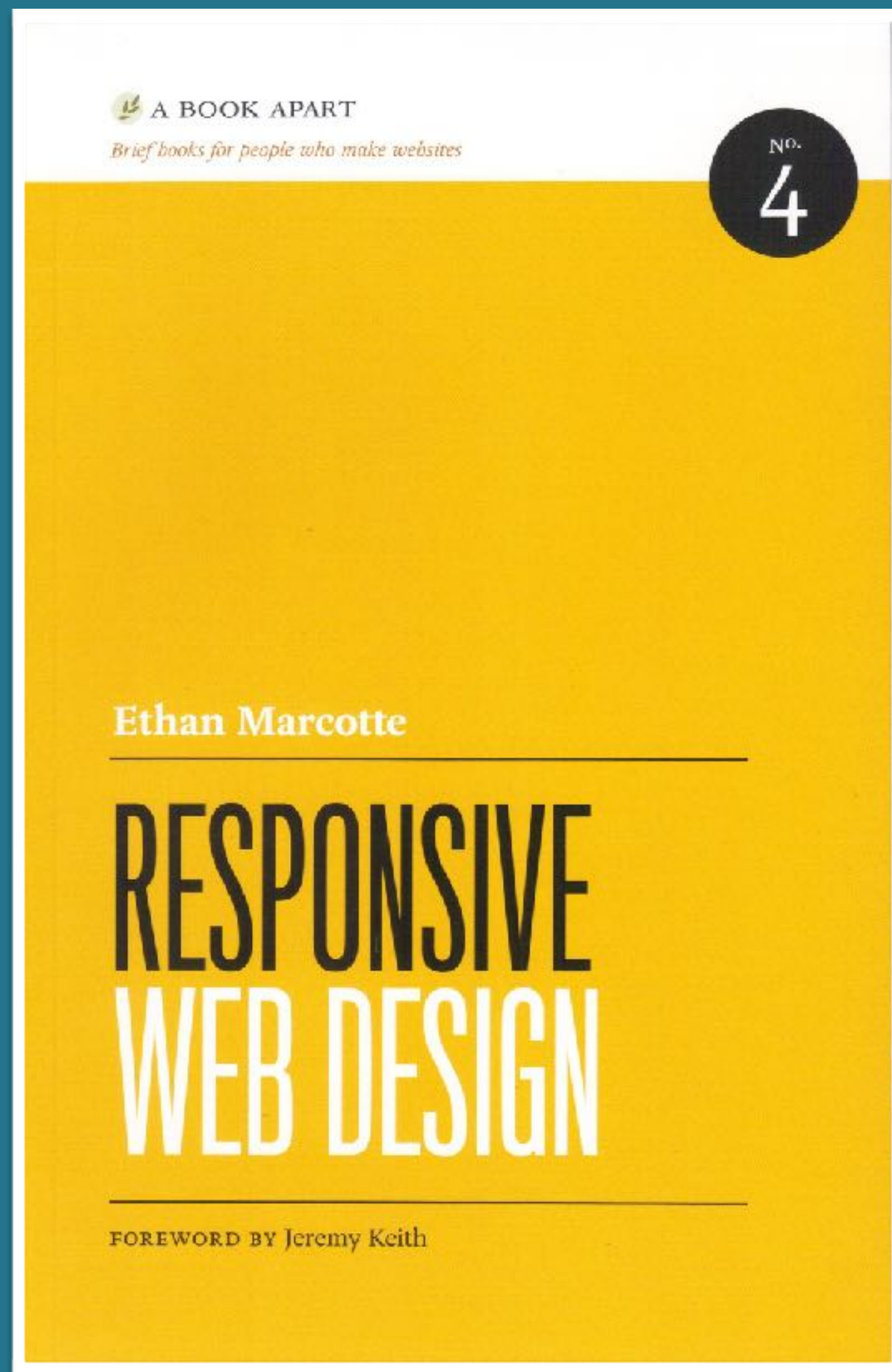
hgroup

figure



CSS Basics 2 Review





RWD Book



**Why does the concept of
the canvas, used in print
design, not translate well to
the web?**



**What challenges do separate
mobile/tablet experiences
present vs. using responsive
design?**



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) {  
    /* CSS Styles That Apply Go Here */  
}
```

```
@media screen and (max-width: 1200px) {  
    /* CSS Styles That Apply Go Here */  
}
```



Media Query

```
@media screen and (min-width: 600px) and (max-width: 1200px) {  
    /* CSS Styles That Apply Go Here */  
}
```

