START SCREENCAST!

LET'S GET EVERYTHING SET UP!

- 1. Navigate to the FEWD 42 Dashboard (<u>saraheholden.com/fewd_dashboard/</u>) and download the Lesson 6 starter code and slides. You'll want to keep the dashboard open for other links and resources we'll be referencing in class.
- 2. Move the starter code and slides from your Downloads folder to the **fewd** folder on your desktop.
- 3. Double-click on starter_code_lesson_6.zip to unzip it
- 4. After you've unzipped, be sure to delete the original .zip file!
- 5. Open the entire **fewd** folder with Sublime Text (either drag and drop the folder on the Sublime icon in the dock on Mac, or open Sublime and go to file > open... and select the **fewd** folder.
- 6. Log in to the FEWD 42 Slack (<u>fewd42.slack.com</u>) and join the class6 channel.

WEEKLY OVERVIEW

WEEK 2	Advanced CSS — Box Model and Layout	
WEEK 3	CSS Lab Week / CSS Positioning	
WEEK 4	K 4 Intro to Programming / jQuery Basics	

FINAL PROJECTS

FINAL PROJECTS

WHERE CAN I FIND MORE INFO AND WHEN EACH MILESTONE IS DUE?

▶ Final Project page on the FEWD 42 Dashboard

WHERE CAN I GET SOME INSPIRATION FROM WHAT PAST STUDENTS HAVE DONE?

▶ Visit the General Assembly Gallery

WHERE SHOULD I BE RIGHT NOW?

By the end of this week you should have looked through the gallery and jotted down a few ideas. Wireframes/project proposals will be due at the end of Week 5! **60** GENERAL ASSEMBLY

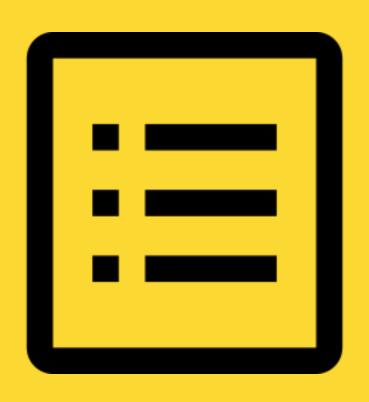
Sarah Holden

STARTUP MATCHMAKER

LEARNING OBJECTIVES

 Practice web development by transforming a design comp into a webpage.

AGENDA



- Review
- ▶ Lab Startup Matchmaker Pt. 2
- ▶ Advanced CSS Positioning (if time permits)

REFACTOR

REVIEW

EXIT TICKET QUESTIONS

- ▶ Why are single page applications more popular than click thru pages?
- ▶ What is SASS? Should we be using it?
- ▶ <u>Is there only one place to insert google font link?</u>
- ▶ What should I do when I get stuck?

PREPROCESSORS

CSS PRE-PROCESSORS: SASS AND LESS

- Use variables in CSS!
- Nest styles!
- ▶ Define mixins (similar to JS functions)
- Mathematical functions
- Operational functions (such as "lighten" and "darken")

\$VARIABLES

```
$baseTextColor: #e51b24;
h1 {
    color: $baseTextColor;
}
```

NESTING

```
article {
    margin-bottom: 3em;
    h1 {
        font-size: 2em;
    }
}
```

EXIT TICKET QUESTIONS

- ➤ Can I apply max-width: 100%; to the background image? Hint: look up background-size: cover
- ▶ How do you position the background-image?
- ▶ How to create button styles? Hint: you can use a box-shadow. I like to use a box-shadow generator to experiment.
- ▶ How do I add a background-image? Hint: You'll need to look up the background-image, background-position, background-size and background-repeat properties. You'll need to use all four!

