

CSS Grid Layout



Brian Treece

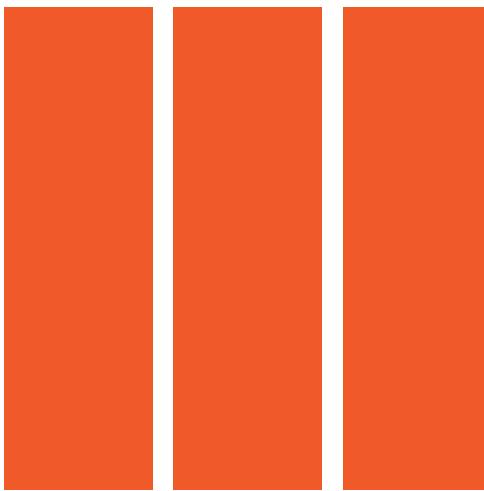
CHIEF OF USER EXPERIENCE AT SOCREATE.IT

@brianmtreece

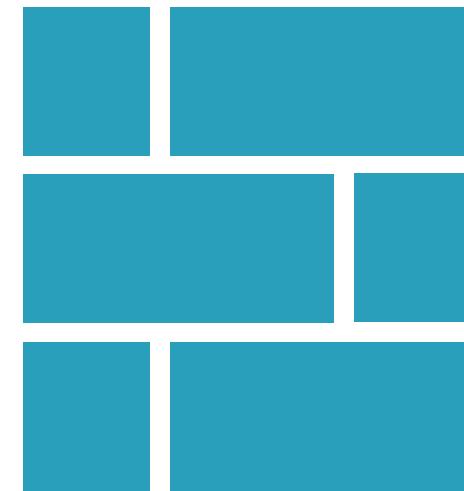


Prepare to
have your
mind blown!

