
WEEK 3 – LAYOUT

CA GENERAL ASSEMBLY

FEWD



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Dad Joke Enthusiast

AGENDA

Review, Homework Q&A

Debugging Lab - Art is Hard

HTML5 Elements

Column Layout

- Inline-Block
- Floats, Clears
- Flexbox

Busy Hands

EXERCISE - DEBUGGING LAB

Art is Hard. So is debugging code.

Pick a partner (that you've not worked with before).

Between the two of you, try to find all of the errors in this code example.

HTML5 STRUCTURAL ELEMENTS

The following behave exactly like `<div>`'s, but add semantic value to your code:

`<header>`

`<footer>`

`<nav>`

`<section>`

`<aside>`

`<article>`

HTML5 ELEMENTS

`<header>`

- Defines a header for a document or section

`<footer>`

- Defines a footer for a document or section

`<nav>`

- Defines navigation links

HTML5 ELEMENTS

`<section>`

- Defines a section in a document

`<aside>`

- Defines content aside from the page content

`<article>`

- Defines an article (as in a blog or news site)

CODEALONG - HTML5 ELEMENTS

Let's incorporate these into Relaxr.

Which elements that we are already using will be replaced with HTML5 elements with more semantic value than just a `<div>`?

DISPLAY: INLINE-BLOCK;

Displays the block object inline, and allows it to retain its box model properties, e.g. height, width, padding, margin.

Remember, inline objects cannot have height, width, (top / bottom) margin, and (top / bottom) padding assigned to them . Inline-block objects, however, can.

DISPLAY: INLINE-BLOCK; THE QUIRKS

Objects appear on the same text baseline, regardless of height, which creates a stalagmite pattern. (This can be controlled with CSS vertical align).

Objects retain whitespace (like inline objects) and descending character safety space below the text baseline.

Some additional resources:

<http://learnlayout.com/inline-block.html>

<http://www.ternstyle.us/blog/float-vs-inline-block>

CODEALONG - HORIZONTAL NAV

<http://codepen.io/ga-joe/pen/pbwqXr?editors=110>

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FLOATS



MOVIE TIME!



**NOTHING MADE YOU HAPPIER
THAN SEEING THIS WHEN
WALKING INTO A CLASSROOM
AS A KID.**


WHAT ARE FLOATS

<http://codepen.io/ga-joe/pen/WxOYmX>

FLOATS - A MORE FORMAL DEFINITION



float

/flɔt/ 

verb

1. rest or move on or near the surface of a liquid without sinking.
"she relaxed, floating gently in the water"
synonyms: stay afloat, stay on the surface, be buoyant, be buoyed up [More](#)
2. move or hover slowly and lightly in a liquid or the air; drift.
"clouds floated across a brilliant blue sky"
synonyms: [hover](#), [levitate](#), be suspended, [hang](#), defy gravity [More](#)

noun

1. a thing that is buoyant in water, in particular.
2. a platform mounted on a truck and carrying a display in a parade.
"a carnival float"

FLOATS – A MORE FORMAL DEFINITION

A left-floated box will shift to the left until its leftmost margin edge touches either the edge of the containing block, or the edge of another floated box.

If the size of the floated box exceeds the available horizontal space, the floated box will be shifted down.

Non-positioned, non-floated, block elements act as if the floated element is not there.

Inline elements flow next to the floated element.

FLOATS – A MORE FORMAL DEFINITION

A floated element should always have an explicit width set. If no width is set, it will collapse to be the width of the content within it (which may vary browser-to-browser / depend on font-size).

Block level elements above a floated element will not be affected by it. However, elements below will wrap around the floated element. To fix this, you need to do what we call “clearing” the float.

FLOAT AND CLEAR



FLOAT - EXAMPLE SCENARIOS

1 - Creating “magazine”-like layout:

<http://codepen.io/ga-joe/pen/EyXGBy?editors=110>

2 - Creating column layouts:

<http://codepen.io/ga-joe/pen/NAgZko?editors=110>

CLEARING

Floated objects do not add to the height of the object that they reside in. Which creates two problems:

- 1 - Objects further down the page don't "know where to go".
- 2 - If there are only floated objects within an object, it will collapse.

The solution is to use a method called clearing.

CLEARING - METHOD 1

CLEAR: BOTH;

If you just want to say to the browser that you've floated a couple block elements, start the next object on it's own line, add this to the next object.

```
clear: both;
```

CLEARING - METHOD 2

THE OVERFLOW METHOD

Only works for collapsed elements, add this to the CSS for the collapsed element.

`overflow: hidden;`

It's a way to tell the browser to pay attention to the height of the content. The most straightforward, but also probably the least intuitive.

CLEARING IN OUR SCENARIOS

- 1 - Creating “magazine”-like layout. Inline text wrapping a floated element. - May or may not need to be cleared.
- 2 - Creating column layouts. Must be cleared if there is content following.