REFACTOR/REVIEW

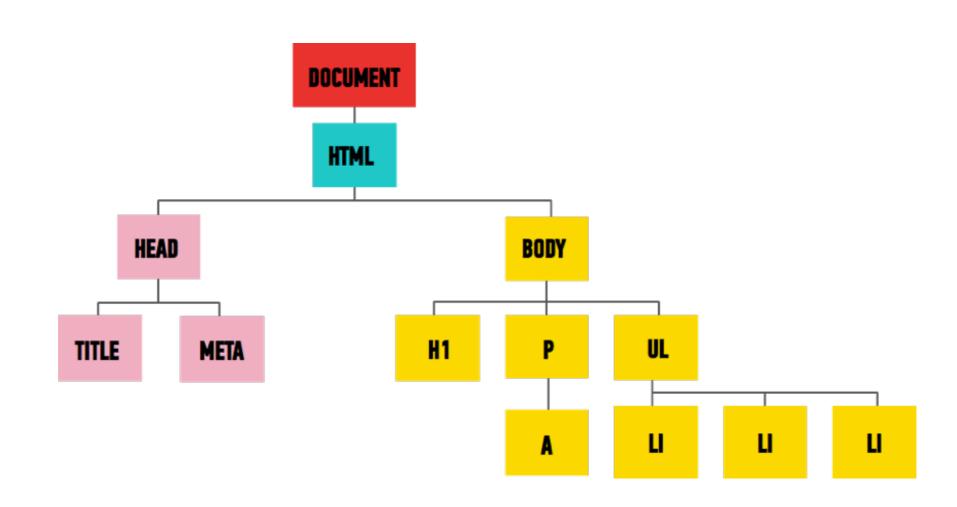
CSS SELECTORS

CSS SYNTAX

Selector

```
h1 {
    color: yellow;
}
```

DOM TREE



		MEANING:	EXAMPLE:
SELECTOR:	UNIVERSAL	Applies to all elements in the document	* {}
	ТҮРЕ	Matches element names	h1, h2, h3 {}
	CHILD	Matches an element that is a direct child of another element	p>a {}
	DESCENDANT	Matches an element that is a descendent (not just a child) of another element	p a {}
	ADJACENT SIBLING	Matches the element that is directly after another element	p+a {}
	GENERAL SIBLING	Matches the element that is a sibling of another	p~a {}

REFACTOR/REVIEW

FLOATS

MATCH IT! — WHICH GOES WITH WHICH?

- 1. Make sure an element starts on a new line
- 2. Fixes "collapsed" parent when all children are floated.
- 3. Take an element from the normal flow and place it along the left side of its container, where text and inline elements will wrap around it

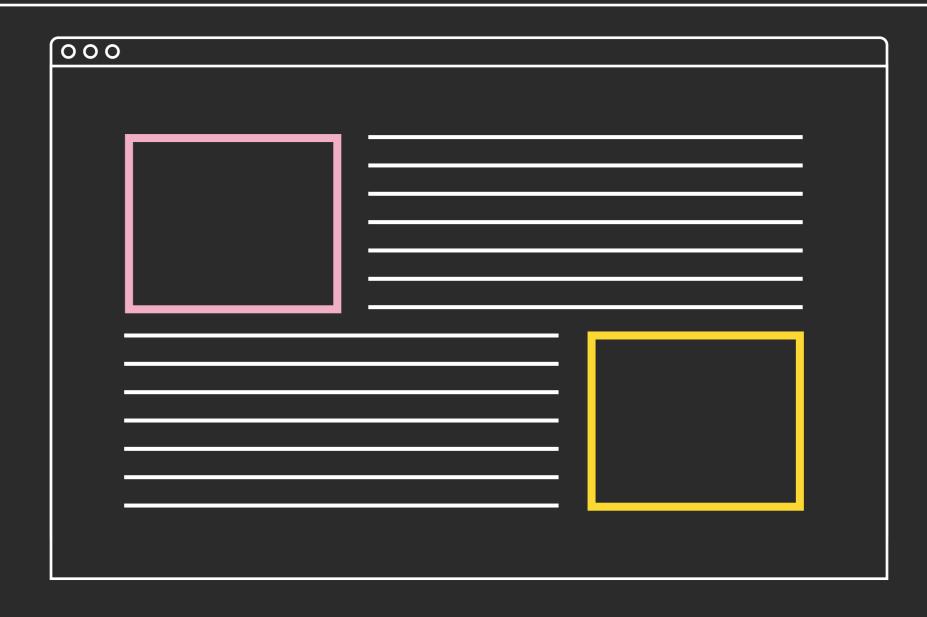
?