Flexbox vs. Grid



Flexbox



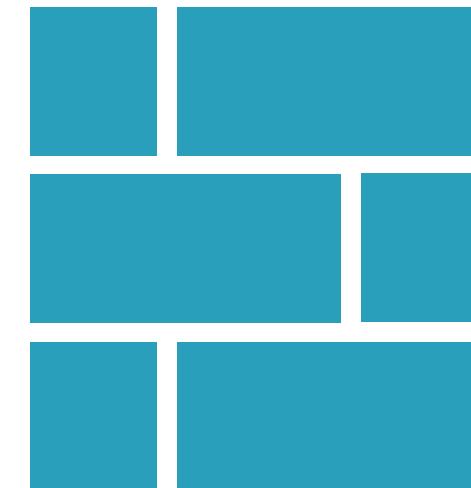
CSS Grid Layout

Flexbox vs. Grid



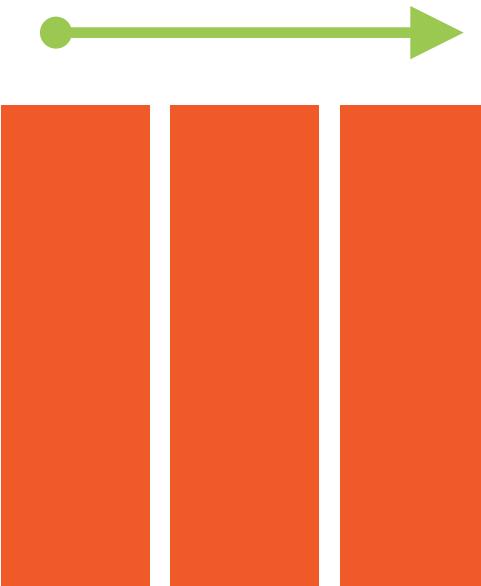
Flexbox

ONE DIMENSION

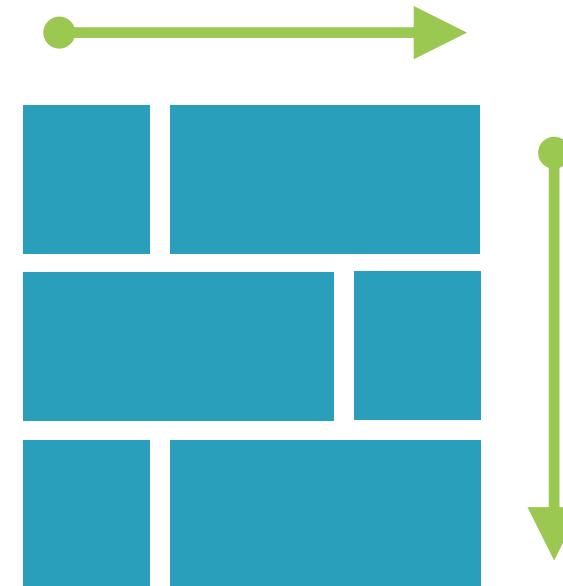


CSS Grid Layout

Flexbox vs. Grid



Flexbox
ONE DIMENSION

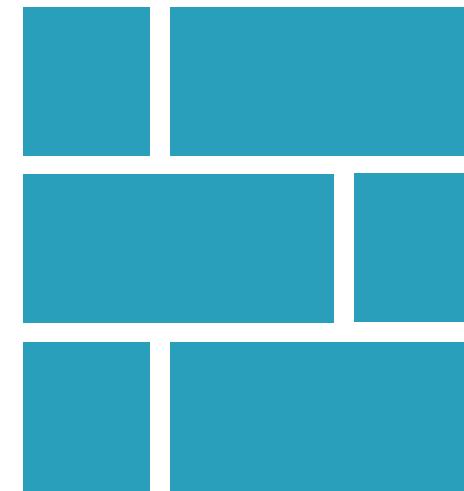


