

RESPONSIVE LAB

[HTTP://TEACHING.EBOYER.IO](http://teaching.eboyer.io)

Eric Boyer

LEARNING OBJECTIVES

- Learn how to analyze a web page in order to be able to redesign it responsively.
- Practice using media queries to achieve a responsive design.

AGENDA



- Answers to Exit Ticket Questions
- Review
- Responsive Type - REM/EM
- iOS Simulator
- Startup Matchmaker - Plan
- Startup Matchmaker - Lab time

ANSWERS TO EXIT TICKET QUESTIONS

“Where to begin and how to stay organized”

ANSWERS TO EXIT TICKET QUESTIONS

“I would like more practice with debugging”

ANSWERS TO EXIT TICKET QUESTIONS

“Not sure when fixed designs work best”

ANSWERS TO EXIT TICKET QUESTIONS

“Imaging and multimedia responsive design for media queries?
Are different resolutions needed?”

ANSWERS TO EXIT TICKET QUESTIONS

“Do companies attempt to accomplish this goal with two websites?
One mobile and one for PCs?”

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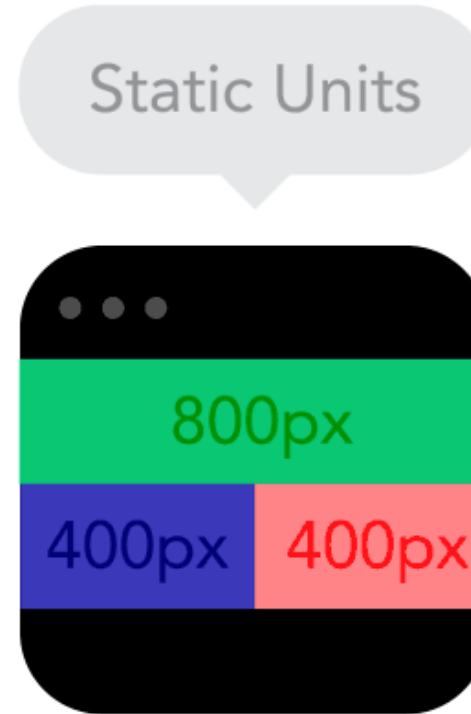
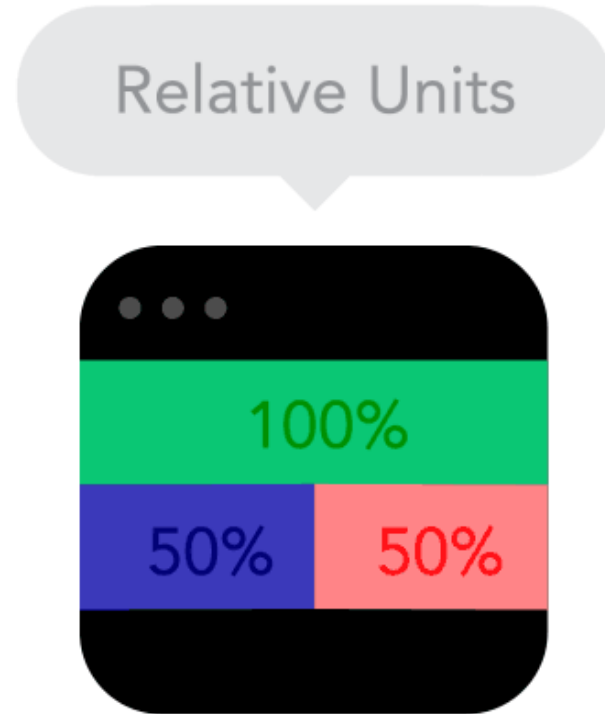
REVIEW

RESPONSIVE DESIGN



FIXED VS. FLUID

Fluid layout



Fixed

Gif credit: [Fast Company](#)