A. float: left

B. clearfix

C. clear:both

CSS — FLOATS



CSS CLEAR PROPERTY

PROBLEM:

CSS Clear Property

Main Content Section

Lorem igsum dolor sit amet, consectetur adipisicing elit. Rem, eligeradi valuptatum cupiditate nisi molestias nemo ipsam odio, laudantum blandittis vitae at Sapiente dolor, obcaecati valuptatibus harum unde in doloremque sint. Lorem ipsum dolor sit amet, consectetur adipisicing elit. Rem, eligendi voluptatum cupiditate nisi molestias nemo ipsam odio, laudantium blandittis vitae at Sapiente dolor, obcaecati valuptatibus harum unde in doloremque sint.

. Something funny

- Člick on me
- Sidebar item
- Another great point
- Wolfman ipsum

Copyright. I should be at the bottom of the page.



Footer is floating up!

SOLUTION:

CSS Clear Property

Main Content Section

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Rem, eligendi voluptatum cupiditate niai moleatias nemo ipsam odio, laudantium blanditiis vitae al Sapiente dolor, obzaecati voluptatibus harum unde in doloremque sint. Lorem ipsum dolor sit amet, consectetur adipisicing elit. Rem, eligendi voluptatum cupiditate nisi molestias nemo ipsam odio, laudantium blanditiis vitae al Sapiente dolor, obcaecati voluptatibus harum unde in doloremque sint.

- · Something funny
- Click on me
- Sidebar Item
- · Another great point
- Wolfman ipsum

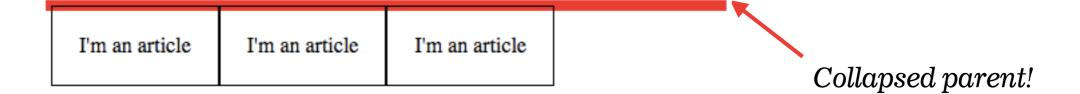
footer {
 clear: both;
}

Copyright. I should be at the bottom of the page.

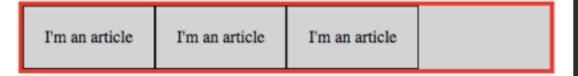
PARENTS OF FLOATED ELEMENTS

If a containing element **only contains floated elements**, some browsers will treat it as if it is zero pixels tall.





SOLUTION:



PT. 1 — ADD CSS CLASS:

```
.clearfix:after {
  content: "";
  display: table;
  clear: both;
}
```

PT. 2 — ADD CLASS TO HTML:

```
<div class="clearfix">
    1 <!-- float: left -->
    2 <!-- float: left -->
    3 <!-- float: left -->
</div>
```

LET'S TAKE A LOOK



CONFUSING NAMES — KEEPING THINGS STRAIGHT

CLEAR: BOTH;

Make sure an element starts on a new line

CSS Clear Property

Main Content Section

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Rens, eligendi valuptatum cupiditate nila imolestisia remo ipsam odio, laudantum blandittis vitae al Sapiente dolor, otoaesati voluptatibus harum unde in doloremque sint. Lorem ipsum dolor sit amet, consectetur adipisicing elit. Rens, eligendi voluptatum cupiditate nial molestias nomo ipsam odio, laudantium blandittis vitae al Sapiente dolor, obcaecati voluptatibus harum unde in

- Člick on me
- Sidebar item
 Another great point
- Wolfman ipsum

Copyright. I should be at the bottom of the page.

CSS Clear Property

Main Content Section

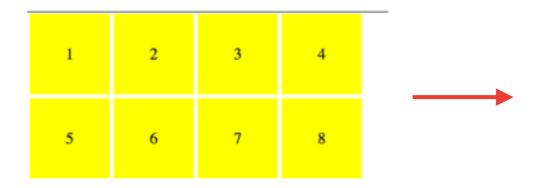
Lorem ipsum dolor sit amet, consectetur adipisicing elit. Rem, eligendi voluptatum cupiditate nisi molestias nemo ipsam odio, laudantium blanditiis vitae al Sapiente dolor, obcaecati voluptatibus harum unde in doloremque sint. Lorem ipsum dolor sit amet, consectetur adipisicing elit. Rem, eligendi voluptatum cupiditate nisi molestias nemo ipsam odio, laudantium blanditiis vitae al Sapiente dolor, obcaecati voluptatibus harum unde in doloremque sint.