CSS Grid Layout
TWO DIMENSIONS

Flexbox vs. Grid

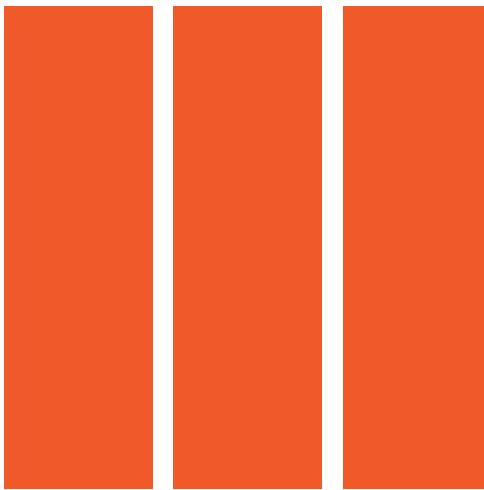


Flexbox



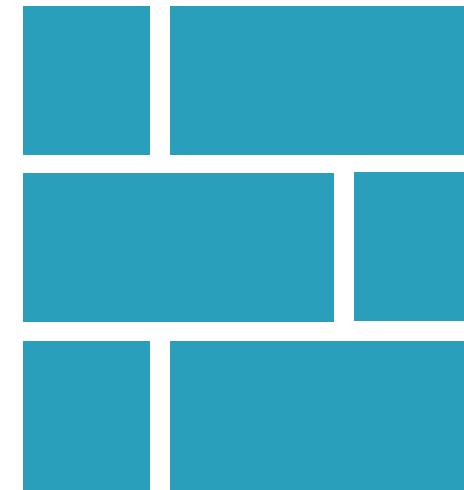
CSS Grid Layout

Flexbox vs. Grid



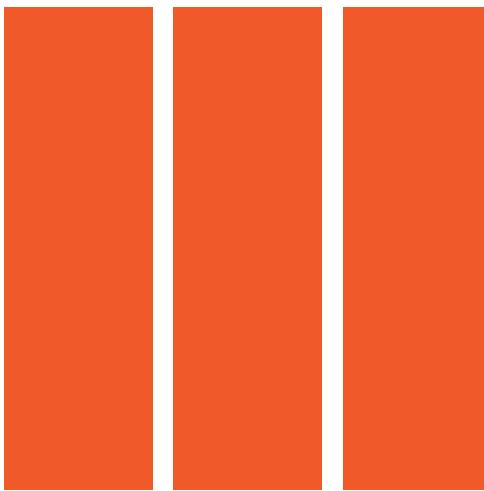
Flexbox

LETS CONTENT SIZE ITSELF



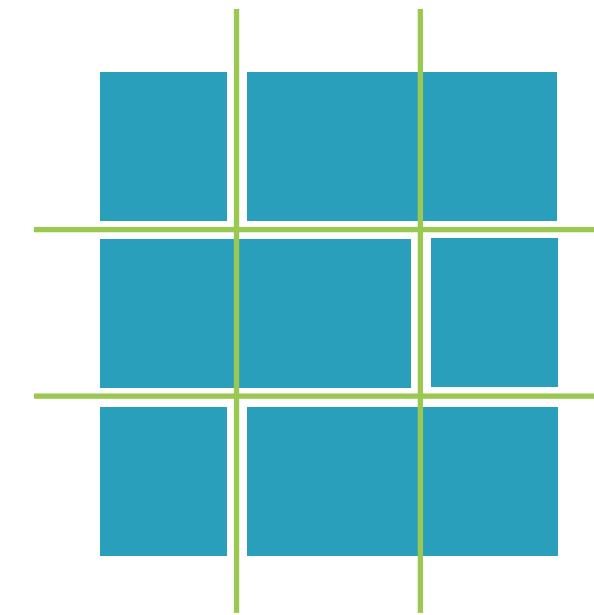
CSS Grid Layout

Flexbox vs. Grid



