CSS GRID

SOME REVIEW

What direction does a Flexbox natively go - horizontal or vertical?

Bonus: What CSS property adjusts that?

MORE REVIEW

How do you reorder Flexbox children?

Bonus: What CSS property adjusts that?

ENOUGH ALREADY

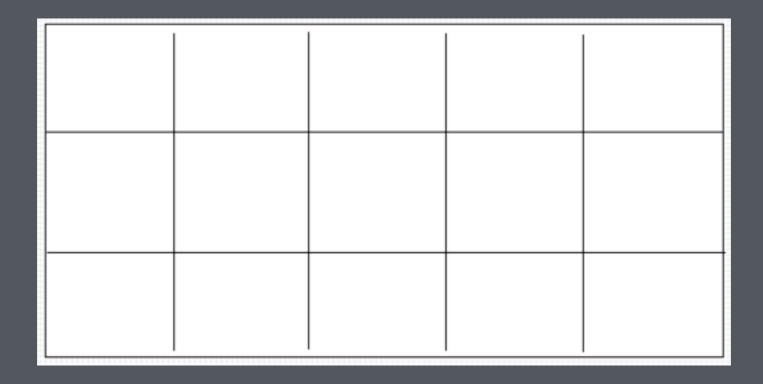
Can you nest a flexbox inside of a flexbox?

How?

CHECK OUT ASSIGNMENT 1

WHAT IS A GRID?

Think of spreadsheets - columns and rows - that you can lay content into.



WHY DO I WANT THIS?

Flexbox only works in ONE dimension at a time (either a row or a column).

Floats don't work in any dimension;)

Grid works in TWO dimensions all the time (row and column).

FLEXBOX CAN BE A ROW

1 2 3 4 5

OR A COLUMN

1

2

(

4

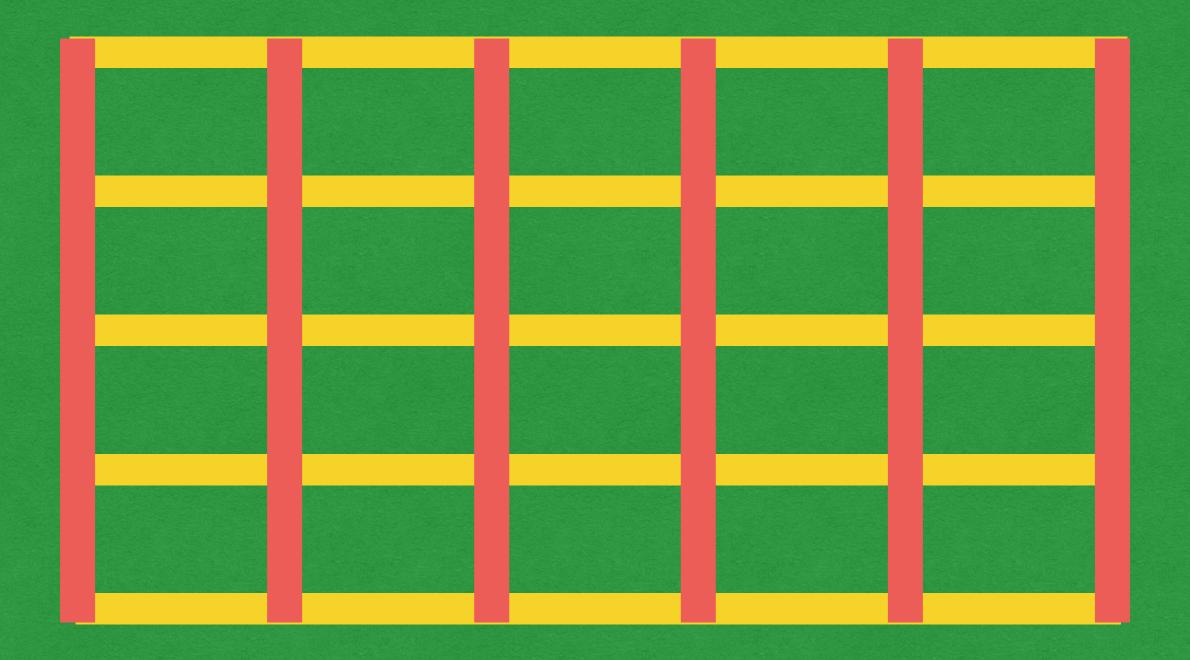
BUT NOT BOTH

How does GRID work?

COUSIN OF FLEXBOX

Built with modern web in mind Natively responsive Parent —> Child Relationship

GRID TRACKS



(thats what the rows and columns are called)

1 - USE DISPLAY

```
.container {
   display: grid;
}
```

2 - THINK !



WHAT KIND OF LAYOUT DO YOU WANT?





EXAMPLE

```
/* 2 column, 1 row grid */
.container {
 display: grid;
  grid-template-column: 100px 100px;
 grid-template-row: 100px;
.item {
 background-color: orange;
```

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18
19	20	

CHECK OUT ASSIGNMENT 2 GRID-01

IMPLICIT TRACKS

You can leave off grid-template-row and CSS grid will automatically make the rows, conceptually called the implicit grid.

SO THIS ALSO WORKS

```
/* 2 column, 1 row grid */
.container {
  display: grid;
  grid-template-column: 100px 100px;
}
.item {
  background-color: orange;
}
```

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18
19	20	

GRID-GAP

grid-gap is the margin/padding of CSS grid.

If you want space between your grid items,
you apply grid-gap to the container. So
easy!



One Value

```
.container {
   display: grid;
   grid-template-column: 100px 100px;
   grid-gap: 20px;
}
.item {
   background-color: orange;
}
```

GRID-GAP

One Value

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20

GRID-GAP

grid-gap can take two values, which set column and row padding respectively



Two Value

```
.container {
   display: grid;
   grid-template-column: 100px 100px;
   grid-gap: 20px 80px;
}
.item {
   background-color: orange;
}
```

GRID-GAP

Two Value (note column/row padding difference)

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20

CHECK OUT ASSIGNMENT 2 GRID-3

FR UNIT

The 'fractional unit' - fr - is a new unit to be used with CSS grid (similar to percentages).

It stands for fractions of a grid container, and it intelligently takes grid-gap into account.

FR UNIT

```
/* 4 column grid, with fr */
.container {
 display: grid;
  grid-template-columns: 1fr 1fr 1fr;
 grid-gap: 20px;
.item {
 background-color: orange;
```

MIX FR & PIXEL / % ?

Yeah - we feel free to mix fixed width and variable width units like pixels, fr and percentages.

They can be used together - fr is like saying 'use the remainder of the space left AFTER you take out the fixed width elements'.

FR UNIT

Can't really tell what's going on unless you open a browser up

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20

CHECK OUT ASSIGNMENT 2 GRID-5

NEXT TIME

Layout Lab!