```
@media screen and (min-height: 600px) {  
    /* CSS Styles That Apply Go Here */  
}
```



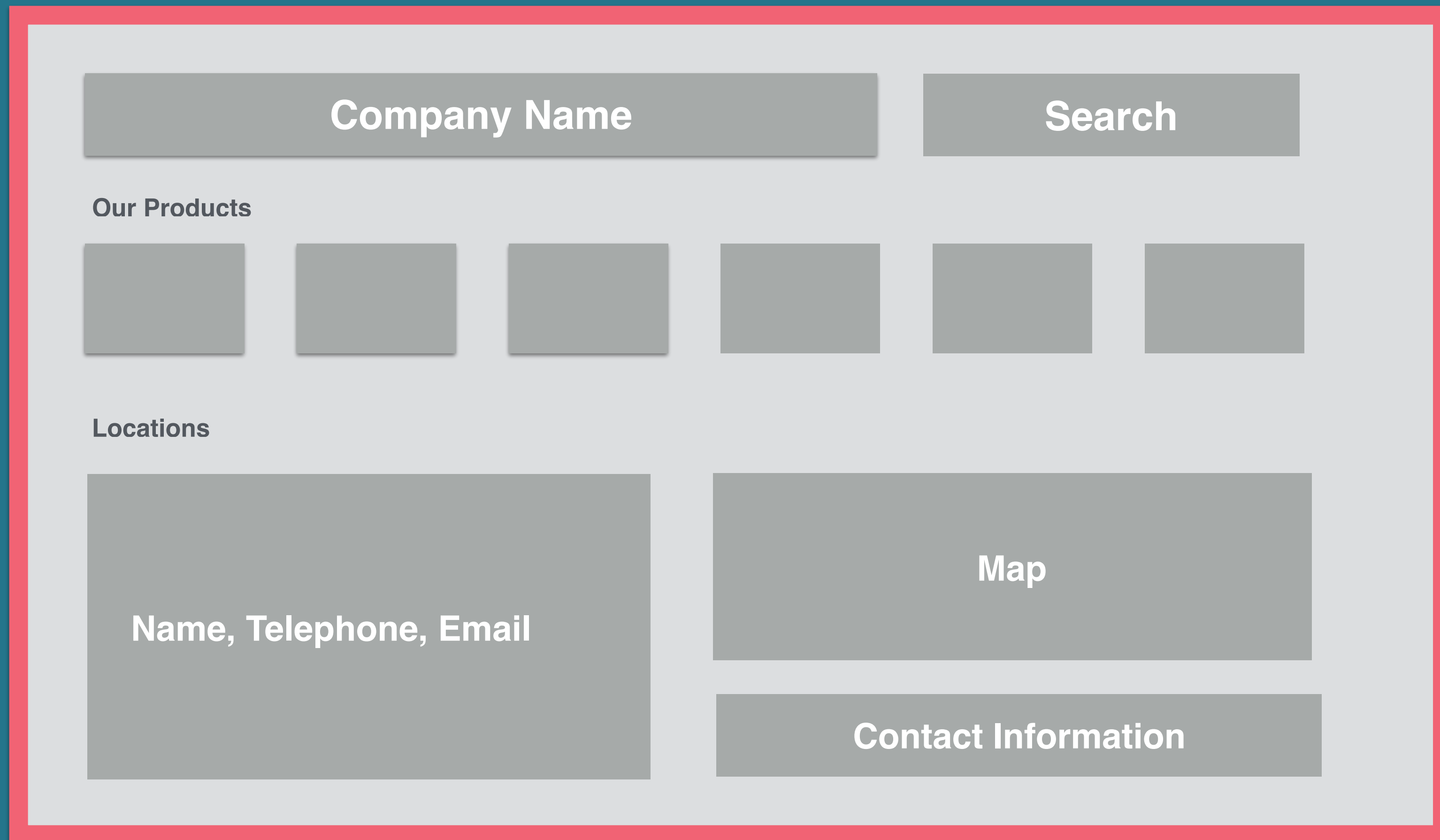
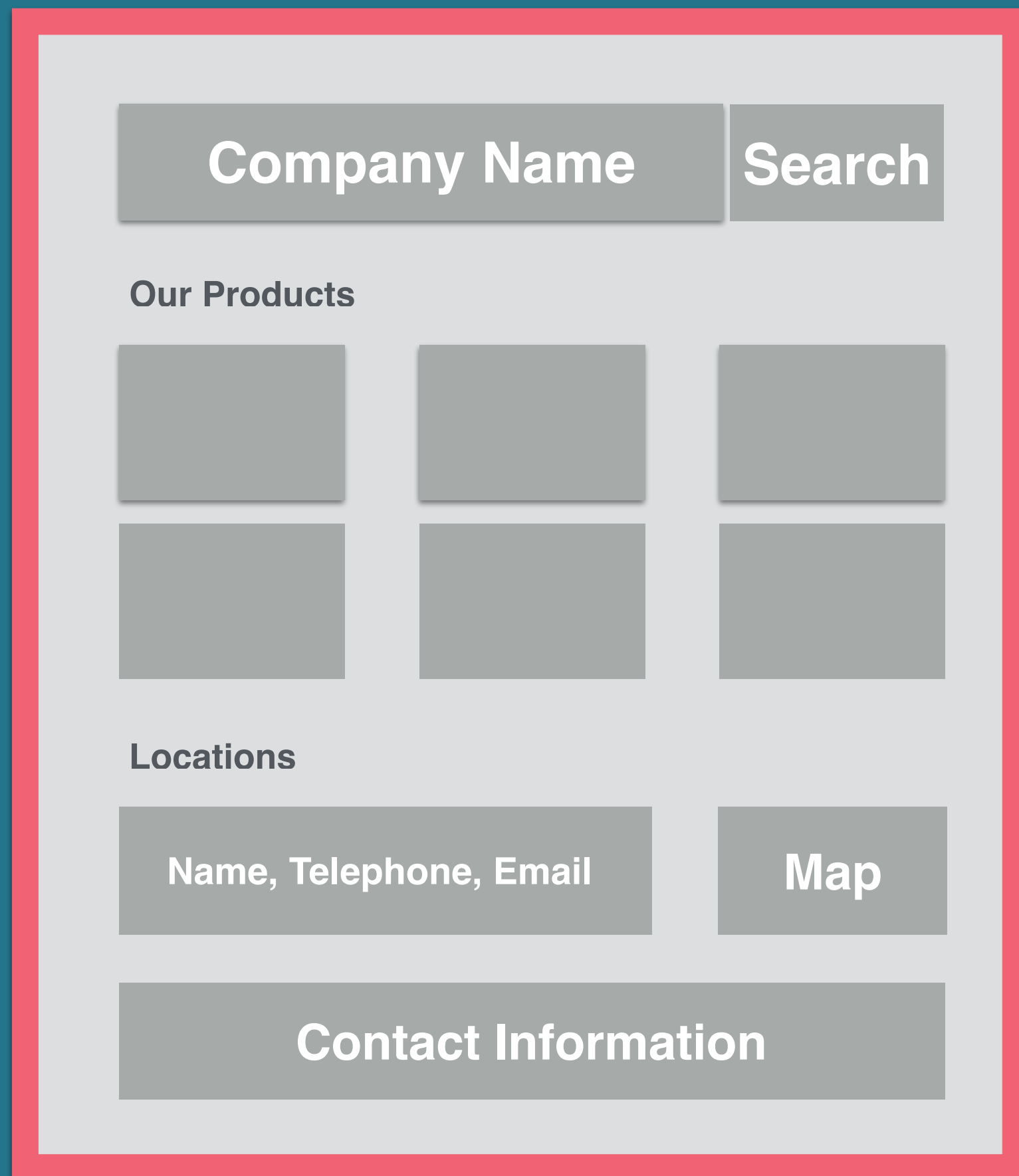
Breakpoint

Size at which the page layout or design “breaks”

Can have multiple breakpoints per layout