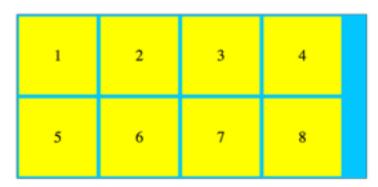
- · Something funny
- Click on me
- Sidebar Item
- Another great point
 Wolfman ipsum

Copyright, I should be at the bottom of the page.

CLEARFIX:

Fixes collapsed parent





ACTIVITY



KEY OBJECTIVE

Differentiate between floats, clear and clearfix.

TYPE OF EXERCISE

Individual/Partner

WHERE

▶ Exercise is in starter_code_lesson_6 > floats_clear_clearfix

INSTRUCTIONS

- 5 min
- 1. Float each paragraph within the .blocks-wrapper to the left.
- 2. Make sure the footer stays at the bottom of the page!
- 3. Fix things so that we still have a nice pink background behind the blocks.

STEPS TO ACHIEVE A MULTI-COLUMN LAYOUT

- 1. MAKE SURE EACH COLUMN HAS A WRAPPER AROUND IT IN YOUR HTML
- 2. ADD BOX-SIZING: BORDER-BOX; TO EVERYTHING (USE THE * CSS SELECTOR)
 - 3. GIVE A WIDTH TO EACH COLUMN (PREFERABLY IN %)
 - 4. FLOAT EACH COLUMN TO LEFT
 - 5. USE PADDING TO ADD SPACE BETWEEN COLUMNS
 - 6. CLEAR ANYTHING UNDERNEATH YOUR COLUMNS I.E. A FOOTER USING THE CSS CLEAR PROPERTY (CLEAR: BOTH;)

FEWD

REFACTORING

ANIMATION

TRANSITIONS

TRANSITIONS

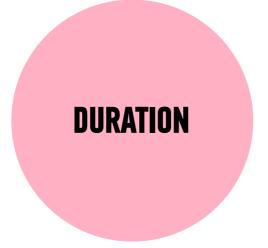
- Provide a way to control animation speed when changing properties
- Instead of having property changes take effect immediately, you can have them take place over a period of time.

```
.example {
  transition: [transition-property] [transition-duration] [transition-timing-function] [transition-delay];
}
```

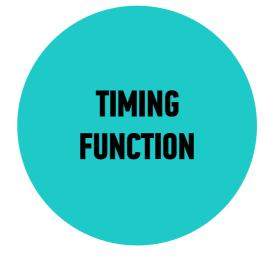
TRANSITIONS



Which properties to animate



How long the transition will last



will run



How the transition When the animation will start

- ▶ Can specify a specific property to transition or "all" to transition all properties
- ▶ Default: all

```
div {
  transition: opacity 0.5s;
}
```

```
div {
  transition: all 0.5s;
}
```

```
div {
  transition: height 0.5s;
}
```

```
.example {
  transition: [transition-property] [transition-duration] [timing-function] [transition-delay];
}
```

▶ A time value, defined in seconds or milliseconds

```
div {
  transition: all 0.5s;
}
```

```
div {
  transition: all 350ms;
}
```

```
div {
  transition: all 3s;
}
```

```
.example {
  transition: [transition-property] [transition-duration] [timing-function] [transition-delay];
}
```

- Describes how a transition will proceed over its duration, allowing a transition to change speed during its course.
- ▶ Timing functions: ease, linear, ease-in, ease-out, ease-in-out

```
div {
  transition: opacity 0.5s ease;
}

div {
  transition: opacity 0.5s ease-in-out;
}
```

```
.example {
  transition: [transition-property] [transition-duration] [timing-function] [transition-delay];
}
```

▶ Length of time before the transition starts

```
div {
  transition: background-color 0.5s ease 2s;
}
```

```
.example {
  transition: [transition-property] [transition-duration] [timing-function] [transition-delay];
}
```