Flexbox

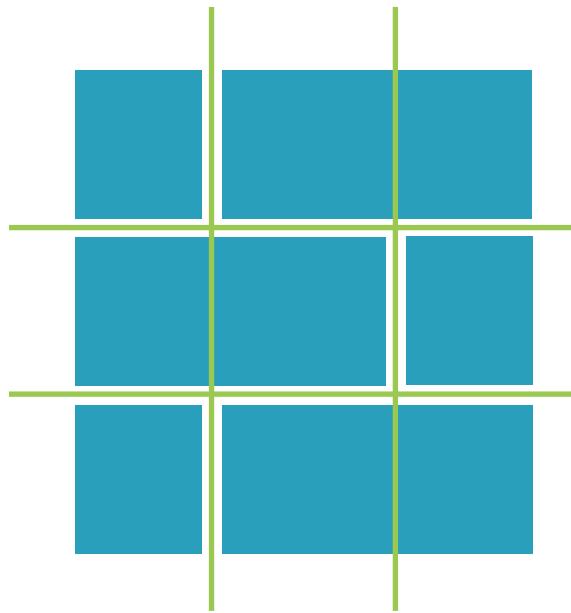
LETS CONTENT SIZE ITSELF



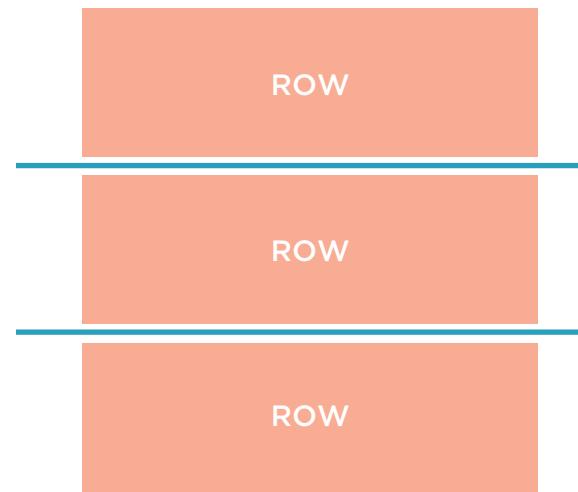
CSS Grid Layout

RELIES ON DEFINED GRIDLINES

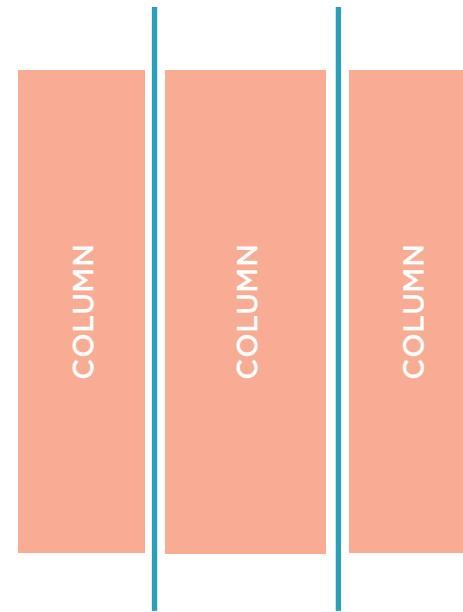
How Grid Layout Works



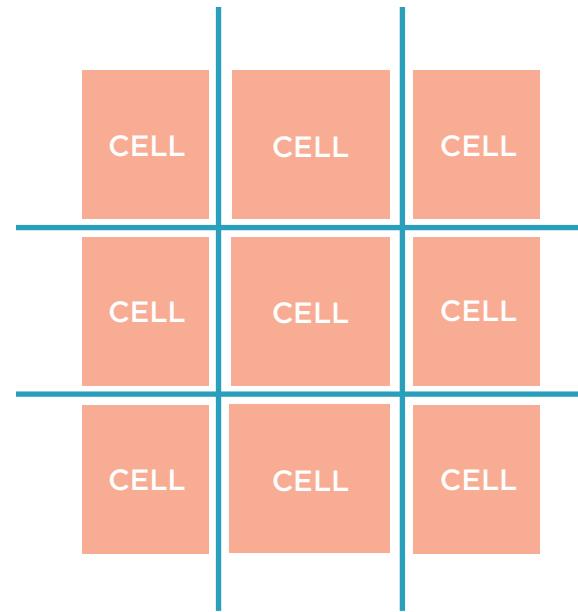
How Grid Layout Works



How Grid Layout Works