Let design (not device) dictate breakpoints





Breakpoint: 1000px wide



Media Query

width

height

device-width

device-height

orientation

aspect-ratio

device-aspect ratio

color

color-index

monochrome

resolution

scan



Magic Meta Tag

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

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



[http://codepen.io/challahan/
professor/yawgyZ/](http://codepen.io/challahan/ professor/yawgyZ/)



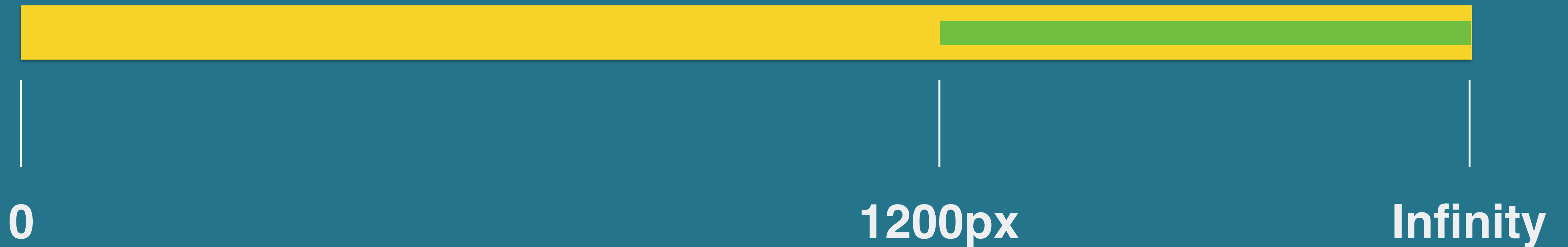
No Media Query



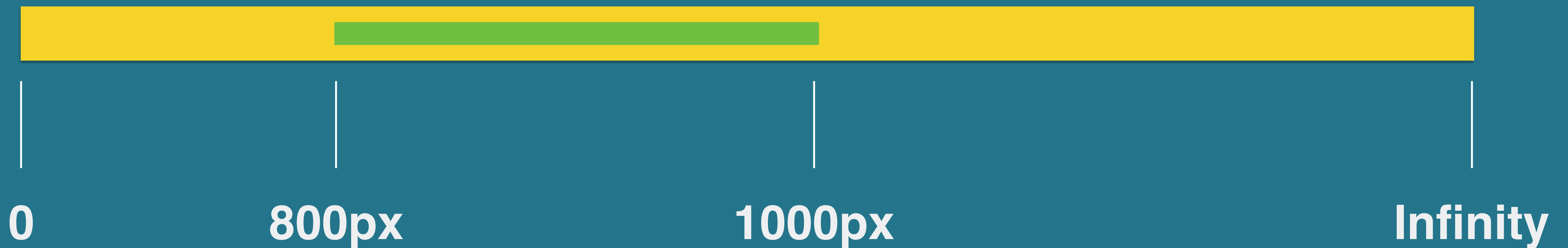
@media screen and (max-width: 600px) { }



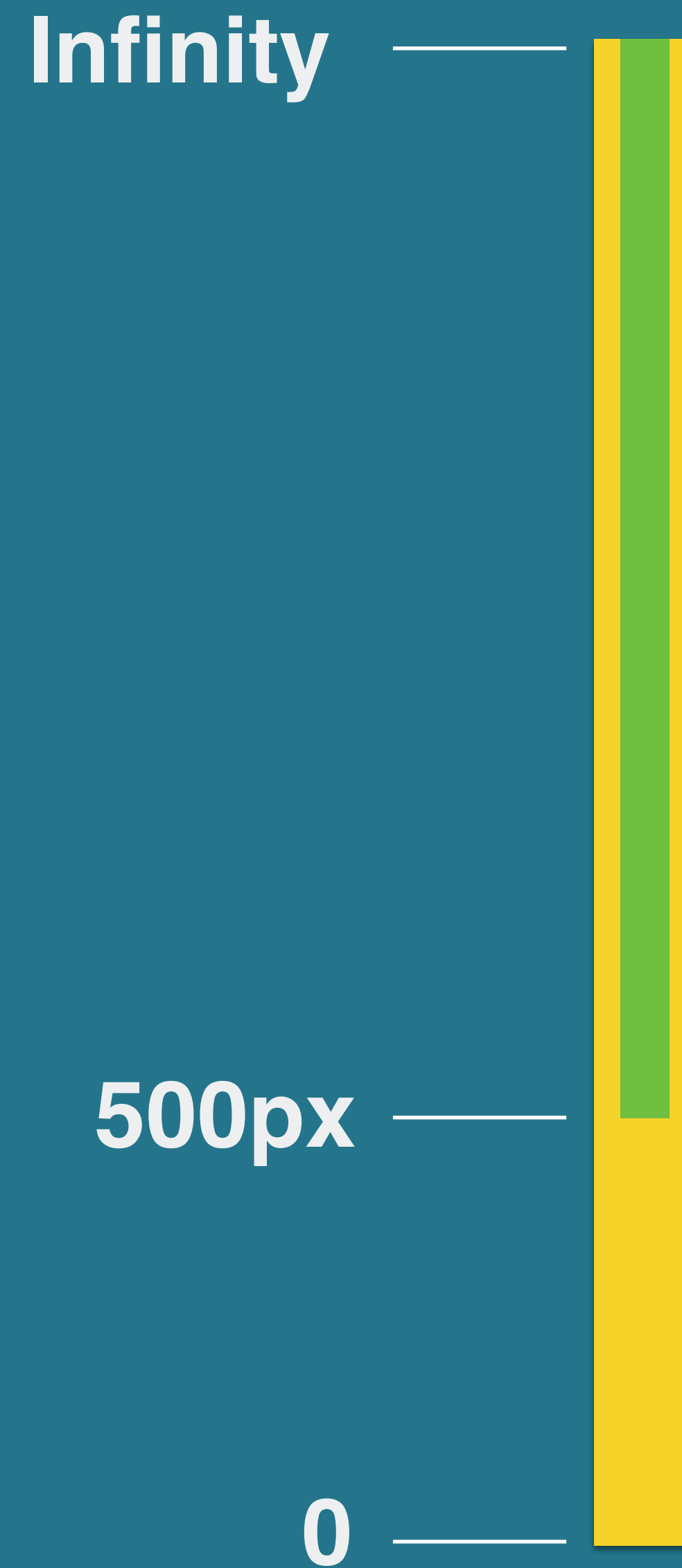
