

RESPONSIVE BASICS

LEARNING OBJECTIVES

- Describe responsive design.
- Apply media queries to achieve a responsive layout.

WEEKLY OVERVIEW

WEEK 4

Responsive Design / CSS Positioning

WEEK 5

Forms / Final Project Lab

WEEK 6

JS Intro

AGENDA

Review

Responsive — Layout Design

Responsive — Media Queries

Lab

FINAL PROJECT OVERVIEW

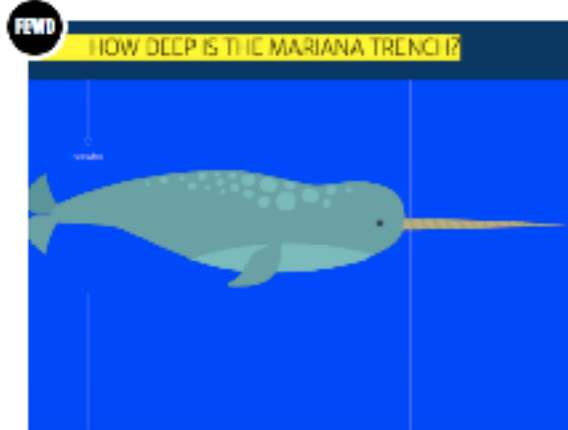
WHERE CAN I FIND PAST EXAMPLES?



Front End Web Development

All Cities

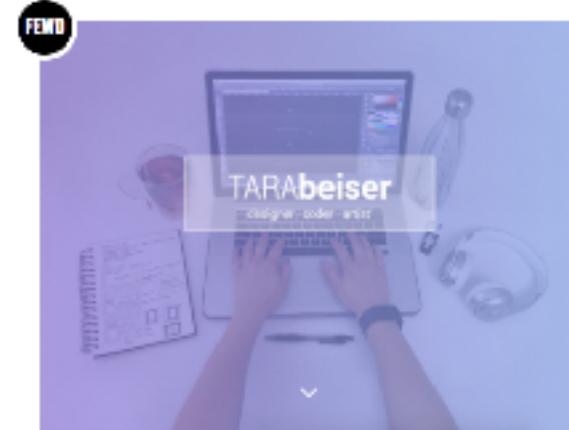
LOGIN



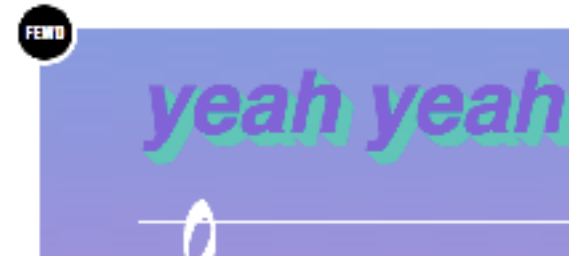
DEPTH OF THE MARIANA TRENCH NYC
by Calie Myers-Wood



HELEN MACDOUGALL STD
by Helen MacDougall

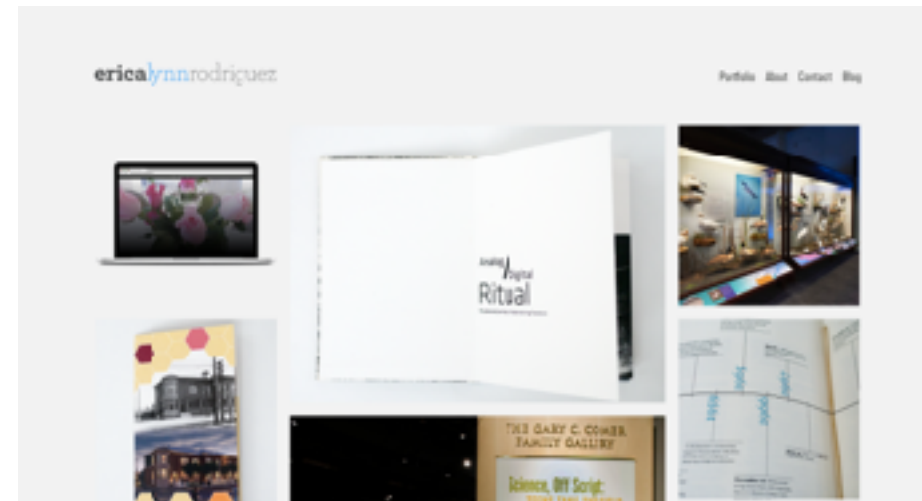
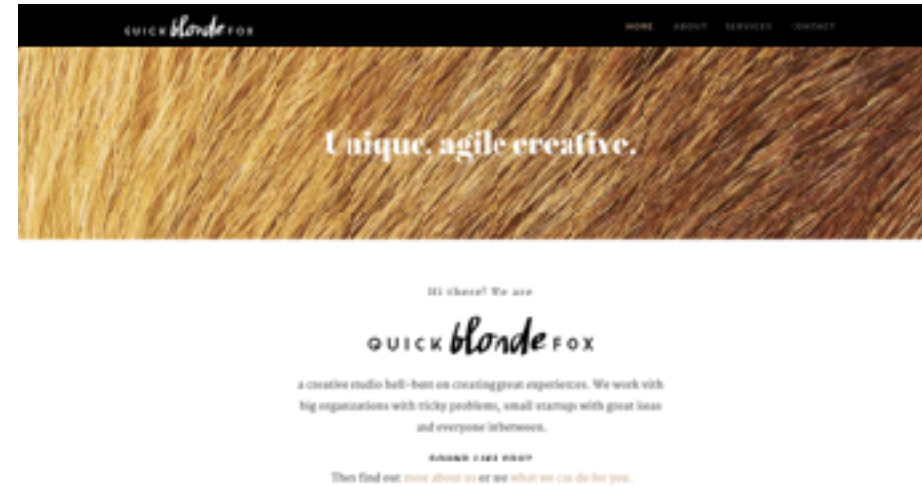