WITH BREAKPOINTS VS. WITHOUT BREAKPOINTS

With Breakpoints



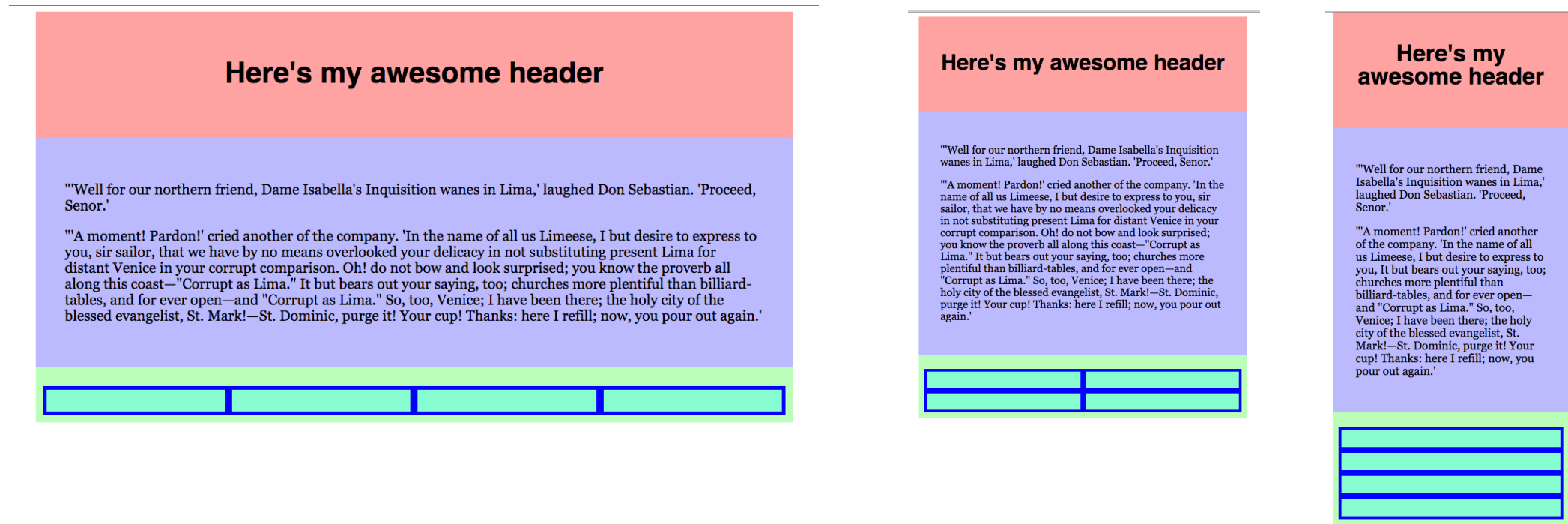
Without Breakpoints



Gif credit: [Fast Company](#)