FLEXBOX



We can't achieve every layout we want with just float and inline-block. Or, even if we can, there are so many nuances to both that to create beautiful layouts can require a lot of weird hacks and workarounds.

Grids help solve this. So does Flexbox.

Flexbox = **Flexible Box** Mode

FLEXBOX



The main idea behind Flexbox is that you put the responsibility of layout on the parent element and not the children. You give the children just as much style as they need and then the browser let's the parent “figure the rest out”.

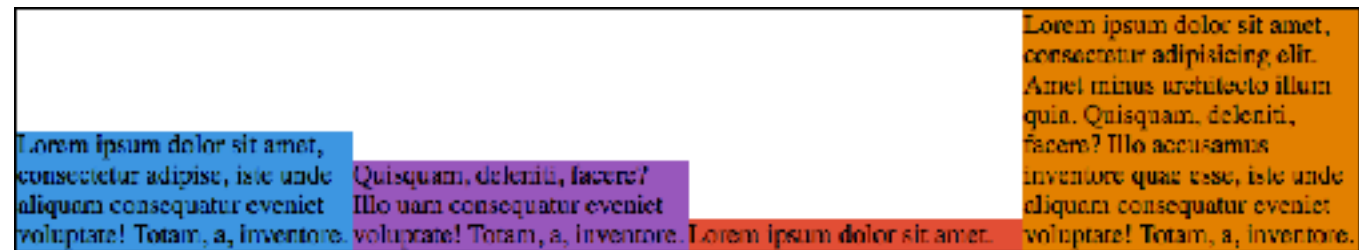
“... give the container the ability to alter its items' width/height (and order) to best fill the available space.”

DIFFERENCE BETWEEN INLINE-BLOCK, FLOAT, AND FLEXBOX

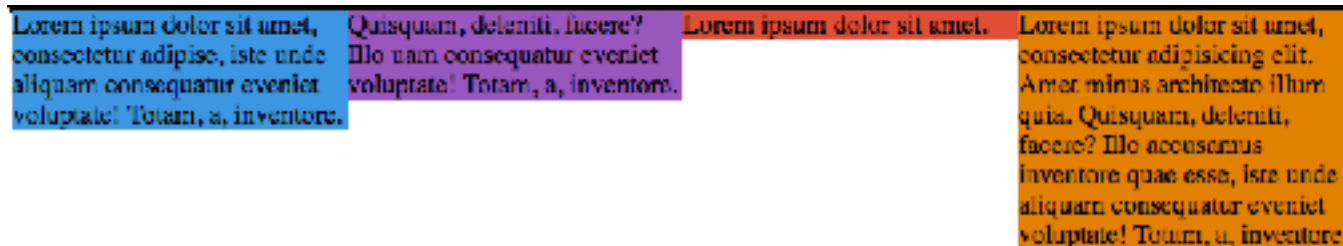
<https://codepen.io/ga-joe/pen/ybQwRY>

INLINE-BLOCK, FLOAT, AND FLEXBOX

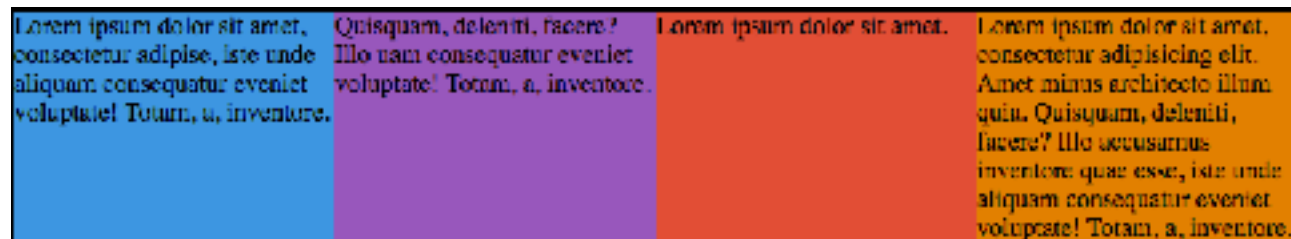
Inline-Block



Float



Flexbox



SITE NAVIGATION – THE DEBATE

`<nav>`, ``, ``, and `<a>`

Or

`<nav>`, `<a>`

<http://css-tricks.com/navigation-in-lists-to-be-or-not-to-be/>

CODEALONG - HORIZONTAL NAVIGATION 3 WAYS

CODEALONG - COLUMN LAYOUT

Fashion Blog Two Column

Let's plan this out a bit first, shall we?

EXERCISE - BUSY HANDS

Idle hands are the Devil's workshop. So get Busy Hands!

How would you mark-up the site?

How you would <div>-up the site?

What have we done already in class that you can repurpose?

IDOL HANDS



FINAL PROJECTS

Start thinking about what you want to work on for your final project.