@media screen and (min-width: 1200px) { }



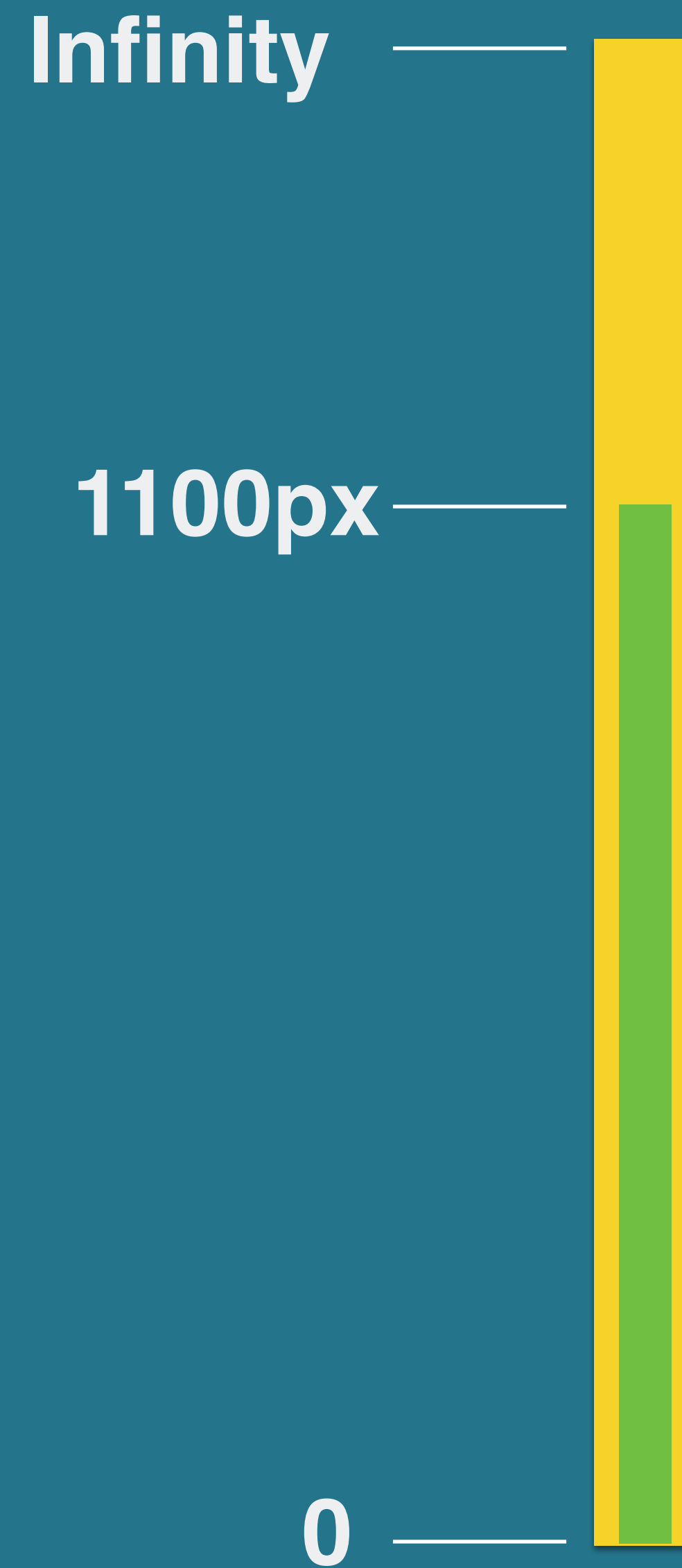
`@media screen and
(min-width: 800px) and
(max-width: 1000px) { }`



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



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



Media Query