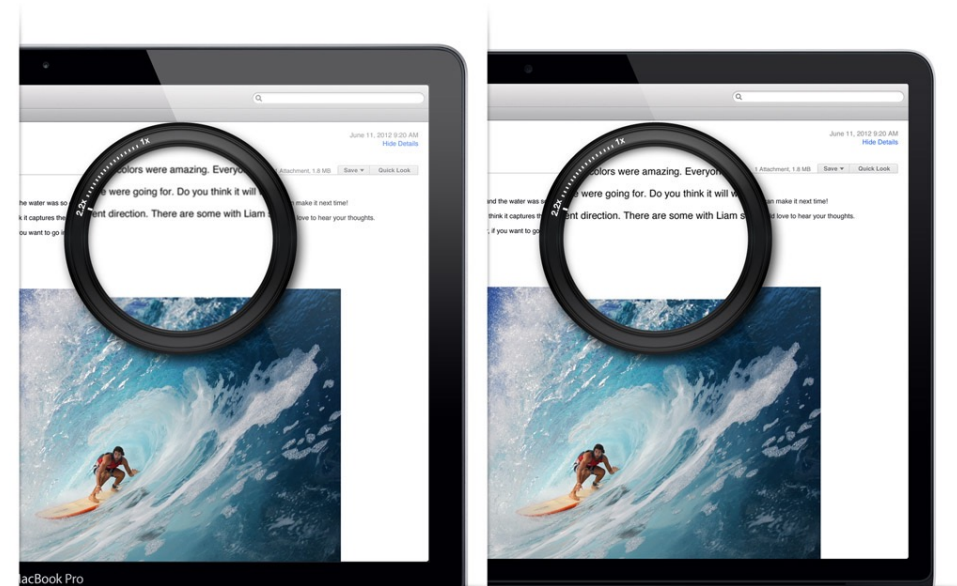
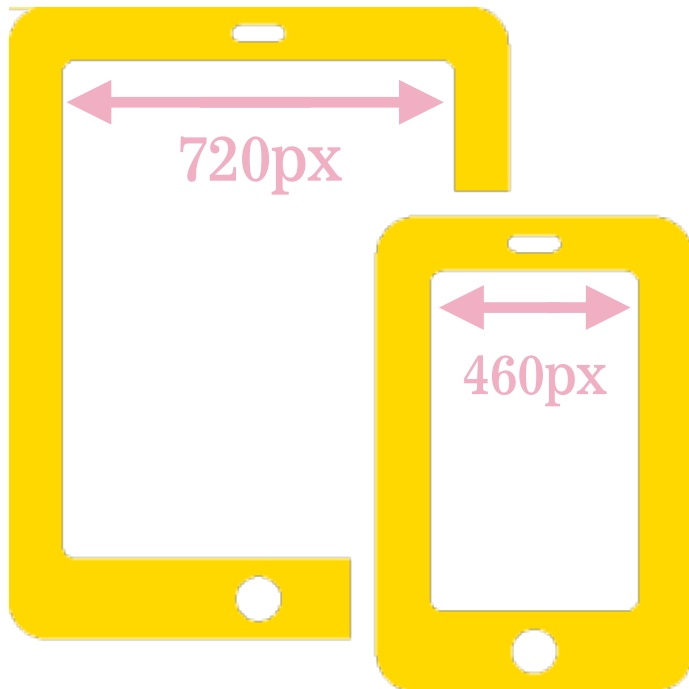
RESPONSIVE LAYOUT

- Uses relative widths (built on a fluid grid)
- Use media queries to control design and content as it scales down or up with the browser or device



MEDIA QUERIES

- Media queries allow us to target CSS rules based on screen size, device orientation, display density, etc.



MEDIA QUERIES

```
@media screen and (max-width: 600px) {  
  .box {  
    width: 100%;  
  }  
}
```

***See a full list of features [here](#)

RESOURCES

Review resources from Tuesday on <http://teaching.eboyer.io>

RESPONSIVE BASICS

RESPONSIVE — REM/EM

EM

- *Relative* unit
- Sized based on the width of the letter “m”
- 1em = 100% font-size
- .5em = 50% font-size
- **Based on parent**

Parent { font-size:16px;}

Child {font-size:2em;}  Child's font size is 32px (200% x 16px)

REM

- "Root" em
- Same as em **except** based on the font-size of the html element

PIXELS AND EMS AND REMS, OH MY!!