ONLINE PORTFOLIO LA
by Tara Beiser



WHAT ARE EXAMPLES OF SUCCESSFUL KINDS OF PROJECTS?

Portfolio Sites



WHAT ARE EXAMPLES OF SUCCESSFUL KINDS OF PROJECTS?

Sites about hobbies or sites just for fun/practice.



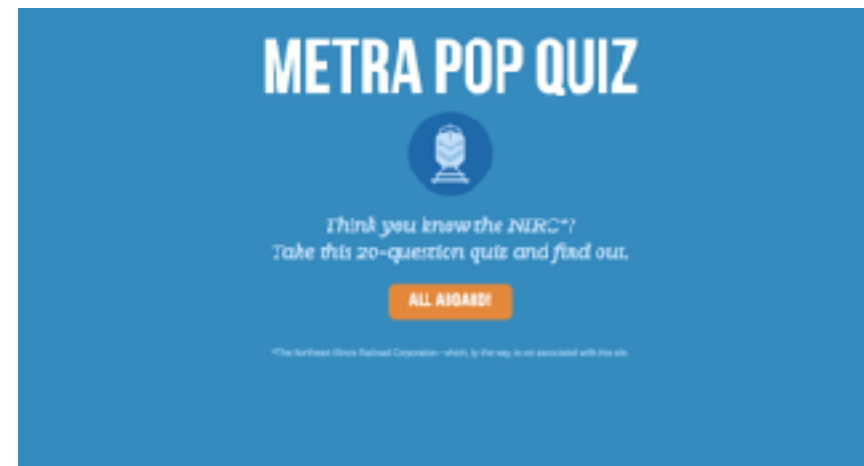
WHAT ARE EXAMPLES OF SUCCESSFUL KINDS OF PROJECTS?

Redesign an existing site for family/friends or just any business with an ugly site :)



WHAT ARE EXAMPLES OF SUCCESSFUL KINDS OF PROJECTS?

Quiz Site / Game



PROJECTS TYPES IF YOU WANT A CHALLENGE

PREMIER League

Home League Map & Table

Latest

The Season Starts on August 13th

Shake out the nerves and chill the shouts it's football time. Week one is fast approaching and with it the start of a season under the rule of a new new king. The season begins tomorrow on the premier league website. The new season has been reviewed from various and various new coaches. They will also have the added challenge and pressure of competing in the Champions League. There is plenty to look forward to, but honestly, all you need right now is a good night's sleep. Spiller's not. Tottenham.

The life of Bakers

The sun never sets on the beautiful game

Pos	Club	GP	W	D	L
1	Chelsea	0	0	0	0
2	Bournemouth	0	0	0	0
3	Burnley	0	0	0	0
4	Manchester United	0	0	0	0
5	Crystal Palace	0	0	0	0
6	Derby	0	0	0	0
7	Leeds	0	0	0	0
8	Leeds	0	0	0	0
9	Leeds	0	0	0	0
10	Leeds	0	0	0	0
11	Leeds	0	0	0	0
12	Leeds	0	0	0	0
13	Leeds	0	0	0	0
14	Leeds	0	0	0	0
15	Leeds	0	0	0	0
16	Leeds	0	0	0	0
17	Leeds	0	0	0	0
18	Leeds	0	0	0	0
19	Leeds	0	0	0	0
20	Leeds	0	0	0	0

WEARCAST November 5, 2018 at 10:17 AM

What is your location?

Enter zip code or city, state


Select your degree of measurement: °F °C

[GET WEATHER](#)

THE ONE CHANGE
in the United States

\$160 BILLION: THE HEALTH COSTS OF HUNGER IN AMERICA

[Read more](#)



WHERE YOU SHOULD BE

- Start planning — homework this week will be to wireframe out your project
- Take a look at the final project gallery for some inspiration
- Look at some sites on [Site Inspire](#) for inspiration

RESPONSIVE BASICS

REVIEW

FEWD

FLEX CONTAINER — REVIEW

DISPLAY: FLEX

We can set **display: flex** on the *parent* container to start the flex magic.

```
parentSelectorHere {  
    display: flex;  
}
```

WHAT IS FLEXBOX?