```
@media screen and (min-width: 600px) {  
    /* CSS Styles Inside Here Only Apply at  
    600px and higher*/  
}
```

```
@media screen and (max-width: 1200px) {  
    /* CSS Styles Inside Here Only Apply at  
    1200px and lower*/  
}
```



Media Query

```
@media screen and (min-width: 600px) {  
  p {  
    color: purple;  
  }  
}
```

```
@media screen and (max-width: 1200px) {  
  p {  
    color: purple;  
  }  
}
```



Targeting Elements with CSS



Use Element Type Selector

In HTML

```
<p>Hello</p>
```

In CSS

```
p {  
    font-weight: bold;  
}
```



Descendant Selector

In HTML

```
<p><a href="#">Hello</a></p>
```

In CSS

```
p a {  
    font-weight: bold;  
}
```



ID and Class

Ways to identify elements so that you can make changes to just those elements.



ID: unique element

```
<p>Water and air. So very commonplace are  
these substances, they hardly attraction  
attention and yet they vouchsafe our very  
existence.</p>
```

```
<p id="first-pullquote">Every time I view  
the sea I feel a sense of calming  
security, as if visiting my ancestral  
home; I embark of a voyage of seeing.</p>
```

```
<p>Mystery of mysteries, water and air are  
right there before us in the sea.</p>
```



Class: Multiple Elements

```
<p class="important">For a one-year period from November 2010, the Marugame Genichiro-Inokuma Museum of Contemporary Art (MIMOCA) will host...</p>
```

```
<p>Each will showcase works by the artist thematically contextualised under the headings...</p>
```

```
<p class="important admittance">Hours: 10:00 - 18:00 (No admittance after 17:30)</p>
```



Use a Class

In HTML

```
<p class="hello">Hello</p>
```

In CSS

```
.hello {  
    font-weight: bold;  
}
```



Mix Elements and Classes

In HTML

