

RESPONSIVE DESIGN

RESPONSIVE DESIGN

REVIEW: BOXES LAYOUT EXERCISE!

RESPONSIVE DESIGN

WHAT IS RESPONSIVE DESIGN?

RESPONSIVE DESIGN

IN THE BEGINNING, THIS WAS THE WEB



RESPONSIVE DESIGN

2007: THE IPHONE LAUNCHES



RESPONSIVE DESIGN

MOBILE SPECIFIC SITES

m.site.com

The Good:

- › Much better interface
- › Specialized mobile content

The Bad:

- › Less consistency
- › Extra work: you have to make 2 sites
- › Bad for Search Engine Optimization
- › Just not practical

THIS IS NOT
THE WEB.



THIS IS THE WEB.



THIS WILL BE THE WEB.



RESPONSIVE DESIGN

WHAT IS RESPONSIVE DESIGN?

In 2010, Ethan Marcotte wrote a groundbreaking article in *A List Apart* about the need for responsive design using one codebase for multiple screens.

- fluid grids
- flexible images
- media queries



RESPONSIVE DESIGN



Responsive design is not about “designing for mobile.” But it’s not about “designing for the desktop” either. Rather, it’s about adopting a more flexible, device-agnostic approach to designing for the web.

—Ethan Marcotte

RESPONSIVE DESIGN

RESPONSIVE DESIGN = A SOLUTION TO A PROBLEM

RESPONSIVE DESIGN

SO LET'S SEE THIS IN THE WILD

travel.usnews.com

[lego](https://lego.com)

imdb.com

RESPONSIVE DESIGN

**OKAY, THAT'S GREAT,
BUT HOW DO WE
ACTUALLY CODE THIS?**

(I'M SO GLAD YOU ASKED)

RESPONSIVE DESIGN

UH, IS THIS GOING TO BE A LOT OF EXTRA WORK?

Actually, no!



RESPONSIVE DESIGN

INCORPORATE FROM THE BEGINNING

Design process

Coding process

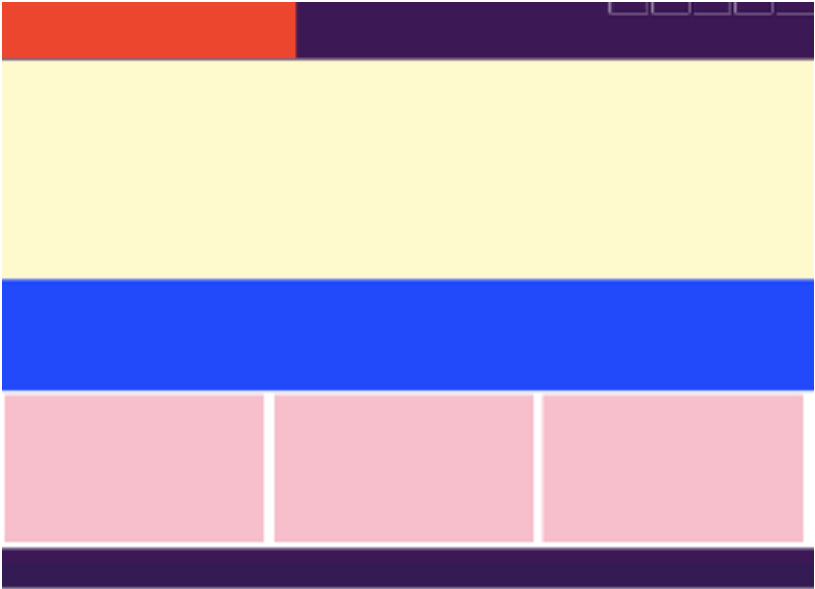
You'll look super impressive

RESPONSIVE DESIGN

CODE ALONG: CATBLOG



(Kind of looks like that Boxes exercise, right?)



RESPONSIVE DESIGN

- **fluid grids**
- flexible images
- media queries

RESPONSIVE DESIGN

SPACING: PX VS %

```
.column {  
  width: 250px;  
}
```



$\text{target} / \text{context} = \text{result}$

RESPONSIVE DESIGN

SPACING: PX VS %

```
.column {  
  width: 30%;  
}
```



$\text{target} / \text{context} = \text{result}$

RESPONSIVE DESIGN

TEXT: PX VS EMS

```
p {  
  font-size: 18px;  
}
```



target / context = result
 $18 / 16 = 1.125$

RESPONSIVE DESIGN

TEXT: PX VS EMS


```
p {  
  font-size: 1.125em;  
}
```



target / context = result
 $18 / 16 = 1.125$

```
body {  
  font-size: 1em;  
}
```

RESPONSIVE DESIGN

- fluid grids 
- **flexible images**
- media queries

RESPONSIVE DESIGN

FLEXIBLE IMAGES

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

RESPONSIVE DESIGN

▸ fluid grids



▸ flexible images



▸ **media queries**

RESPONSIVE DESIGN

MEDIA QUERIES

```
@media screen and (max-width: 320px) {  
    new CSS rules that only apply when the screen size is 320px or less  
}
```

RESPONSIVE DESIGN

MEDIA QUERIES

@media screen and (max-width: 320px)
(min-width: 1024px)
(min-device-width: 768px)
(max-device-width: 480px)
(orientation: portrait)
(orientation: landscape)
(min-width: 320px) and (max-width: 480px)

