



# FEWD - RESPONSIVE BASICS

KARA YU

MIT, Meteor

## AGENDA

- Review
- Responsive Layouts
- REM/EM
- Media Queries

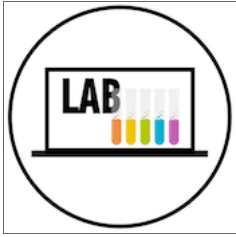
## REVIEW

Let's bring HTML/CSS back into the equation.

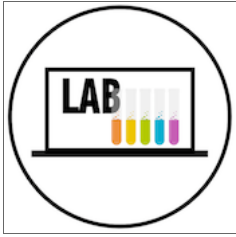
# RESPONSIVE LAYOUT

# RESPONSIVE SITES

- View these websites on your mobile phone.
- What additional info would you want on desktop?
  - Generalassemb.ly
  - Dwolla.com
  - Relayrides.com



**BOXES**



## MOBILE BOXES

## FIXED VS RESPONSIVE

Checkout these **Fixed** sites

- **UPS.com**
- **Boston.com**
- **Google.com**
- **Getaround.com**

Checkout these **Responsive** Sites

- **Generalassemb.ly**
- **Dwolla.com**
- **Sweethatclub.com**
- **Relayrides.com**



## FIXED LAYOUT

- Relies on a container of fixed width
- Usually 960px or 980px

## RESPONSIVE LAYOUT

- Different styles for different screen widths
- Uses an elastic/fluid layout
- Fluid
- Sized in percentages
- Elastic
- Sized in ems

## EMS VS REMS - NEEDS MORE CLARITY

### EM

- Sized based on the width of the letter "m"
- Same as percentages\*. 1em=100% font-size
- **<http://alistapart.com/articles/howtosizetextincss>**
- Based on parent
- Parent{ font-size:16px;}
- Child{font-size:2em;}
- Child's font size is 32px

### REM

- "Root" em. Same as em
- Caveat: Based on the font-size of html element

## MEDIA QUERIES

## MEDIA QUERIES - WHAT SHOULD BE IN CODE?

@media only screen and (max-width: xPx) (min-width: xPx) (max-device-width:xPx)  
(min-device-width:xPx)

For iPad:

(orientation: portrait) (orientation: landscape)

Separate multiple clauses with "and"

# MOBILE DISPLAY

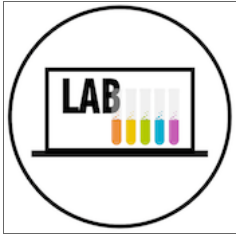
```
<meta name="viewport" content="width=device-width, initial-scale=1">
```

Why necessary?

- Mobile browser assumption of fixed layout of 980px
- Standard media queries sizes
- Small: up to 768px
- Medium: 768-991px
- Large: 992px+

## USAGE

```
/*float boxes into columns*/
.box{
    float:left;
}
@media only screen and (max-width:768px){
    /*insert responsive css here
    ex: stack floated boxes
    */
    .box{
        float:none;
    }
}
```



## RESPONSIVE BOXES



## OPTIONAL

Grid layouts Transition (make media query changes smoother)

## CSS3 TRANSITIONS

ADD AN EFFECT WHEN CHANGING FROM ONE STYLE TO ANOTHER

```
a {  
  color: #D00;  
  -webkit-transition: all 300ms;  
}  
a:hover {  
  color: #A00;  
}
```

## CSS3 TRANSITIONS

### ADD AN EFFECT WHEN CHANGING FROM ONE STYLE TO ANOTHER

```
div {  
  -moz-transition-property: width; /* Firefox 4 */  
  -webkit-transition-property: width; /* Safari and Chrome */  
  -o-transition-property: width; /* Opera */  
  transition-property: width;  
}  
div:hover {  
  width: 300px;  
}
```

