

# Today

- Review
- Email Frameworks
- BEM Syntax

# CSS Framework

- Creates a layout system for you
- Gives you classes that do things to apply to your html

# Smart Defaults

- Quick to **prototype** with
- Marketplace for **plug and play**
- Handle a vast array of **browsers** well
- Have made **design decisions** for you

# **Which one?**

What are you doing with it?

# Philosophy

Design patterns? Tech patterns? Rems? Grids?

# *SASS*

(And other CSS Preprocessors)

- ~~Variables~~
- Nesting (not for long)
- Inheritance (uh-oh)
- Functions
- Calculating things (width:  $600\text{px} / 960\text{px} * 100\%$ )

# Let's make a grid

Example!



# Today

- ~~Review~~
- Email Frameworks
- BEM Syntax

**Email. Is. Different.**

*Implementing responsive email design  
can be a bit of a drag*

# 2 Types: HTML and TXT

One is plain text and one can have formatting and pictures.

# **2 Main Client Types:**

## **Desktop and Web**

Thunderbird vs gmail.com

# HTML for emails

Not the same as web HTML

# Web based HTML for emails

Your HTML is rendered inside someone else's  
HTML

# Clients Preprocess

Strip anything potential harmful for the mail client  
to render



# Result

Most people default to a limited set of HTML when writing emails

# Safe to Use

- HTML Tables
- Width 600px
- Inline CSS
- Web safe fonts

# Maybe?

- Background Images
- Custom Fonts
- Embedded Fonts
- Wide layouts

# Nope.

- Iframe
- Audio
- Video
- Forms

**Clients \* OSs \* Devices**  
**\* Browsers!**

# 90+ Unique Email Clients

[caniuse.com](https://caniuse.com) (for email)

**Let's look at a single  
property**

display: ????

# Grid in **webmail** clients

Pushing in the right direction



# You can buy help

Live previews from Litmus

# Use Simple Boilerplates

Three generic styles

# Use Frameworks

Zurb Inky

**Don't expect  
perfection**

See note at bottom of [page](#)

# Lesson?

CSS rules are not well encapsulated

**Shadow DOM Soon**

**BEM**

# **Block Element Modifier**



**It's a naming  
convention**

**It's a design**  
**methodology**

# Goals

- Simplicity
- Reusability
- Sharability

**What's it made of?**

# Blocks

Can I draw a line around it?

☐ **Receive all emails, except those I unsubscribe from.**

We'll occasionally contact you with the latest news and happenings from the GitHub Universe. [Learn more.](#)

☒ **Only receive account related emails, and those I subscribe to.**

We'll only send you legal or administrative emails, and any emails you've specifically subscribed to.

# Element

Inside the standalone

Can it exist in another block? Then it's a block.

# Modifier

State/look of block or element



-- and \_

**CSS Syntax Helps us**  
**see B\_\_E--M**

```
.block {}
```

```
.block__element {}
```

```
.block--modifier {}
```

**Mid -- 'M' odifier**

```
.person {}  
.person__hand {}  
.person--female {}  
.person--female__hand {}  
.person__hand--left {}
```

Can look at CSS to see HTML dependencies

**.person\_\_hand vs  
.hand**

**Is there a .hand  
elsewhere?**



```
<a class="btn btn--big btn--orange" href="">  
  <span class="btn__price">$9.99</span>  
  
  <span class="btn__text">Subscribe</span>  
</a>
```

# What's Happening?

Two things.

# **Separate Structure from Cosmetics**

Block styles and modifier styles

```
.btn {  
  display: inline-block;  
  padding: 1em 2em;  
  vertical-align: middle;  
}  
  
.btn--success {  
  background-color: green;  
  color: white;  
}
```

**Allow Styles to be  
Composed**

```
<a class="btn btn--big btn--orange" href="">
```

**SRP + DRY**

# Flatten the Specificity Hierarchy



**.one .two vs .one--two**

**Raise specificity while  
maintaining portability**

# CSS Extras

**[id="hack"] { }**

ID as Attribute

**writing-mode: vertical-  
rl**

**No class the 9th**

**Sarah Intro to JS on  
the 11th**

**No Graded HW Next**

**W 11**