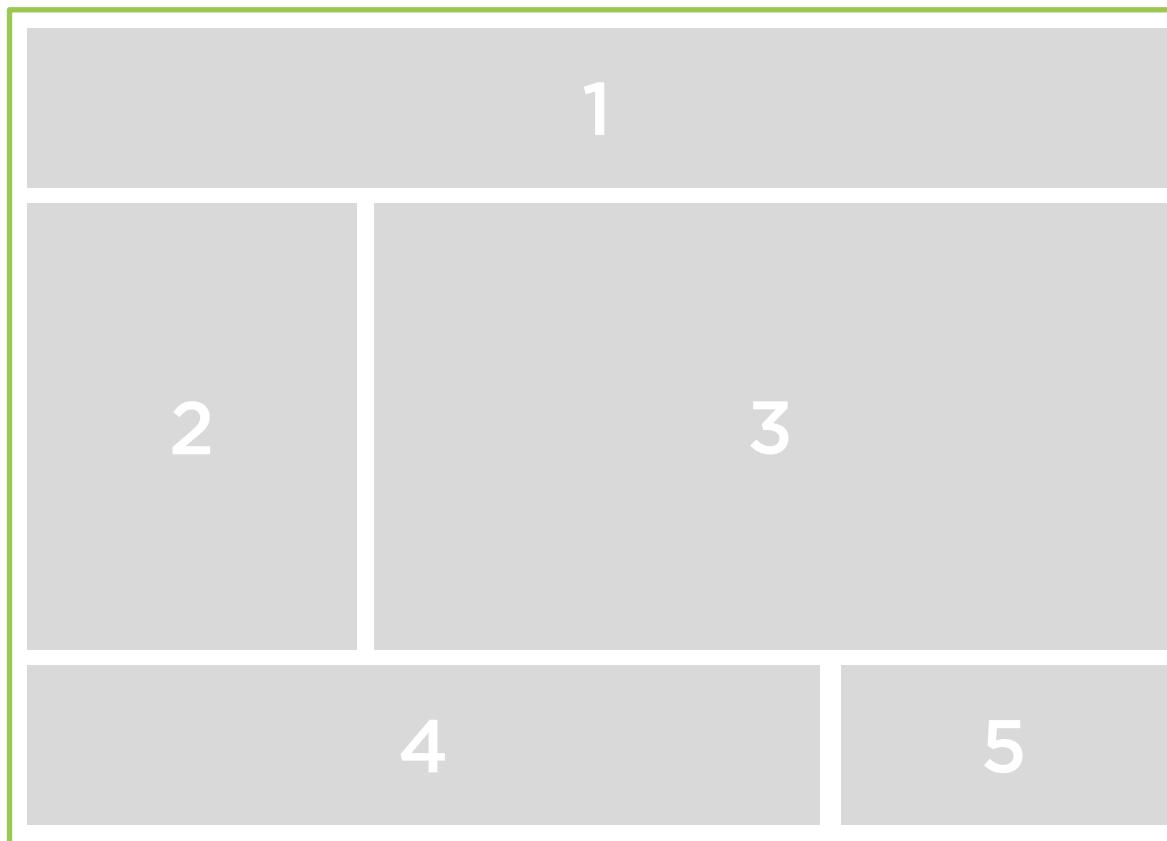


How Grid Layout Works

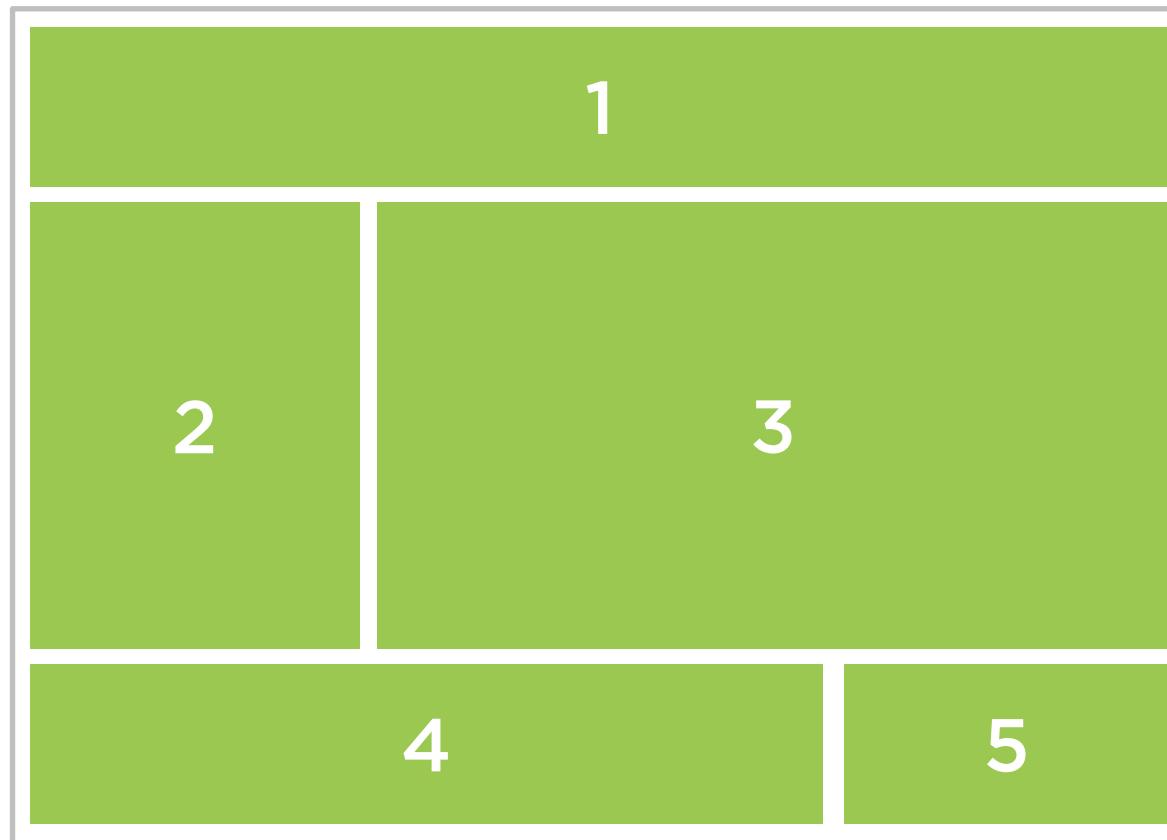


Grid Layout the Basics

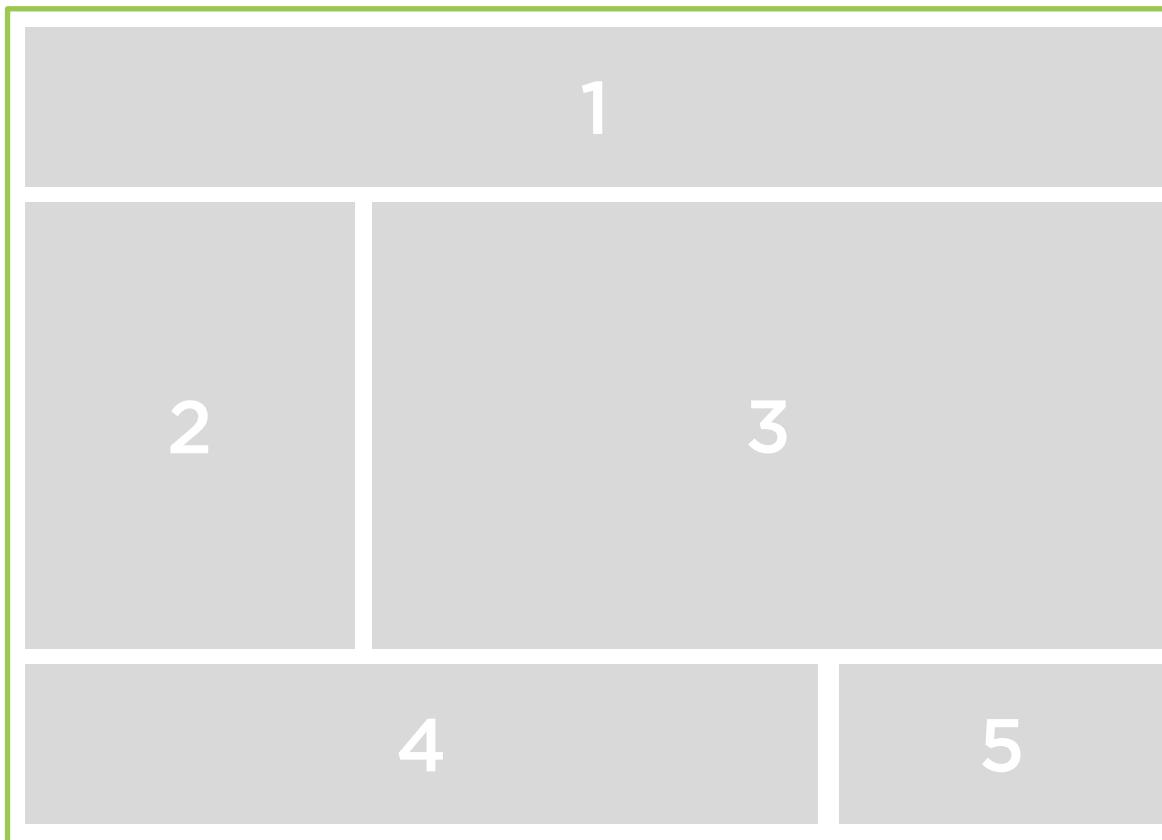
Grid Container



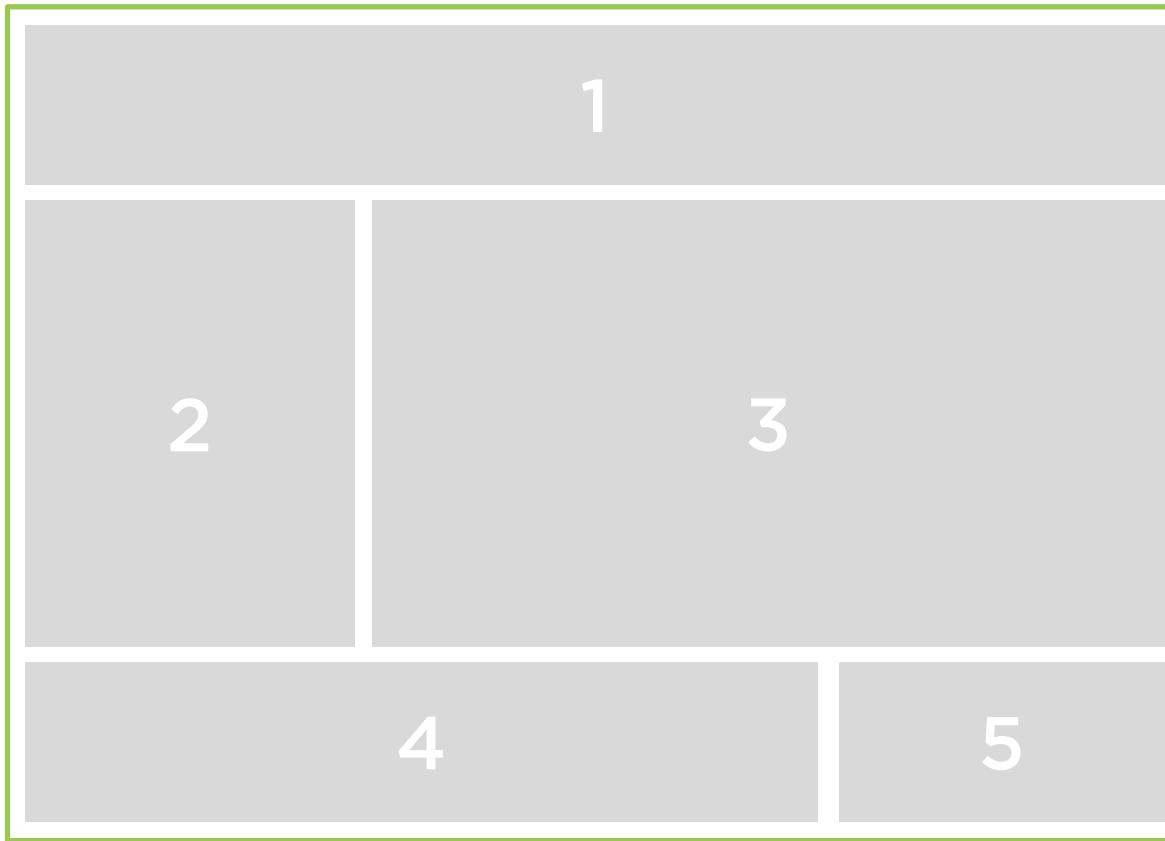
Grid Items



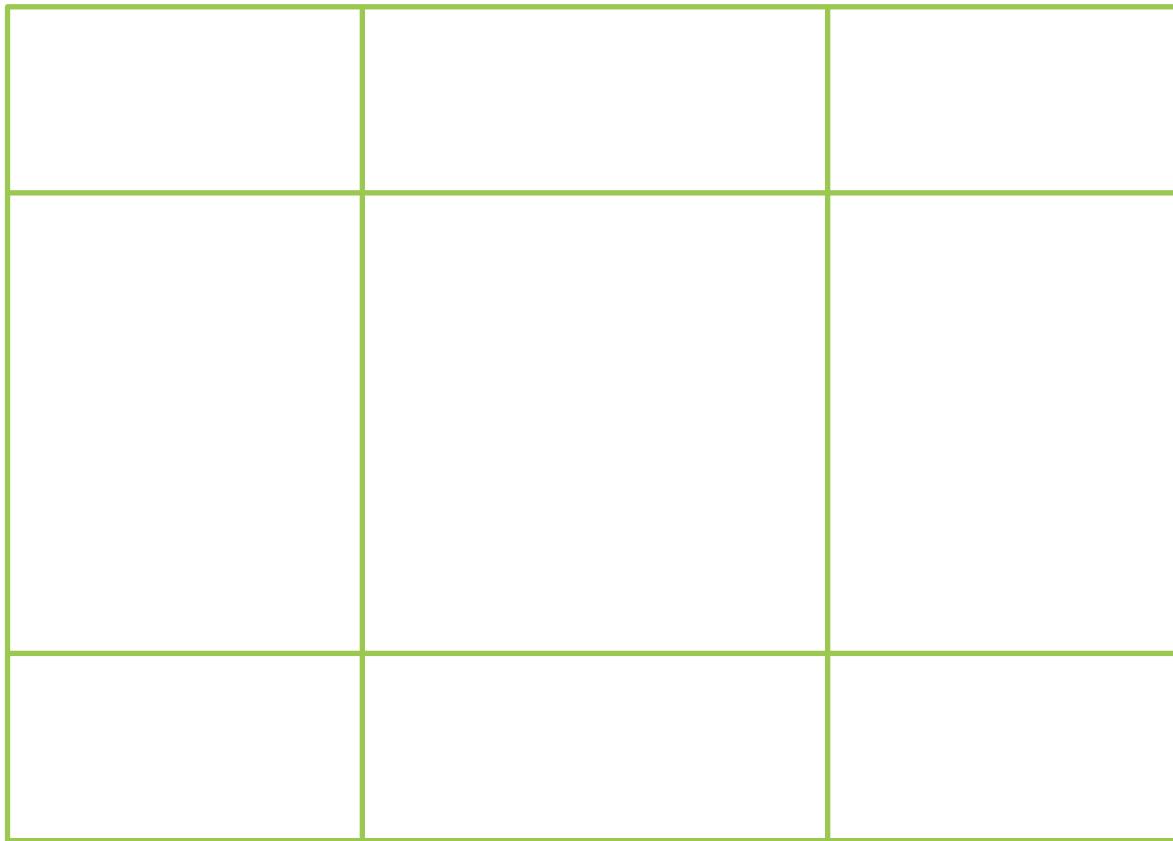
Grid Container Creates “Grid Context”