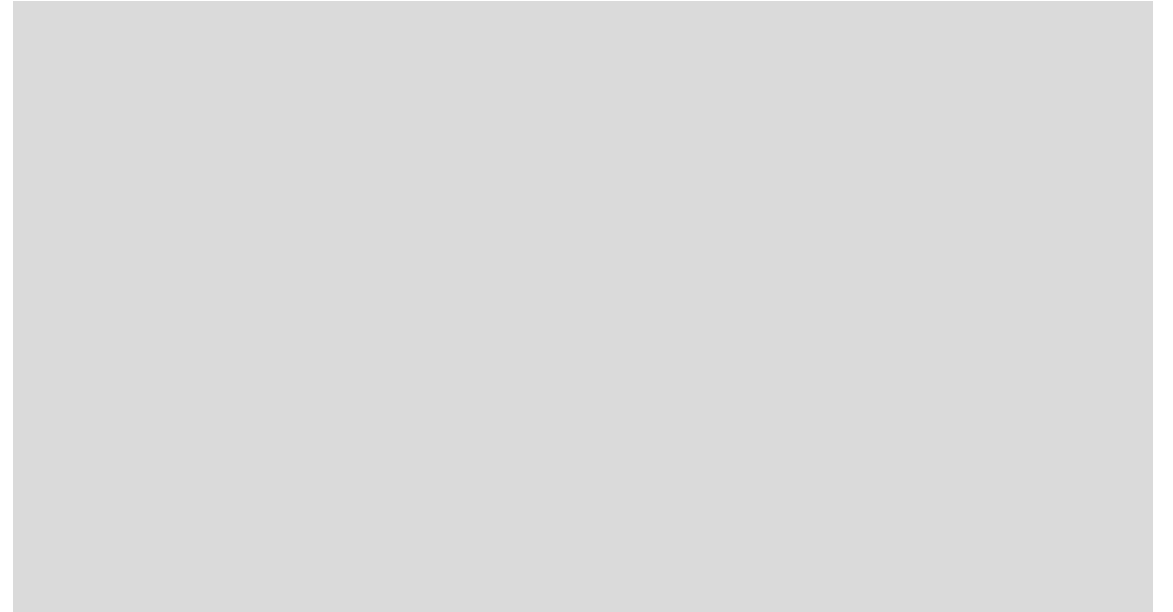
parent wrapper:
flex container

```
<section>
  <article>
    <h1>Article title</h1>
    <p>Lorem ipsum dolor sit amet.</p>
  </article>

  <article>
    <h1>Article title</h1>
    <p>Lorem ipsum dolor sit amet.</p>
  </article>

  <article>
    <h1>Article title</h1>
    <p>Lorem ipsum dolor sit amet.</p>
  </article>
</section>
```

Flex Container

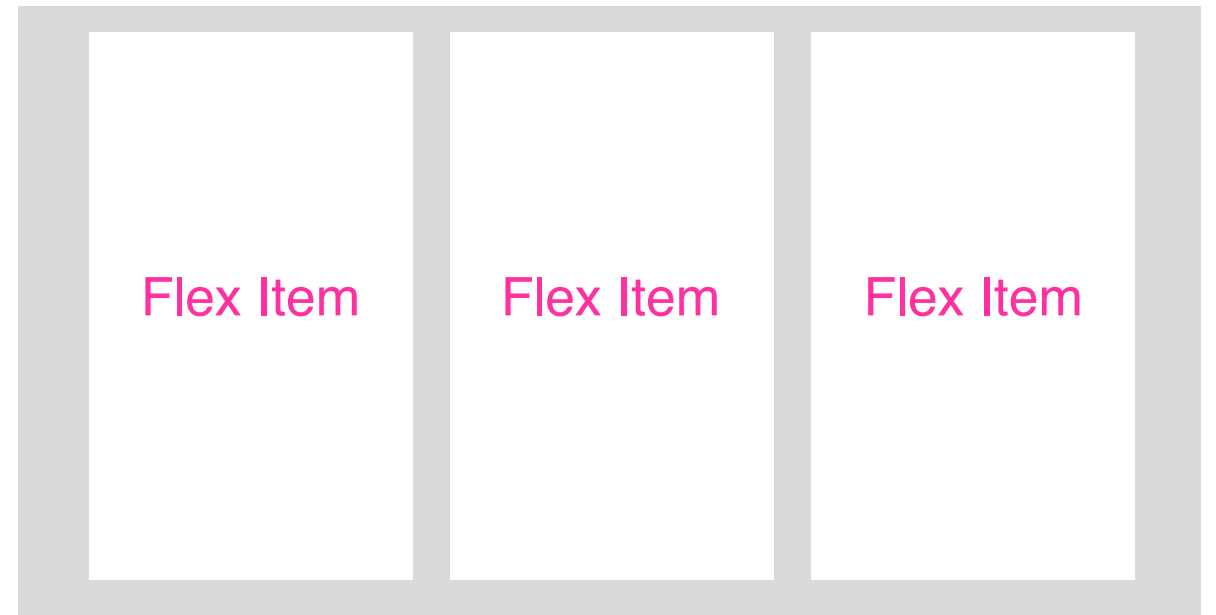


WHAT IS FLEXBOX?

direct children:
flex items

```
<section>  
  <article>  
    <h1>Article title</h1>  
    <p>Lorem ipsum dolor sit amet.</p>  
  </article>  
  <article>  
    <h1>Article title</h1>  
    <p>Lorem ipsum dolor sit amet.</p>  
  </article>  
  <article>  
    <h1>Article title</h1>  
    <p>Lorem ipsum dolor sit amet.</p>  
  </article>  
</section>
```