RESPONSIVE DESIGN

MEDIA QUERIES

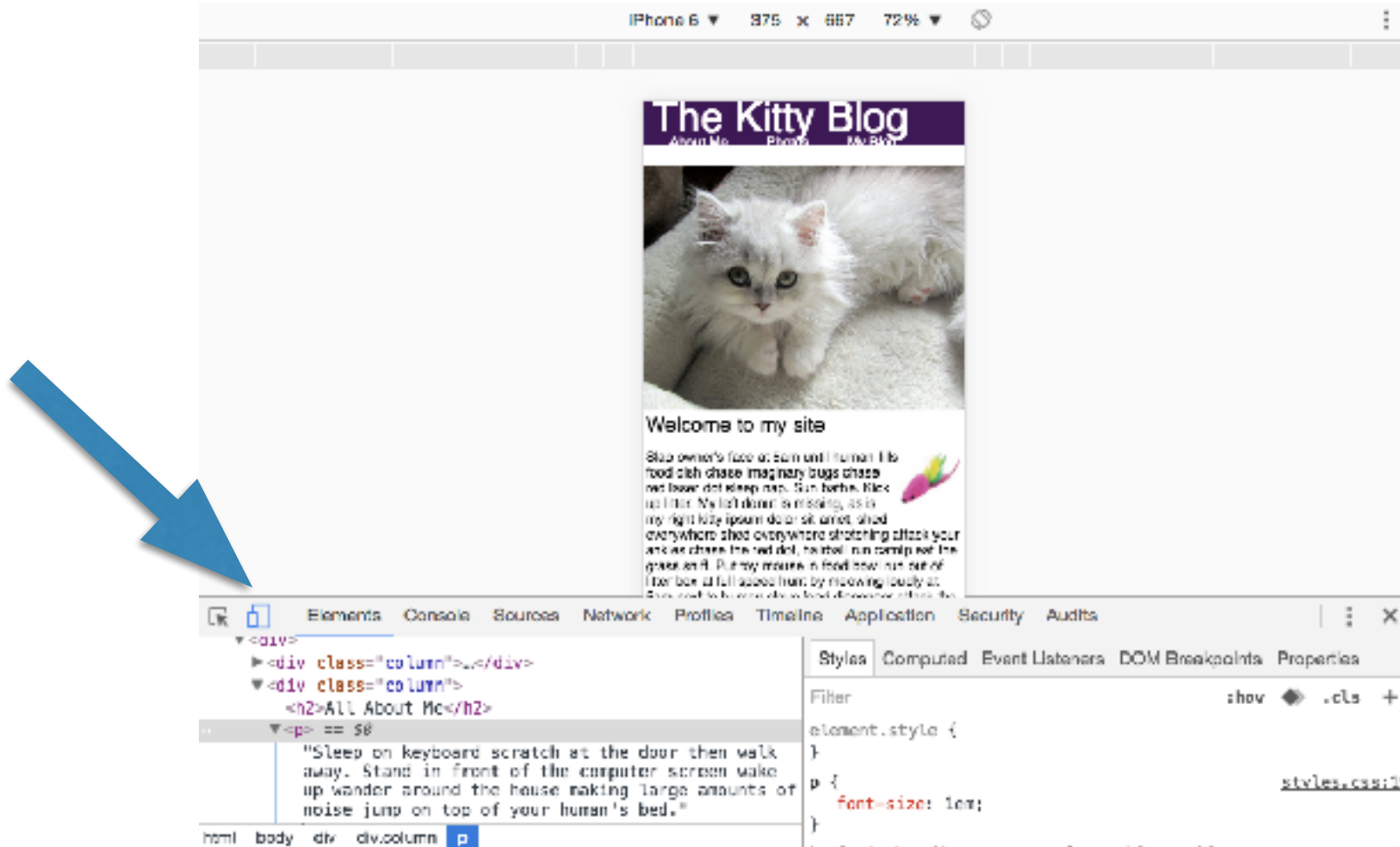
The Media Queries go at the bottom of the CSS. Why?



```
74
75 footer {
76     background-color: #3B0855;
77     padding: 2%;
78     color: #fff;
79     text-align: center;
80 }
81
82 footer p {
83     padding-top: 1%;
84 }
85
86 @media screen and (max-width: 720px) {
87     .column {
88         display: block;
89         width: 100%;
90         padding-top: 5%;
91         padding-bottom: 5%;
92     }
93 }
```

RESPONSIVE DESIGN

CHROME DEV TOOLS



RESPONSIVE DESIGN

IPHONE FIX

```
<meta name="viewport" content="width=device-width, initial-scale=1">
```

RESPONSIVE DESIGN

IF YOU WANT TO LEARN MORE ...

Ethan Marcotte's article on Responsive Design

<https://alistapart.com/article/responsive-web-design>

Mobile-First Responsive Web Design by Brad Frost

<http://bradfrost.com/blog/web/mobile-first-responsive-web-design/>

RESPONSIVE DESIGN

▸ fluid grids



▸ flexible images



▸ media queries



RESPONSIVE DESIGN

NOW YOU'RE CODING RESPONSIVE!!!