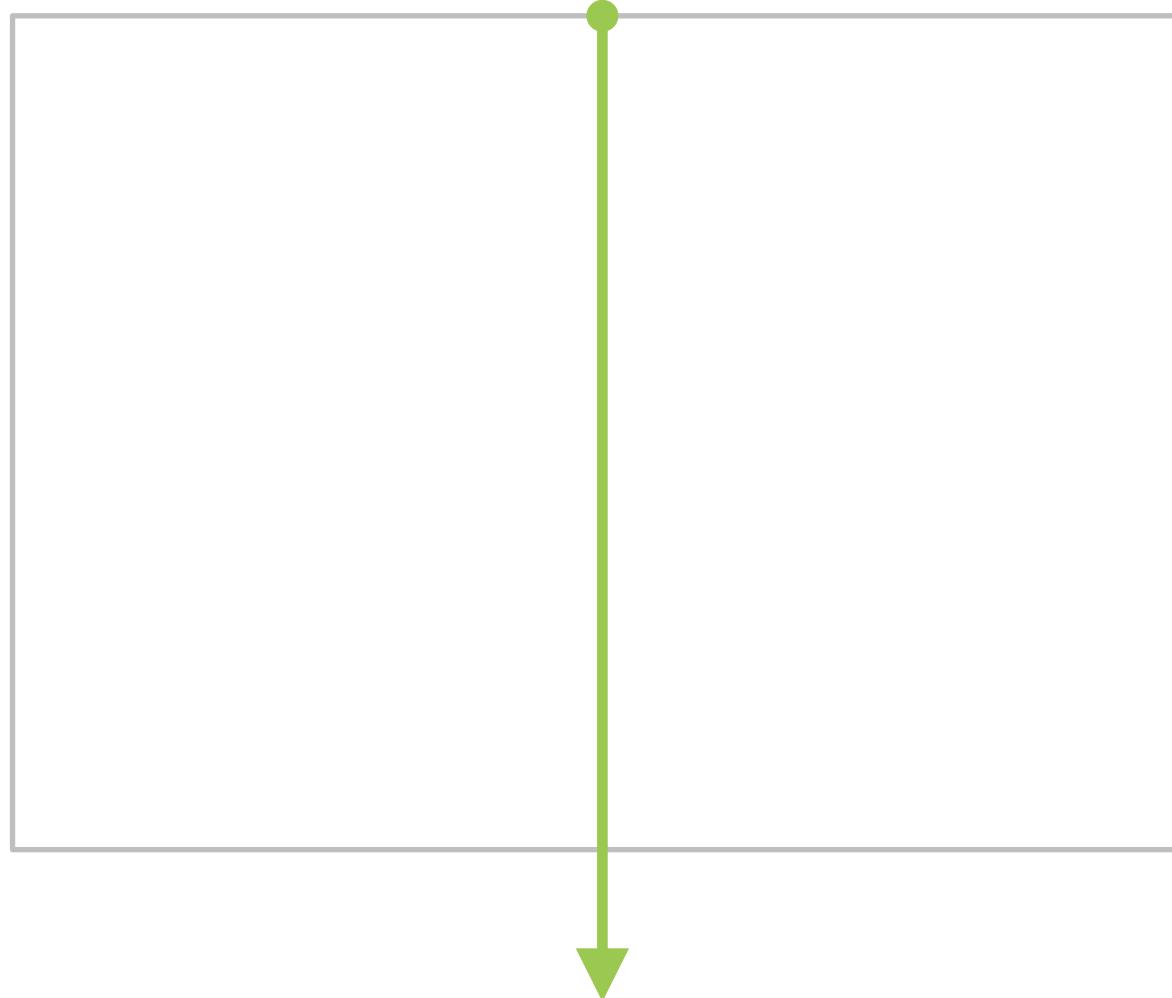
Grid Container aka “Grid”