	RELATIVE?	BASED ON
PX	absolute	
EM	relative	parent
REM	relative	html element

THE BENEFIT OF USING RELATIVE UNITS

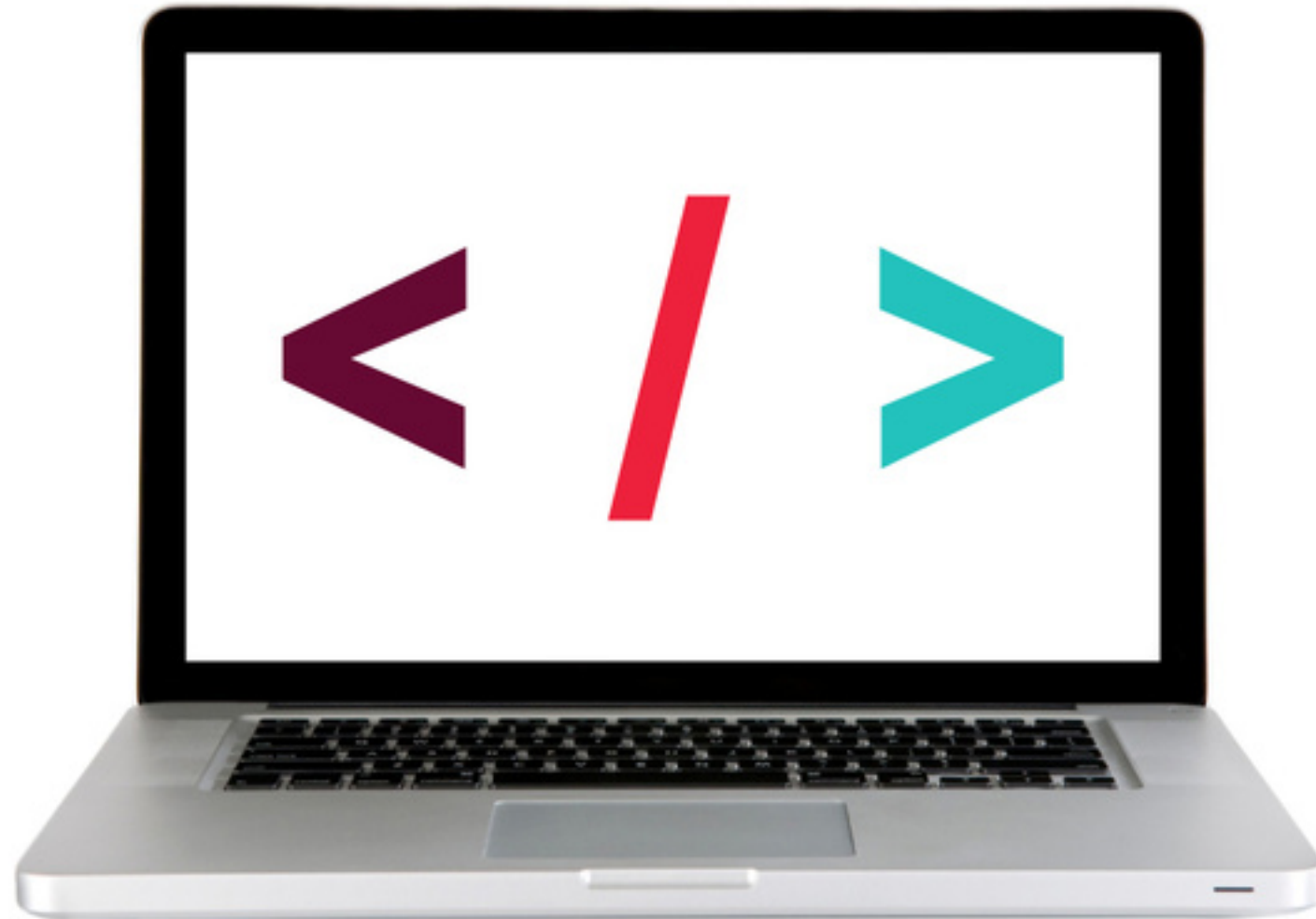
```
html { font-size: 16px; }
h1 { font-size: 33px; }
h2 { font-size: 28px; }
h3 { font-size: 23px; }
h4 { font-size: 19px; }
small { font-size: 13px; }
.box { padding: 20px; }

@media screen and (min-width: 1400px) {
  html { font-size: 20px; }
  h1 { font-size: 41px; }
  h2 { font-size: 35px; }
  h3 { font-size: 29px; }
  h4 { font-size: 24px; }
  small { font-size: 17px; }
  .box { padding: 25px; }
}
```

```
html { font-size: 1em; }
h1 { font-size: 2.074em; }
h2 { font-size: 1.728em; }
h3 { font-size: 1.44em; }
h4 { font-size: 1.2em; }
small { font-size: 0.833em; }
.box { padding: 1.25em; }

@media screen and (min-width: 1400px) {
  html { font-size: 1.25em; }
}
```