Flex Container



REVIEW ACTIVITY



EXERCISE

KEY OBJECTIVE

- ▶ Review HTML/CSS Layouts

TYPE OF EXERCISE

- ▶ Individual/Partner

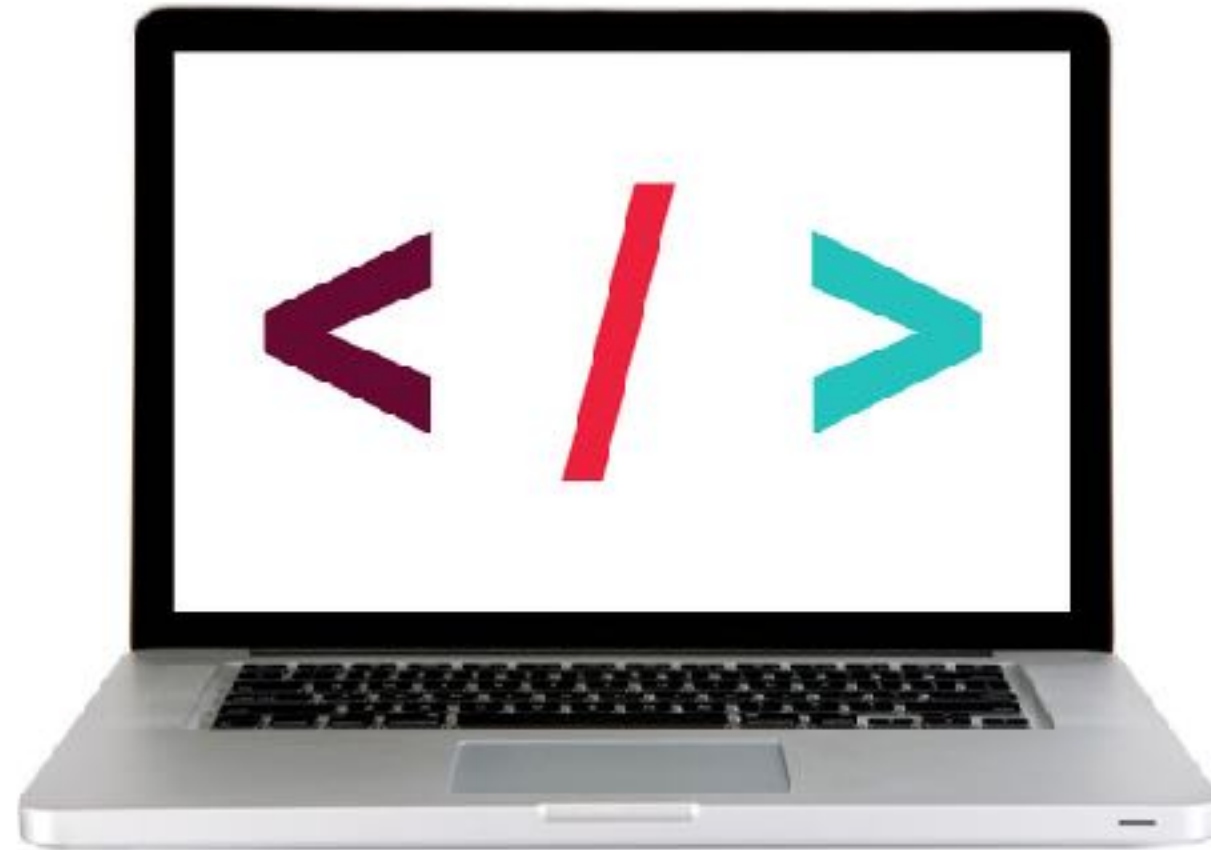
TIMING

1. Open starter code > albums
2. Use HTML and CSS to recreate albums_1.png
3. Use the grid systems like we learned!

RESPONSIVE BASICS

RESPONSIVE — LAYOUT DESIGN

LET'S TAKE A CLOSER LOOK



<https://generalassemb.ly/>

RESPONSIVE DESIGN

“Day by day, the number of devices, platforms, and browsers that need to work with your site grows. Responsive web design represents a fundamental shift in how we’ll build websites for the decade to come.”

