

FLEXBOX

**FLEXBOX WAS THE FIRST REAL LAYOUT
TOOL WE HAD IN CSS. IT OPENED UP
DOORS, AND IS MORE WIDELY USED
THAN GRID***

*100% ANECDOTAL

**BUT IT IS A LITTEL QUIRKY AND CAN
THROW SOME CURVE BALLS AT YOU**

**BEFORE WE GET TO THE CURVEBALLS,
LET'S EXPLORE WHAT HAPPENS WHEN
WE USE FLEXBOX**

CODEPEN LINK

<https://codepen.io/kevinpowell/pen/zYBLybz>

LAYOUTS WITH FLEXBOX

To make layouts flexible, flexbox changes how the size of flex items are calculated.

There are three properties at play here:

- `flex-basis`
- `flex-shrink`
- `flex-grow`

FLEX BASIS

flex-basis is the "main size" of a flex item. We say "main size" and not width, because the **flex-direction** changes the direction **flex-basis** works in.

But to simplify matters, let's think of it as the **width** of the element.

ENTER FLEX-SHRINK

So while the default of `flex-basis` is `auto`, we also have `flex-shrink`, which defaults to `1`.

By being a number bigger than `0` it means that the element is allowed to shrink smaller than its actual size if there isn't enough room.

ENTER FLEX-SHRINK

This is a good thing, because without `flex-shrink`, elements would overflow out the side and this whole flexbox thing would be useless.

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**AS MUCH AS THIS HELPS US MAKE
COLUMNS, IT DOES PRESENT US WITH
A NEW PROBLEM...**

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<https://codepen.io/kevinpowell/pen/jOrpdOW>

CONSISTENCY

This happens because if we do not set a `flex-basis` on an element, the default behavior is to set the `flex-basis` to the `width` of our elements.

Our elements do not have a `width`, so that default's to `auto`.

**ALL OF THAT MEANS THAT THE WIDTH
OF THE COLUMNS IS BASED ON THE
AMOUNT OF CONTENT THAT IS INSIDE
OF THEM**

**IF THE CONTENT IS THE SAME
THEN THE WIDTHS ARE EQUAL**

**BUT MOST OF THE TIME THE CONTENT
IS NOT PERFECTLY EVEN**

**LUCKILY THERE IS A VERY EASY FIX TO
THIS INCONSISTENCY**

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**MOST OF THE TIME, THIS IS EXACTLY
WHAT WE WANT FROM FLEXBOX**

**BUT OFTEN WE NEED MORE
COMPLICATED SOLUTIONS THAT EITHER
WRAP OR WHICH HAVE COLUMNS OF
DIFFERENT WIDTHS**

**WE'LL GET THERE SOON ENOUGH, BUT
THIS IS ENOUGH TO GET US STARTED**