```
<p class="hello">Hello</p>
```

In CSS

```
p.hello {  
    font-weight: bold;  
}
```



But There's More!

You'll use these much less frequently, but know that they're available.



Additional CSS Selectors

ID Selector: `#introduction { }`

Direct Child Selector: `li > a { }`

Adjacent Selector: `h1+p { }`

General Sibling Selector: `h1~p { }`

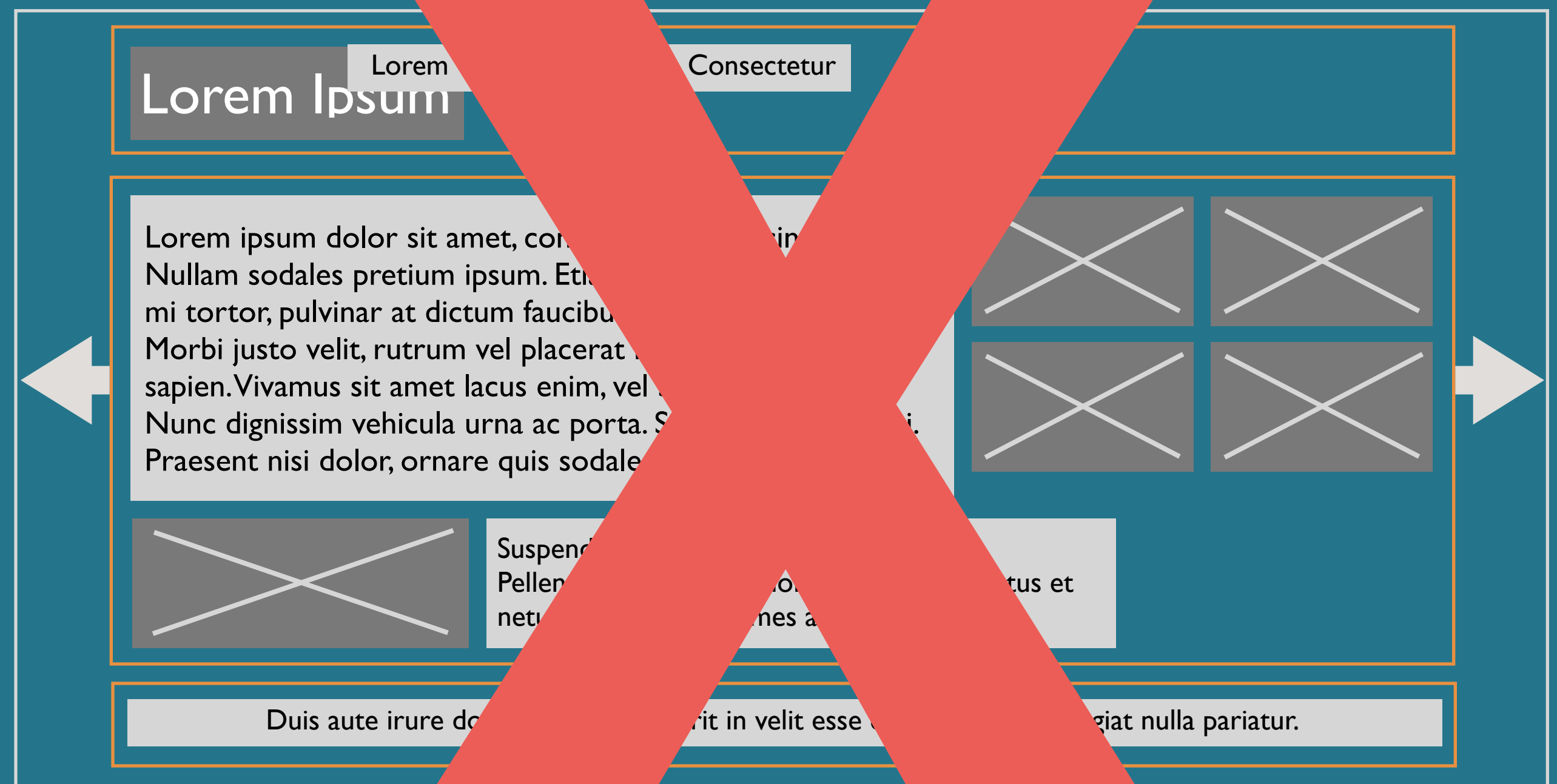


Creating Layouts



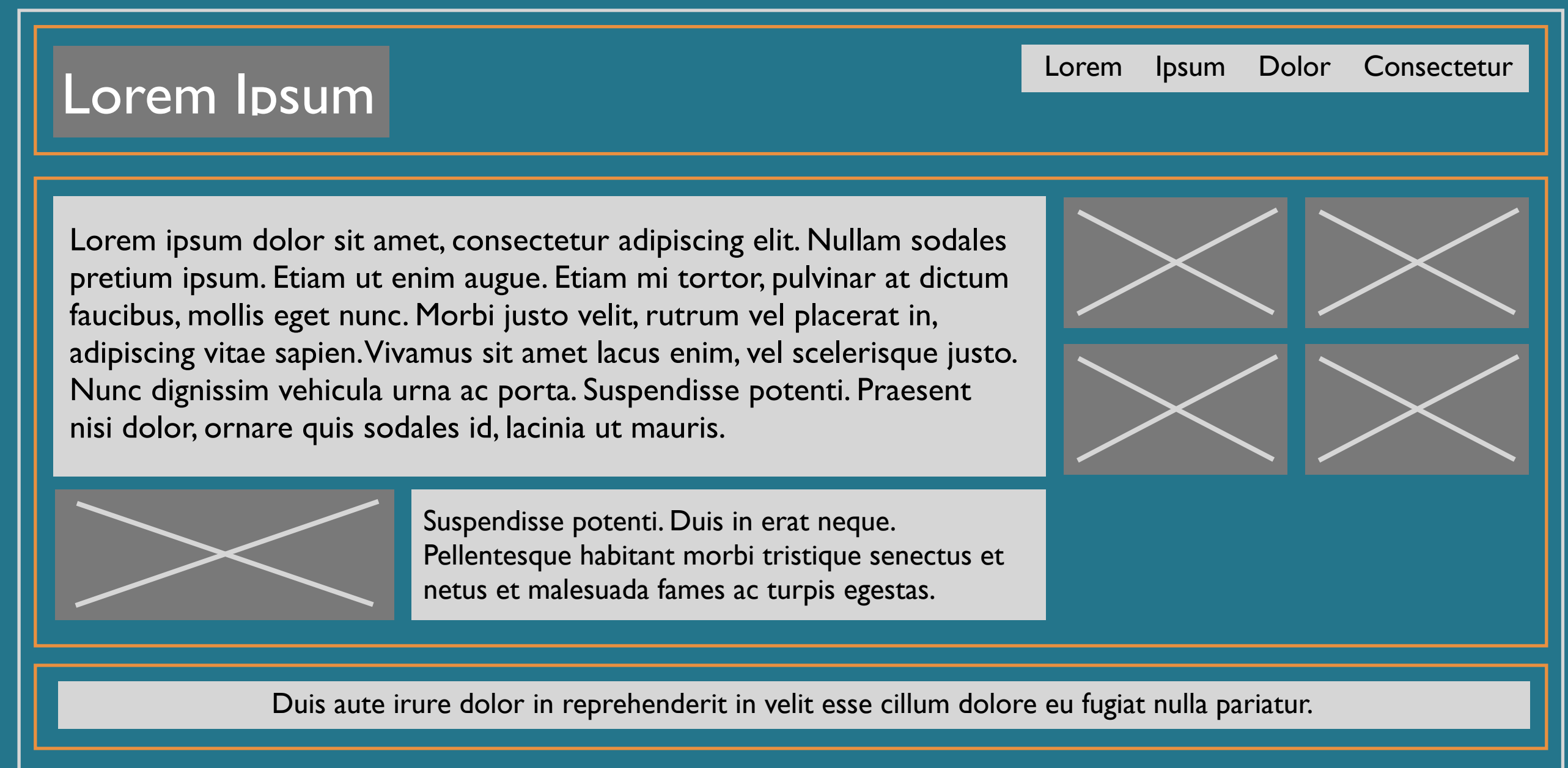
Fixed-Width (Pixel) Layouts