- Jeffrey Veen

RESPONSIVE DESIGN

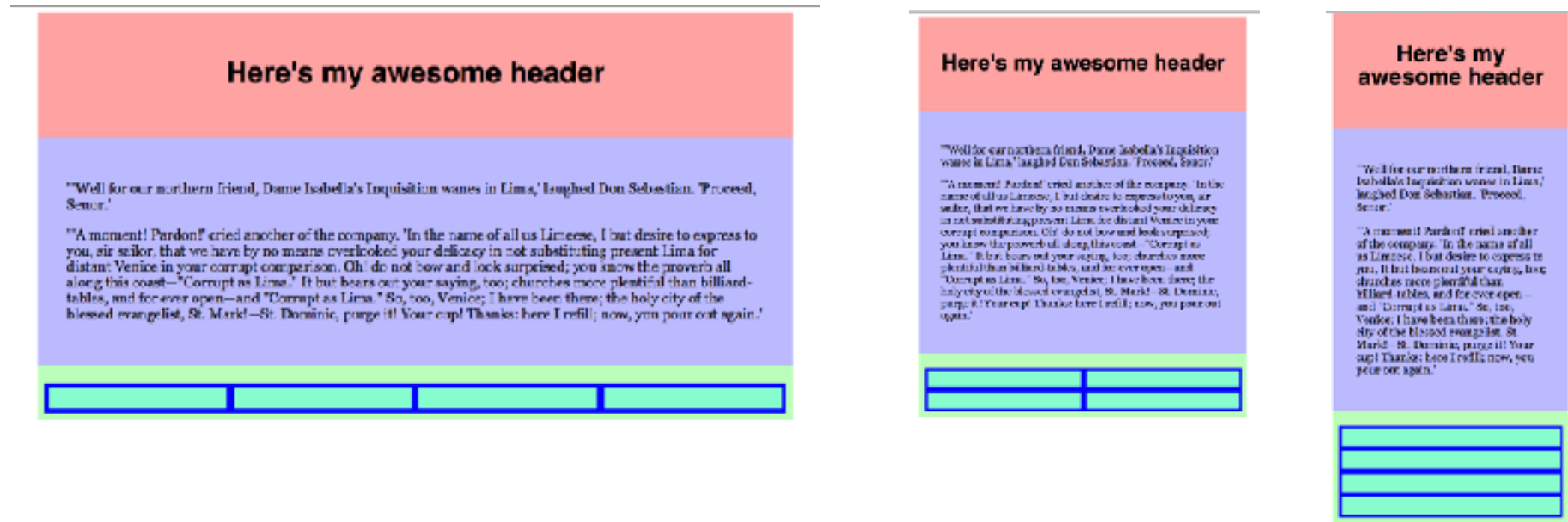


RESPONSIVE DESIGN



RESPONSIVE LAYOUT

- Uses **PERCENTAGES** for widths
- Use **MEDIA QUERIES** to control design and content as it scales down or up with the browser or device



WITH BREAKPOINTS VS. WITHOUT BREAKPOINTS

With Breakpoints

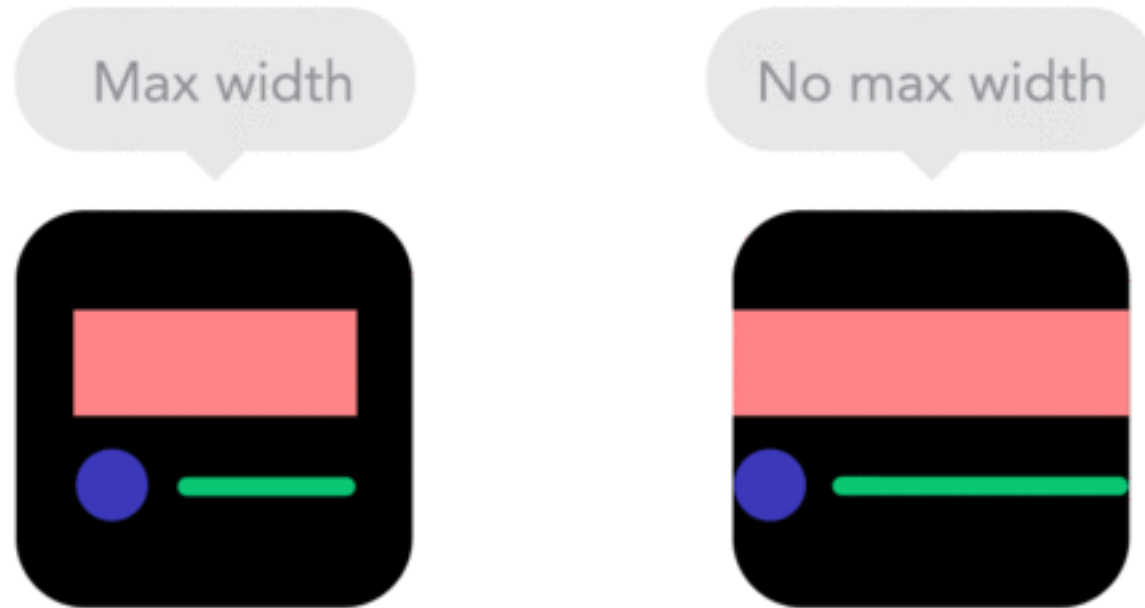


Without Breakpoints



Gif credit: [Fast Company](#)

MAX-WIDTH — A HELPFUL TOOL FOR LAYOUT



Gif credit: [Fast Company](#)

TURN AND CHAT

- What makes a site responsive?
- What types of widths should we use for a responsive site?
- What can we add to our stylesheets to rearrange content, show or hide content, etc. for smaller screens?

RESPONSIVE BASICS

RESPONSIVE — MEDIA QUERIES

VIEWPORT META TAG — AN IMPORTANT NOTE!!