MORE FUN WITH TRANSITIONS — CODROPS

Fun CSS button styles: <u>Creative buttons</u>

Icon hover effects: Icon Hover Effects

Modal dialogue effects (advanced): <u>Dialogue Effects</u>

ACTIVITY — **BUTTON LAB**



KEY OBJECTIVE

▶ Practice using CSS transitions

TYPE OF EXERCISE

Individual/Partner Lab

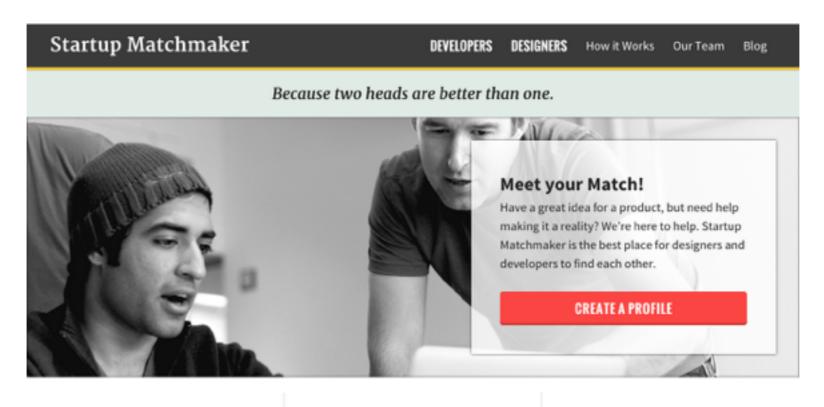
TIMING

6 min

1. Add :hover styles and transition to the button

STARTUP MATCHMAKER PT. 2

LAB — STARTUP MATCHMAKER



Create a Profile

Are you a Designer? Put yourself out there so that others can find you!

SIGN UP NOW

Find a Developer

Looking for a developer to work with on the next big thing? Look no further.

START YOUR SEARCH

Find a Designer

Need someone who can make a product intuitive and appealing? Get ready.

START YOUR SEARCH

LAB - STARTUP MATCHMAKER



KEY OBJECTIVE

Demonstrate the ability to plan and build a website

7. Style everything else!

LAB SESSION

20 min

Until 8:50

Hook up Google Fonts (use styleguide.png for reference).
 Use a color picker (Sip) to pick main colors (use styleguide.png for reference).
 Get everything where it needs to be! Add styles for page structure (columns, floats, inline-block, clear: both, clarifix). Use "Steps to achieve a multi-column layout" in review section for reference
 Look up background-image, background-position, and background-repeat properties in CSS (Sarah recommends MDN). Implement the background image and "overlay".
 Add base Styles (base fonts, colors, etc.)

8. **Super bonus:** Build pages for designers and developers (use pngs

6. Add base styles for headers, anchors, text

in starter code folder for reference)

LAB - STARTUP MATCHMAKER (HACKER EDITION)



KEY OBJECTIVE

Demonstrate the ability to plan and build a website

LAB SESSION

Until 8:50

- 1. Materials for the advanced version are in the startup_matchmaker_advanced folder.
- 2. Set up folder/document structure for project (feel free to use the html template as a starter!)
- 3. Gather content (in copy.txt) and add HTML Markup
- 4. Focus on layout styles first (getting everything in place)
- 5. Then add colors, text styles, fonts, etc.
- 6. Tidy things up
- 7. **Super bonus:** Build pages for designers and developers (use pngs in starter code folder for reference)

LET'S GIT IT!

IN SUBLIME TEXT:

Make sure all your changes are saved.

IN THE GITHUB APP:

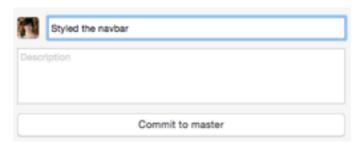
ADD

Make sure the boxes next to each file you've edited are checked.

travel_blog_part1/images/ad.gif

COMMIT

Enter a commit message and click "commit to master."