```
body {  
  width: 960px;  
  margin: 0 auto;}  
  
.column1, .column2, .column3 {  
  background-color: #efefef;  
  width: 300px;  
  float: left;  
  margin: 10px;}  
  
/* ... */
```



Liquid (Percentage) Layouts

```
body {  
  width: 90%;  
  margin: 0 auto;}  
  
.column1, .column2, .column3 {  
  width: 31.3%;  
  float: left;  
  margin: 1%;}  
.column3 {  
  margin-right: 0%;}
```

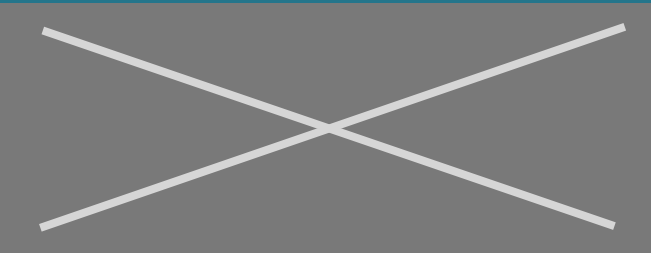


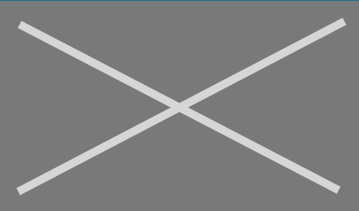
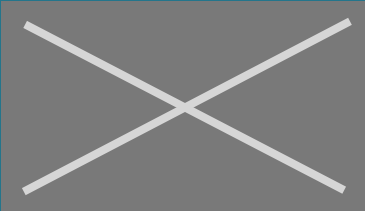
Responsive Layouts

Lorem Ipsum

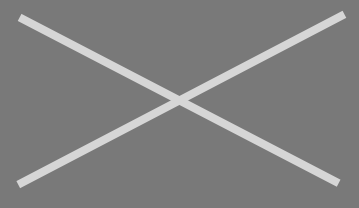
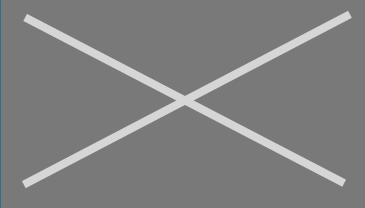
Lorem Ipsum Dolor Consectetur

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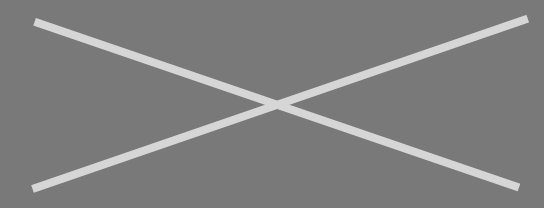
Suspendisse potenti. Duis in erat neque. Pellentesque habitant morbi tristique



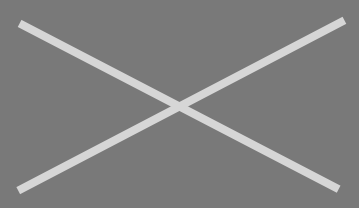
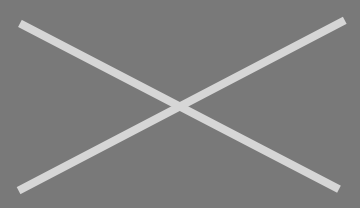
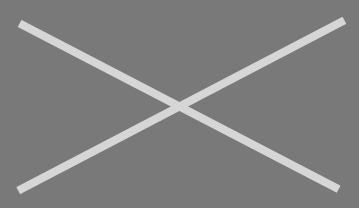
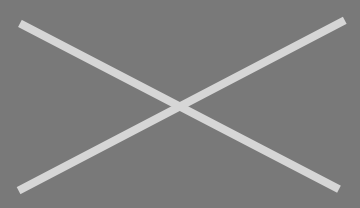
Lorem Ipsum

Lorem Ipsum Dolor Consectetur

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Suspendisse potenti. Duis in erat neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.



Duis aute irure dolor in reprehenderit in velit esse cillum dolore eu fugiat nulla pariatur.



Hands-On Exercise

<http://codepen.io/challahan/pen/ZLgPoR>



Fonts & Media Queries

Due Next Week



For Next Class

READ: Flexbox Articles, Responsive Web Design Ch. 5

DUE: Fonts & Media Queries Assignment

