GENERAL ASSEMBLY

CSS

RESPONSIVE BASICS

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LEARNING OBJECTIVES

- Describe what responsive design is
- Describe the differences between fixed and responsive designs
- Implement 2 different media queries
- Describe the difference between REM and EM

REVIEW

DIVIDED TIMES

How'd it Go?

DO YOU REMEMBER?

- Box Model
- CSS Specificity
- Floats
- Flexbox

RESPONSIVE LAYOUTS

FIXED WEBSITES

- UPS.com
- Google.com
- Amazon.com
- NYTimes.com

FIXED LAYOUTS

- Used up to this point
- Relies on a container of fixed width
- Standard size used to be 960px or 980px

RESPONSIVE WEBSITES

- Apple.com
- BostonGlobe.com
- signesduquotidien.org
- generalassemb.ly

RESPONSIVE LAYOUTS

- Different styles for different screen widths
- Fluid
- Smaller screens are often sized in percentages

REM/EM

EM

- Originates from print design
- Is a relative to it's parent element

EM

```css
body {
  font-size: 20px;
}

.container {
  font-size: 10px;
}

p {
  font-size: 1.5em;
}
```

```html
<body>
  <p>Paragraph one...</p>
  <div class="container">
    <p>Paragraph two...</p>
  </div>
</body>
```

REM

- REM is easier to keep track of than EM
- Is a relative to the root element

REM

```css
body {
  font-size: 20px;
}

.container {
  font-size: 10px;
}

p {
  font-size: 1.5rem;
}
```

```html
<body>
  <p>Paragraph one...</p>
  <div class = "container">
    <p>Paragraph two...</p>
  </div>
</body>
```

MEDIA QUERIES

MEDIA QUERIES

- Start with the `@media` keyword
- Contains conditions inside parenthesis
- Can combine multiple conditions with the `and` or `or` keyword

MEDIA QUERIES

```
@media (min-width: 960px) {
  // css here
}
```

```
@media (min-width: 360px) and (max-width: 960px) {
  // css here
}
```

```
@media (max-width: 360px), (min-width: 960px) {
  // css here
}
```

MEDIA TYPE

- braille, embossed, handheld, print, projection, screen, speech, tv
- added after the `@media` keyword

```
@media screen (min-width: 960px) {
  // css here
}
```

ONLY KEYWORD

Allows you to ignore CSS in older browsers (i.e. screen) that are not compatible.

```
@media only screen (min-width: 960px) {
  // css here
}
```

BOOTSTRAP QUERIES

```
/* Extra small devices (phones, less than 576px) */
/* No media query since this is the default in Bootstrap */

/* Small devices (landscape phones, 576px and up) */
@media (min-width: 576px) {
  // css
}

/* Medium devices (tablets, 768px and up) */
@media (min-width: 768px) {
  // css
}

/* Large devices (tablets, 992px and up) */
@media (min-width: 992px) {
  // css
}
```

WHY MOBILE FIRST

GRACEFUL DEGRADATION

- Arose out of a need to have a design function on as many browsers and platforms as possible.
- A full standard website would scale back as the viewport and devices got smaller

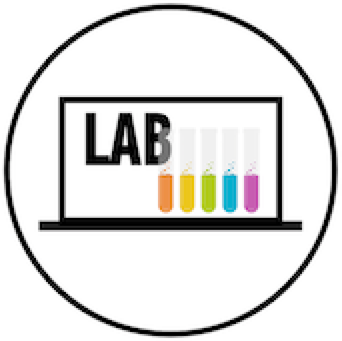
PROGRESSIVE ENHANCEMENT

- Attempt to provide users with the least resources (screen size, processing power, third party plugins) with a perfectly functional experience.
- The site can gradually be enhanced for larger platforms with more resources.

PROGRESSIVE ENHANCEMENT VS GRACEFUL DEGRADATION

- Scaling Down is much more difficult than scaling up

LAB



CLOSING

LEARNING OBJECTIVES

- Describe what responsive design is
- Describe the differences between fixed and responsive designs
- Implement 2 different types of media queries
- Describe the difference between REM and EM

EXIT TICKETS

Give us feedback! Let us know what we're doing well at, and more importantly, what we can improve at.

HOMEWORK