LET'S TAKE A CLOSER LOOK



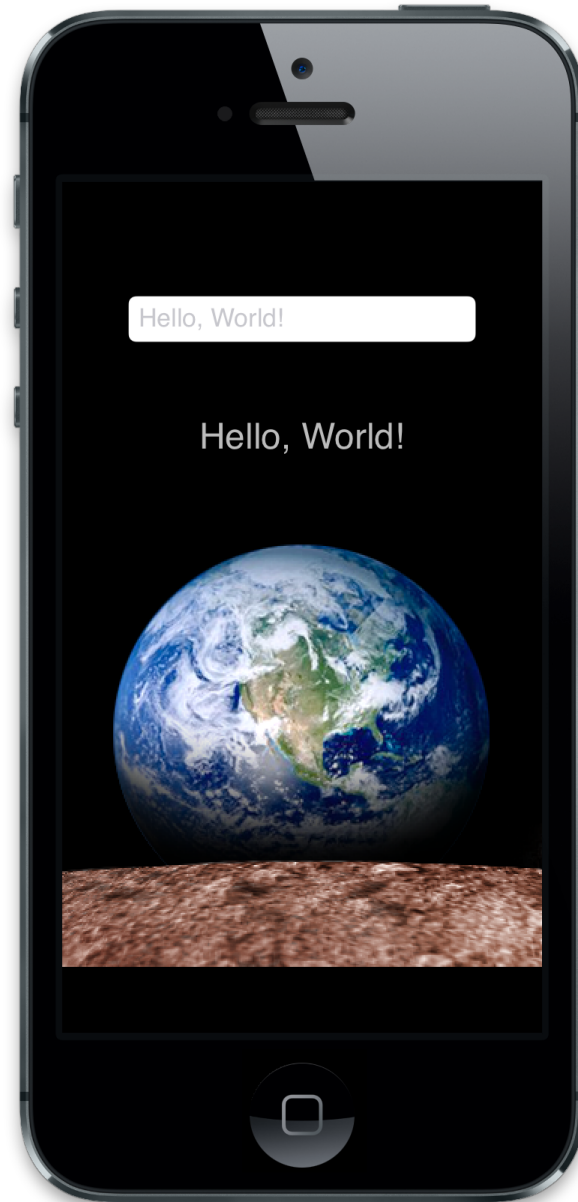
RESOURCES

Review resources for Today on <http://teaching.eboyer.io>

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IOS SIMULATOR

IOS SIMULATOR!



ACCESSING THE IOS SIMULATOR

LAUNCHING THE SIMULATOR

1. Download (FROM HOME) Xcode from the [App Store](#)
2. Launch Xcode
3. Control-click the Xcode icon in the Dock, and choose Open Developer Tool > iOS Simulator from the shortcut menu

CHANGING DEVICES

1. Choose a device from the Hardware > Device menu.

DEBUGGING IN SAFARI

1. Launch Safari
2. Go to Develop > iOS Simulator > (select your page) to open Safari's elements panel

Read the [documentation](#) for more tips and techniques.

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STARTUP MATCHMAKER — FIXED TO RESPONSIVE

FIXED TO RESPONSIVE — PLANNING

1. Determine what content is extra

- Does that h1 need an h2 under it?
- Will that one-liner get the visitor to understand my site or is it extra?

2. Determine what content needs to be visible

- Is it necessary to show my entire nav if there are other ways of getting to navigation?

3. Identify Extra Styling

- Do my columns need a border if they're stacked?

**Stuck? Refer to the examples from mediaqueri.es*

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ACTIVITY



EXERCISE

KEY OBJECTIVE

- ▶ Learn how to analyze a web page in order to be able to redesign it responsively.

TYPE OF EXERCISE

- ▶ Groups of 2-3

TIMING

10 min Create a sketch of Startup Matchmaker for a mobile devices.

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STARTUP MATCHMAKER — LAB TIME

FIXED TO RESPONSIVE — EXECUTION

1. Convert widths to percentages
2. Size fonts in ems/rens
3. Make layout/styling updates for different screen sizes using media queries

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ACTIVITY



EXERCISE

KEY OBJECTIVE

- ▶ Practice using media queries to achieve a responsive design.

TYPE OF EXERCISE

- ▶ Individual/partner

TIMING

- | | |
|---------------|---|
| <i>20 min</i> | 1. Size fonts in ems/rem |
| <i>30 min</i> | 2. Make layout/styling updates for different screen sizes using media queries |
| <i>40 min</i> | 3. Write JS that makes the mobile nav open and close when clicked. |
| | 4. BONUS: Work on developers and designers pages |

LEARNING OBJECTIVES

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HOMEWORK

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EXIT TICKETS