PUSH

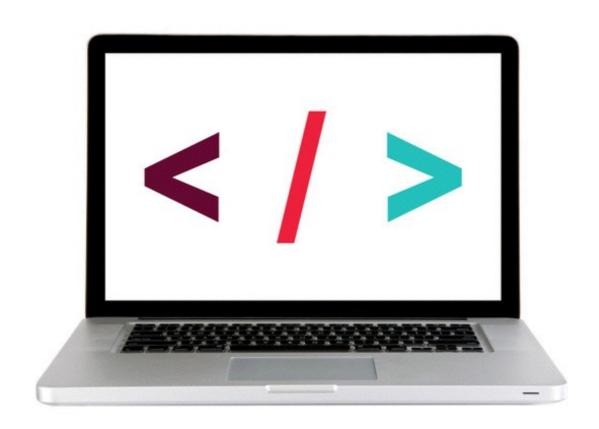
Click "sync" in upper right corner.



FORM BASICS

ADVANCED CSS POSITIONING

LET'S TAKE A CLOSER LOOK — POSITIONING 101



STATIC POSITIONING

- This is the normal flow of the document, the **default**
- Elements render in order, as they appear in the document flow.

```
.my-class {
   position: static;
}
```

RELATIVE POSITIONING

- Relative positioning moves an element *relative* to where it would have been in normal flow.
- For example, "left: 20px" adds 20px to an element's left position
- Creates a coordinate system for child elements.

```
.my-class {
   position: relative;
   top: 20px;
   left: 30%;
}
```

ABSOLUTE POSITIONING

- When the *position* property is given a value of *absolute*, an element is taken out of the normal flow of the document.
- This element no longer affects the position of other elements on the page (they act like it's not there).
- You can add the *right*, *top*, *left* and *bottom* properties to specify where the element should appear relative to its first positioned (not static) ancestor element

```
.my-class {
   position: absolute;
   top: 0;
   left: 500px;
}
```

FIXED POSITIONING

- When the *position* property is given a value of *fixed*, the element is positioned in relation to *the browser window*
- When the user scrolls down the page, it stays in the same place.
- You can add the *right*, *top*, *left* and *bottom* properties to specify where the element should appear in relation to the browser window.

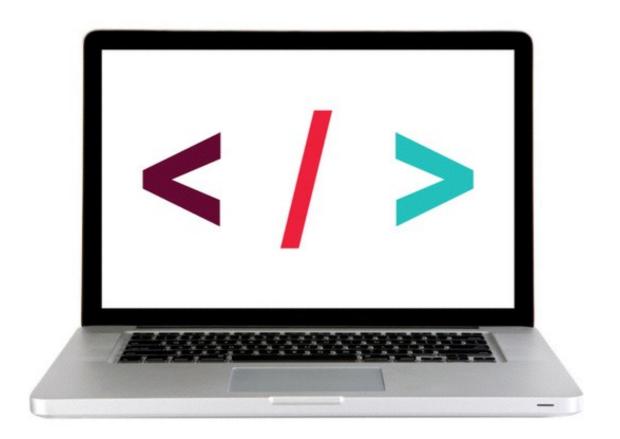
```
.my-class {
  position: fixed;
  top: 0;
  left: 500px;
}
```

OVERLAPPING ELEMENTS — **Z-INDEX**

- When using relative, fixed or absolute positioning, elements can overlap.
- When elements overlap, the elements that appear later in the HTML code sit on top of those that appear earlier in the page.
- If you want to control which elements are layered on top of each other, you can use the z-index property.
- This property takes a number the higher the number the closer that element is to the front.
- ▶ Similar to 'bring to front' and 'send to back' in programs like *Adobe Illustrator*.

```
.my-class {
   z-index: 10;
}
```

LET'S TAKE A CLOSER LOOK



starter_code_lesson_6 > positioning_fun

WANT TO LEARN MORE?

Resources for more info/examples:

- ▶ Textbook (CSS & HTML): Pages 363 369
- → A List Apart: <u>CSS Positioning 101</u>

LAB

LEARNING OBJECTIVES

 Practice web development by transforming a design comp into a webpage.

HOMEWORK

HOMEWORK

Read the specs on the FEWD 42 Dashboard. Don't forget the videos/reading!!

ADVANCED CSS

EXIT TICKETS

http://goo.gl/forms/vPhCOlfESf