- The viewport meta tag controls how a webpage is displayed on a mobile device.
- Without the tag, mobile devices will assume you want the full desktop experience and will set the viewport width at 980px (iOS)

DEVICE-WIDTH

- This tells the browser “My Website adapts to your width”

INITIAL-SCALE

- Sets the initial zoom level and prevents default zooming

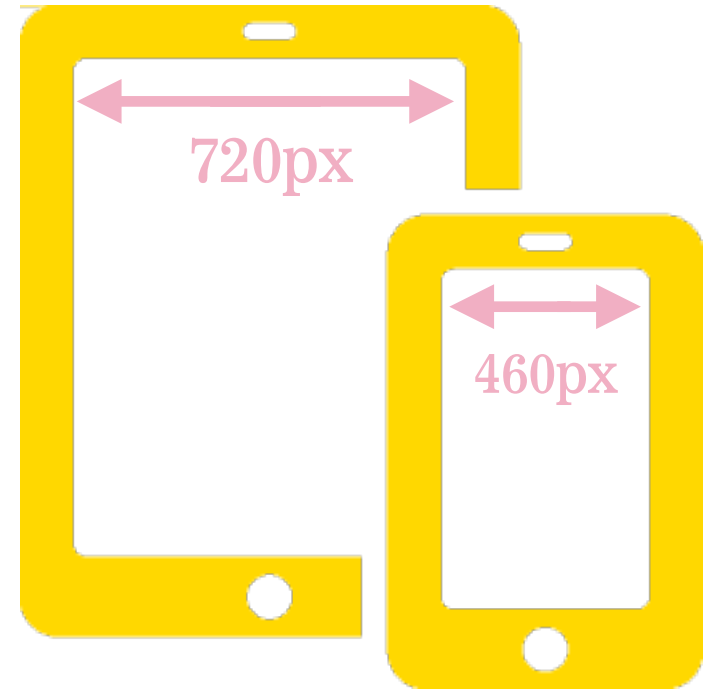
```
<meta name="viewport" content="width=device-width, initial-scale=1">
```

MEDIA QUERIES

Media queries allow us to add or change styles for elements based on:

- screen size (width or height of browser window)
- device orientation (portrait or landscape)
- display density (retina or non-retina)

With media queries, we can allow most of our styles to remain the same, while we make **small tweaks for specific formats**.



ACTIVITY



EXERCISE

KEY OBJECTIVE

- ▶ Review Flexbox / Preview Media Queries

TYPE OF EXERCISE

- ▶ Individual/Partner

TIMING


1. Look at this [Codepen](#) with a partner and talk through steps 1 - 7.

ADDING MEDIA QUERIES

```
@media screen and (max-width: 600px) {  
  section {  
    width: 50%;  
  }  
}
```

MEDIA QUERIES — SYNTAX

STYLES FOR COMPUTER SCREENS

```
@media  screen and (max-width: 600px) {  
  section {  
    width: 50%;  
  }  
}
```

STYLES FOR PRINT

```
@media  print {  
  /* All your print styles go here */  
  header, footer, nav {  
    display: none;  
  }  
}
```

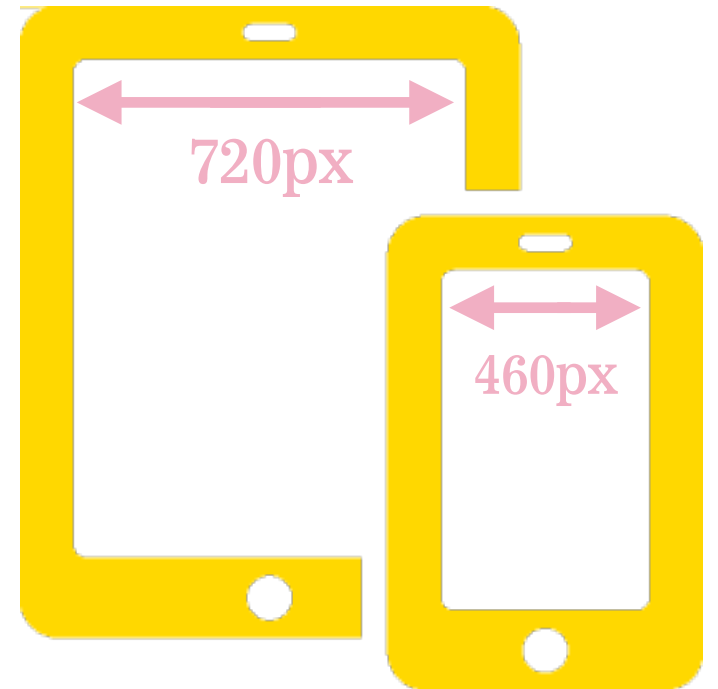
MEDIA QUERIES — SYNTAX

MAX-WIDTH: SCREENS 600PX OR LESS

```
@media screen and (max-width: 600px) {  
  section {  
    width: 50%;  
  }  
}
```

MIN-WIDTH: SCREENS 600PX OR MORE

```
@media screen and (min-width: 600px) {  
  section {  
    width: 50%;  
  }  
}
```



MEDIA QUERIES — ORDER

1. Place your media queries **at the bottom of your stylesheet** so they can override code that comes before them.
2. If you have multiple media queries, they should go from largest to smallest (max-width: 600 would be placed above max-width: 400)

```
@media screen and (max-width: 600px) {  
  section {  
    width: 50%;  
  }  
}
```

```
@media screen and (max-width: 400px) {  
  section {  
    width: 100%;  
  }  
}
```

TURN AND CHAT

- ▶ What are media queries? What can we change inside media queries?
- ▶ Where should we add media queries? Why is this order important?
- ▶ I have the two following media queries. How should these be rearranged? Can anything be removed?

```
@media screen and (max-width: 400px) {  
  .hamburger {  
    display: block;  
  }  
  section {  
    width: 100%;  
  }  
}
```

```
@media screen and (max-width: 600px) {  
  .hamburger {  
    display: block;  
  }  
  section {  
    width: 50%;  
  }  
}
```

ACTIVITY: MAKE ALBUMS SITE RESPONSIVE



EXERCISE

KEY OBJECTIVE

- ▶ Apply media queries to achieve a responsive layout.

TYPE OF EXERCISE

Individual / Partner

TIMING

25 min

1. Use a media query to make the code look like albums_2_450.png on screen sizes 450px and smaller
2. Challenge: create versions for max-width of 660px and a max-width of 960px (images in starter code folder)

RESPONSIVE BASICS

LAB

ACTIVITY: MONUMENT LANDING – RESPONSIVE



EXERCISE

KEY OBJECTIVE

- ▶ Practice applying media queries to achieve a responsive layout.

TYPE OF EXERCISE

- ▶ Individual/Partner

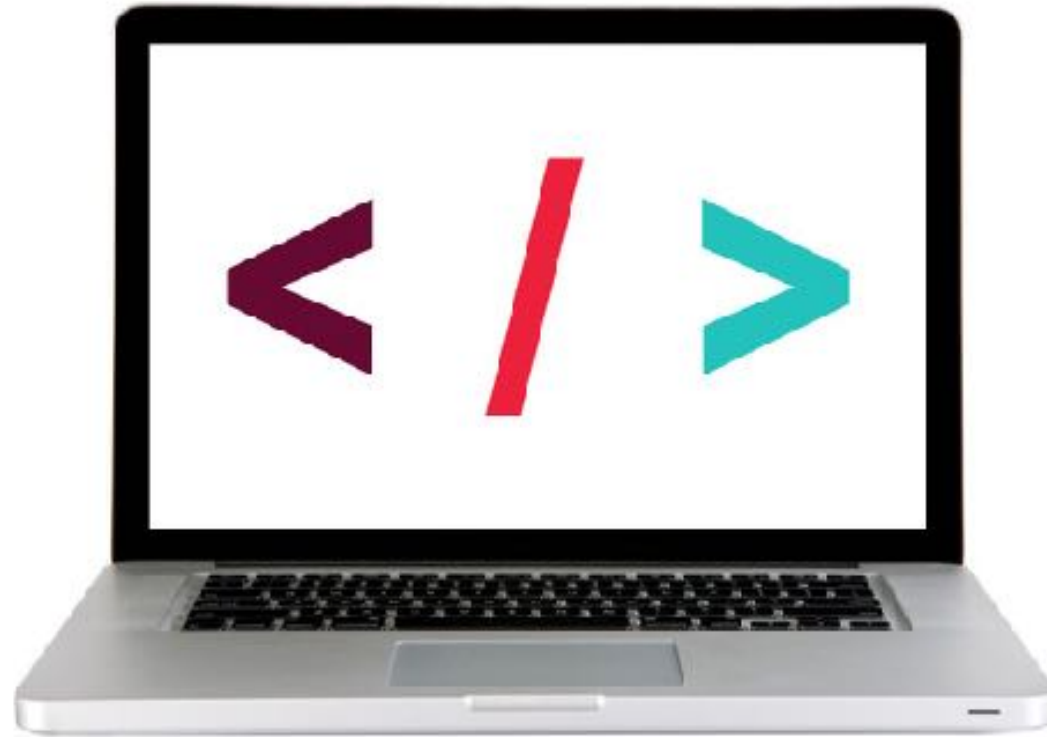
TIMING

1. Open up your starter code > monument_responsive. Think about what you should change as the screen size gets smaller.
2. Write media queries at the bottom of your CSS file to create a responsive version of the Monument Landing Page.

FEWD

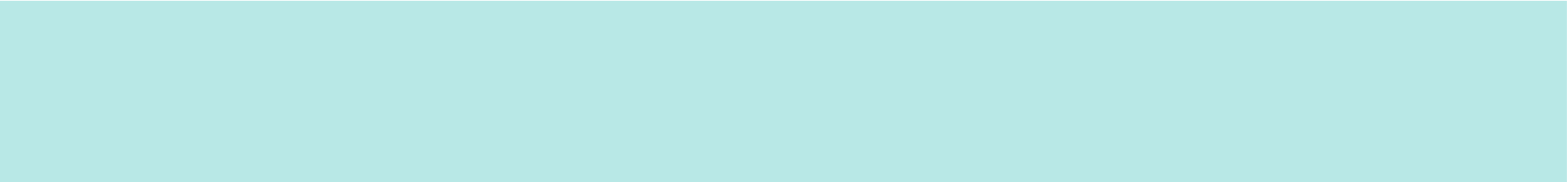
GRID SYSTEMS — RESPONSIVE

DEMO: GRID SYSTEMS



<https://codepen.io/larissam/details/oqMppQ/>

ROWS



COLUMNS



ROWS

Since all our rows will be set to **display: flex;** we can store this property in a class and apply it to any element to turn it into a row.

```
.row {  
  display: flex;  
  flex-wrap: wrap;  
  margin-bottom: 20px;  
}
```

Make sure to add “flex-wrap: wrap” to your row class!

COLUMNS

We can create classes for the different options for column widths. We can then apply these classes to any flex item to set its width.

```
.col-1-4 {  
    width: 25%;  
}  
  
.col-1-3 {  
    width: 33.333333%;  
}  
  
.col-1-2 {  
    width: 50%;  
}
```

COLUMNS — RESPONSIVE

We can then create classes for different screen sizes in a media query:

```
@media screen and (max-width: 970px) {  
  .col-md-1-4 {  
    width: 25%;  
  }  
  .col-md-1-2 {  
    width: 50%;  
  }  
  .col-md-full {  
    width: 100%;  
  }  
}
```

COLUMNS — RESPONSIVE

We can then create classes for different screen sizes in a media query:

```
@media screen and (max-width: 750px) {  
  .col-sm-full {  
    width: 100%;  
  }  
}
```

COLUMNS — RESPONSIVE

And finally, we can add any classes that apply to our HTML. We can add multiple classes to one element with a space-separated list:

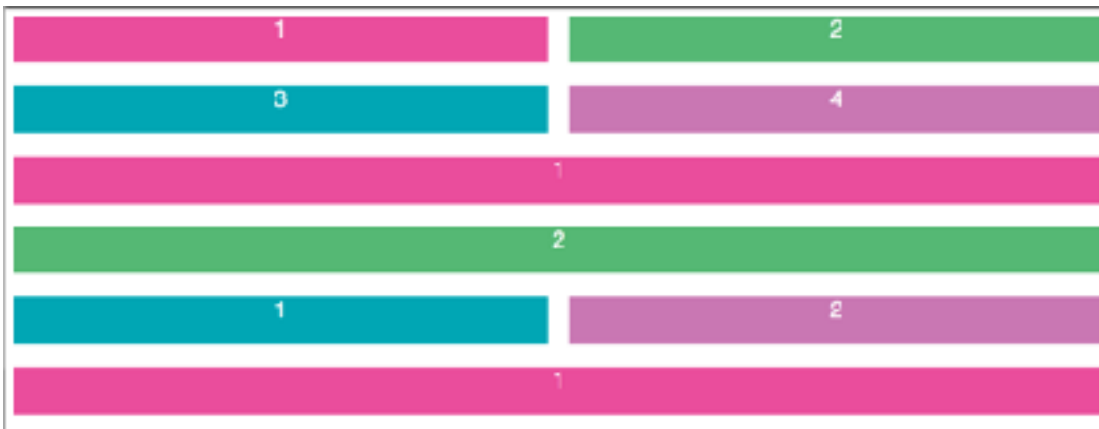
```
<section class="col-1-4 col-md-1-2 col-sm-full">Content</section>
```

ACTIVITY – APPLY THE GRID CLASSES!

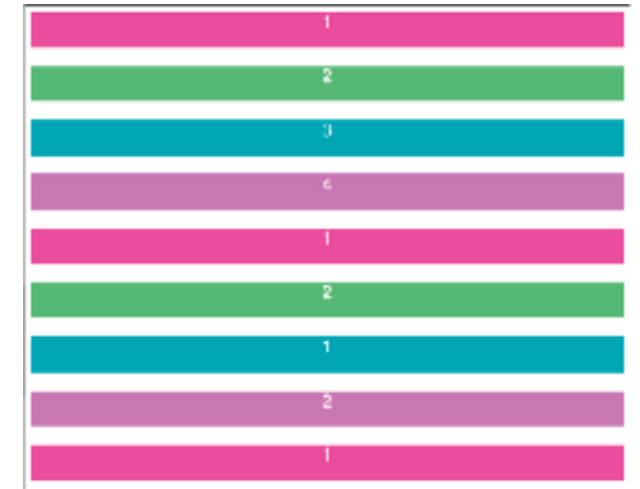
Large (default) viewport:



Medium viewport:



Small viewport:



<https://codepen.io/larissam/pen/gxRQrj?editors=1100#0>

RESPONSIVE GRID SYSTEMS

LAB

ACTIVITY: PACIFIC BURGER – RESPONSIVE



EXERCISE

KEY OBJECTIVE

- ▶ Practice applying media queries to achieve a responsive layout.

TYPE OF EXERCISE

- ▶ Individual/Partner

TIMING

1. Open up the code in starter code > `pacific_responsive`
2. Add media queries and grid system classes “row”, “col-2-3”, “col-1-3”, “col-sm-full”, etc to create the responsive layouts in the mocks

WEEKLY OVERVIEW

WEEK 4

Responsive Design / CSS Positioning

WEEK 5

Forms / Final Project Lab

WEEK 6

JS Intro

LEARNING OBJECTIVES

- Describe responsive design.
- Apply media queries to achieve a responsive layout.

EXIT TICKETS