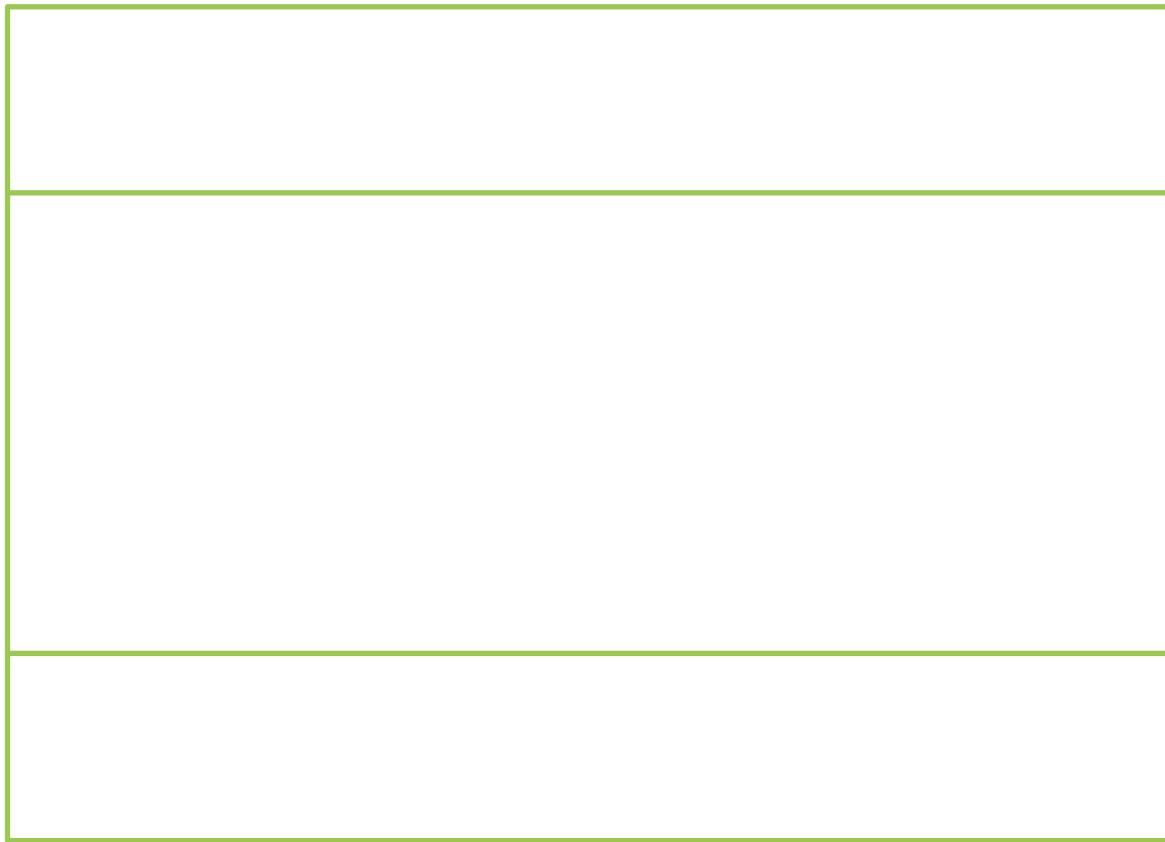
Grid Lines



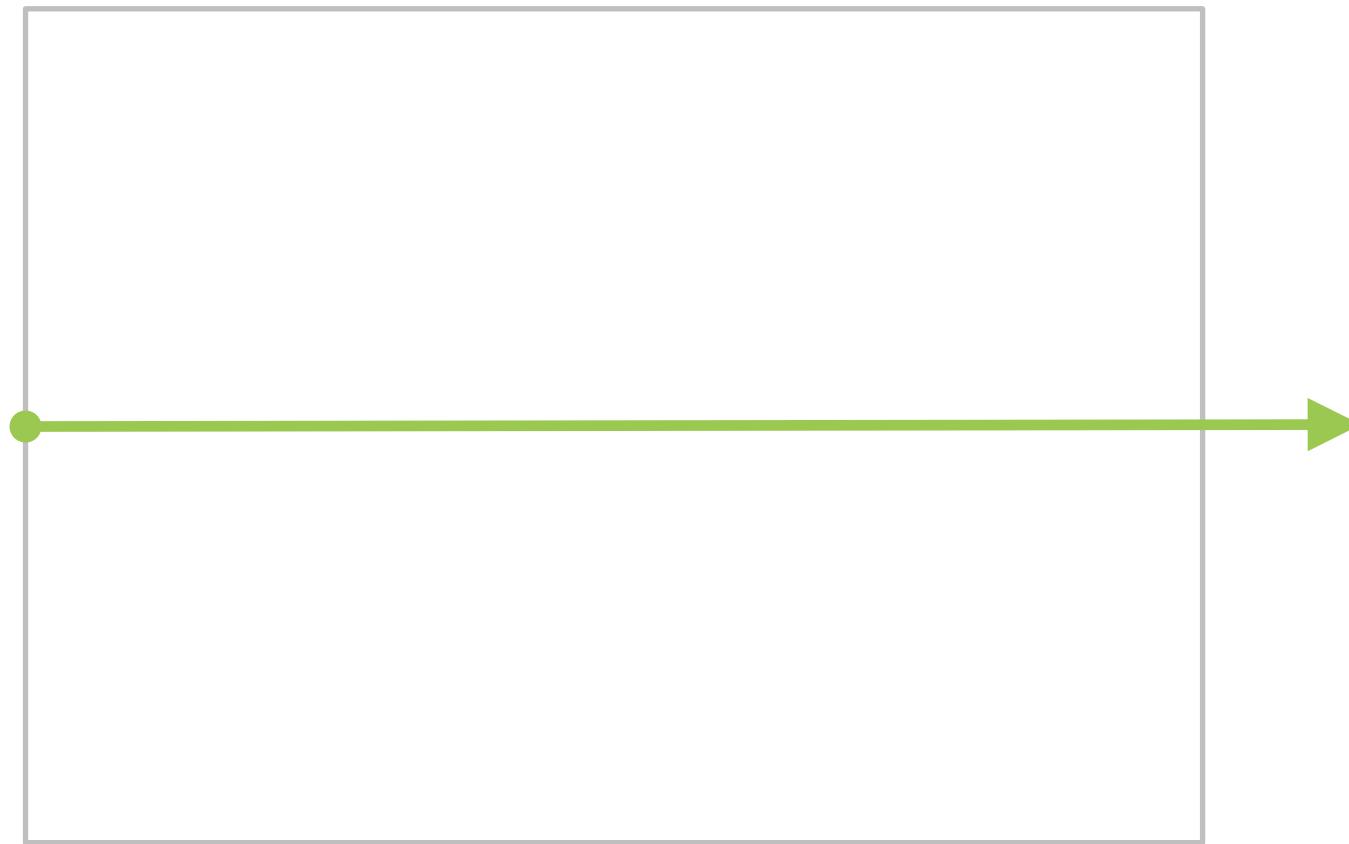
Column Axis



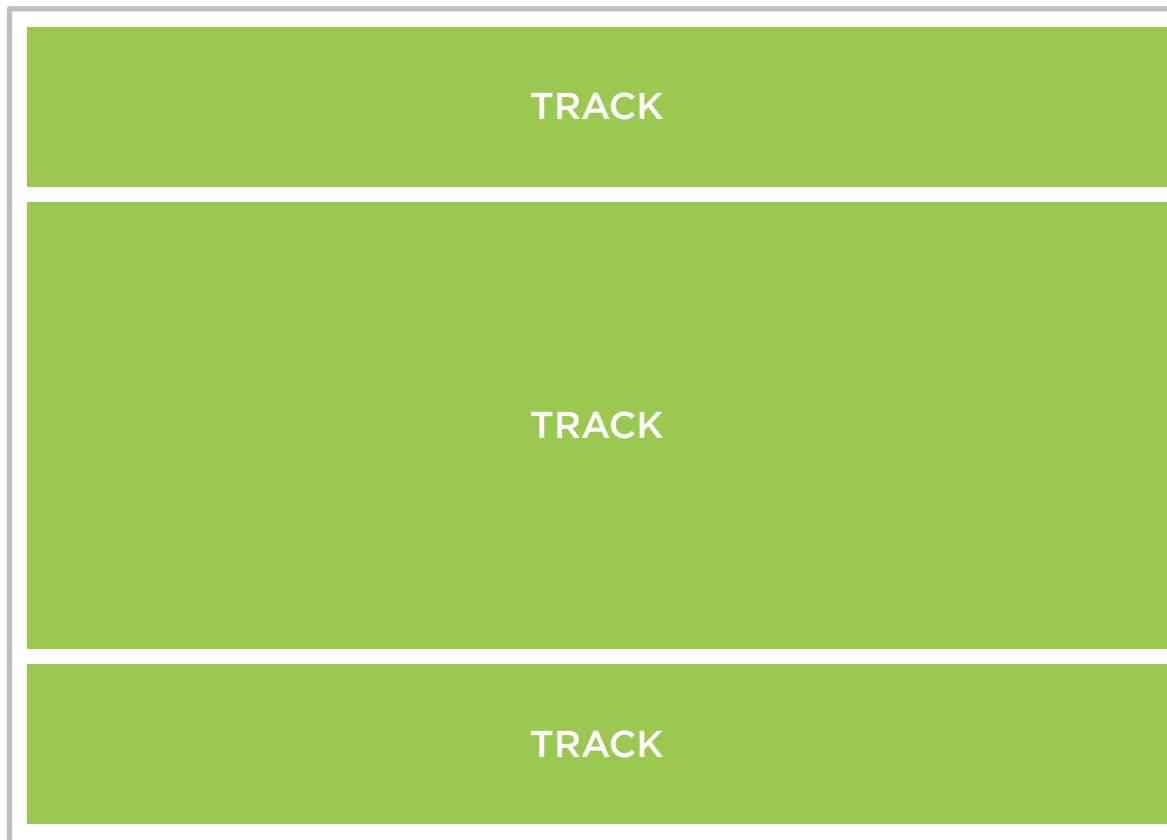
Grid Rows



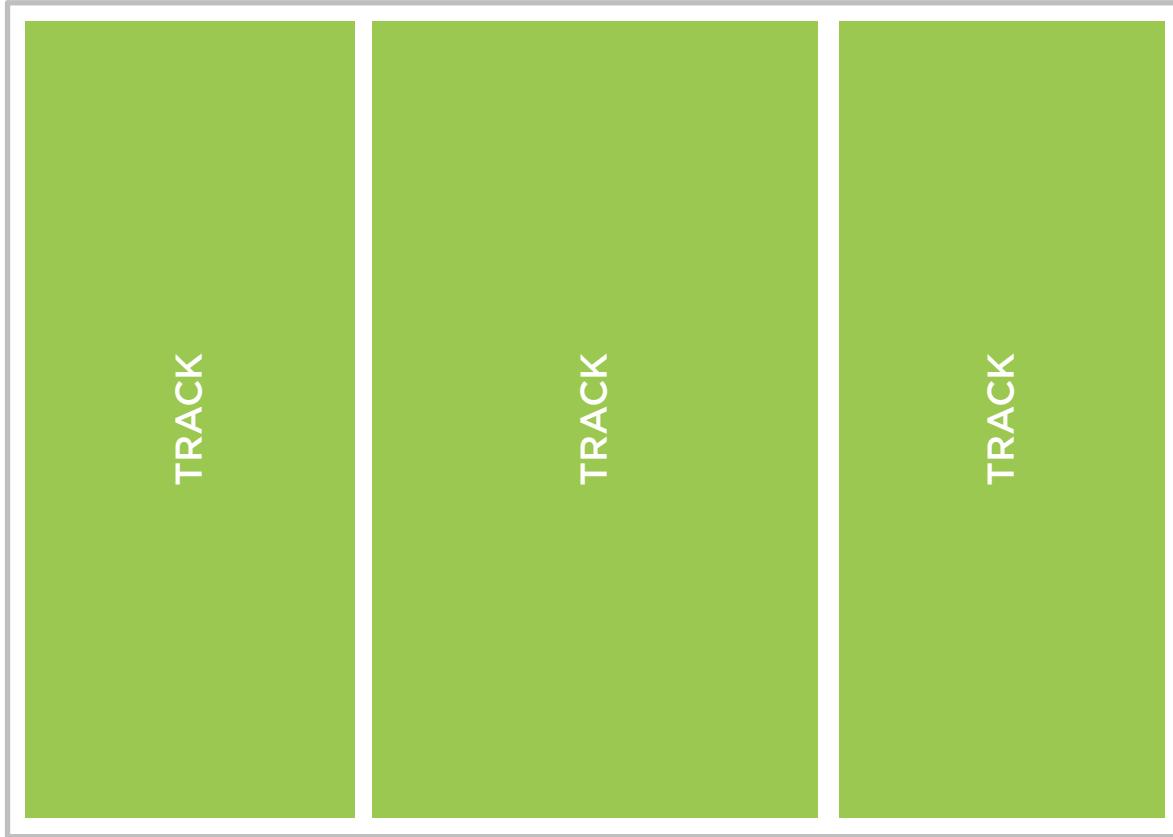
Row Axis



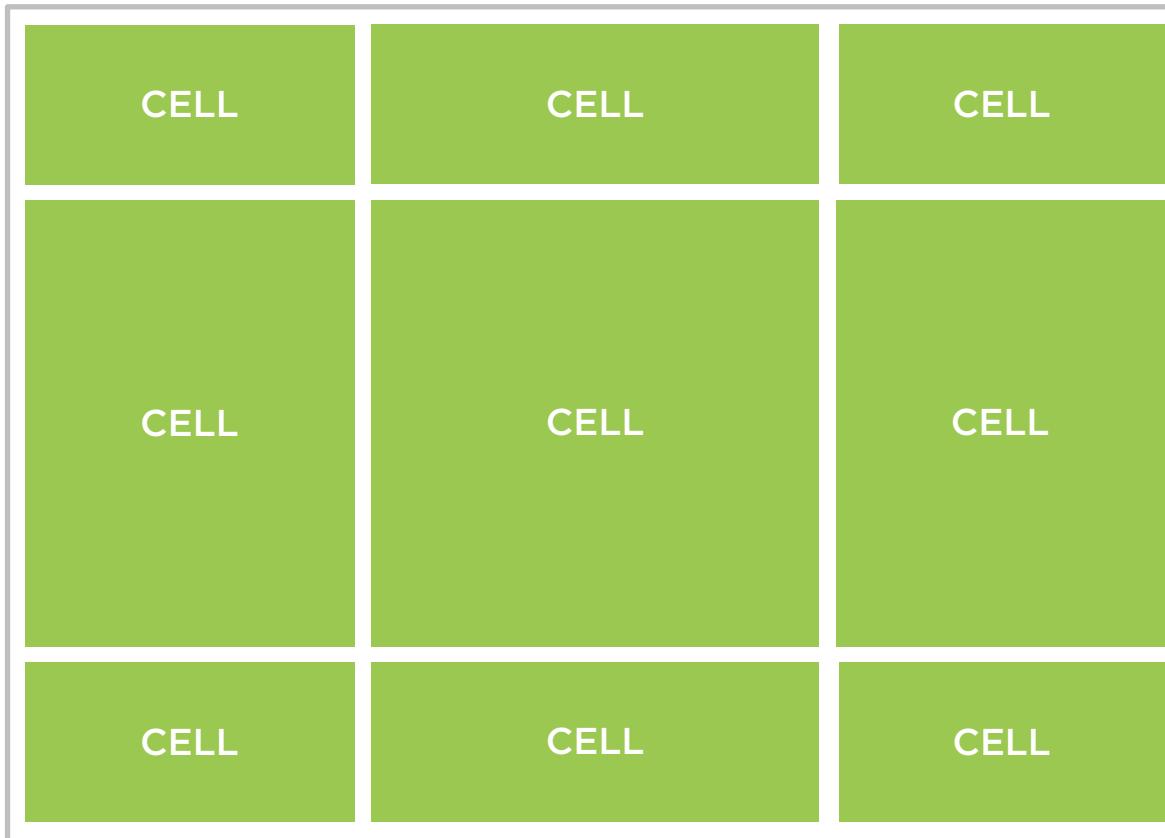
Grid Tracks



Grid Tracks



Grid Cells



Grid Areas



Setting Up a Grid

Grid Columns

grid-template-columns

Grid Rows

grid-template-rows

Defining Columns & Rows

`grid-template-columns: width;`

`grid-template-rows: height;`

Defining Columns & Rows

`grid-template-columns: width width;`

`grid-template-rows: height height;`

Defining Columns & Rows

`grid-template-columns: width width width width;`

`grid-template-rows: height height height height;`

Placing Grid Items

grid-column-start

grid-column-end

grid-row-start

grid-row-end

Placing Grid Items

Placing Grid Items

grid-row-start

grid-row-end

Spacing Between Items

Spacing Between Items

gap

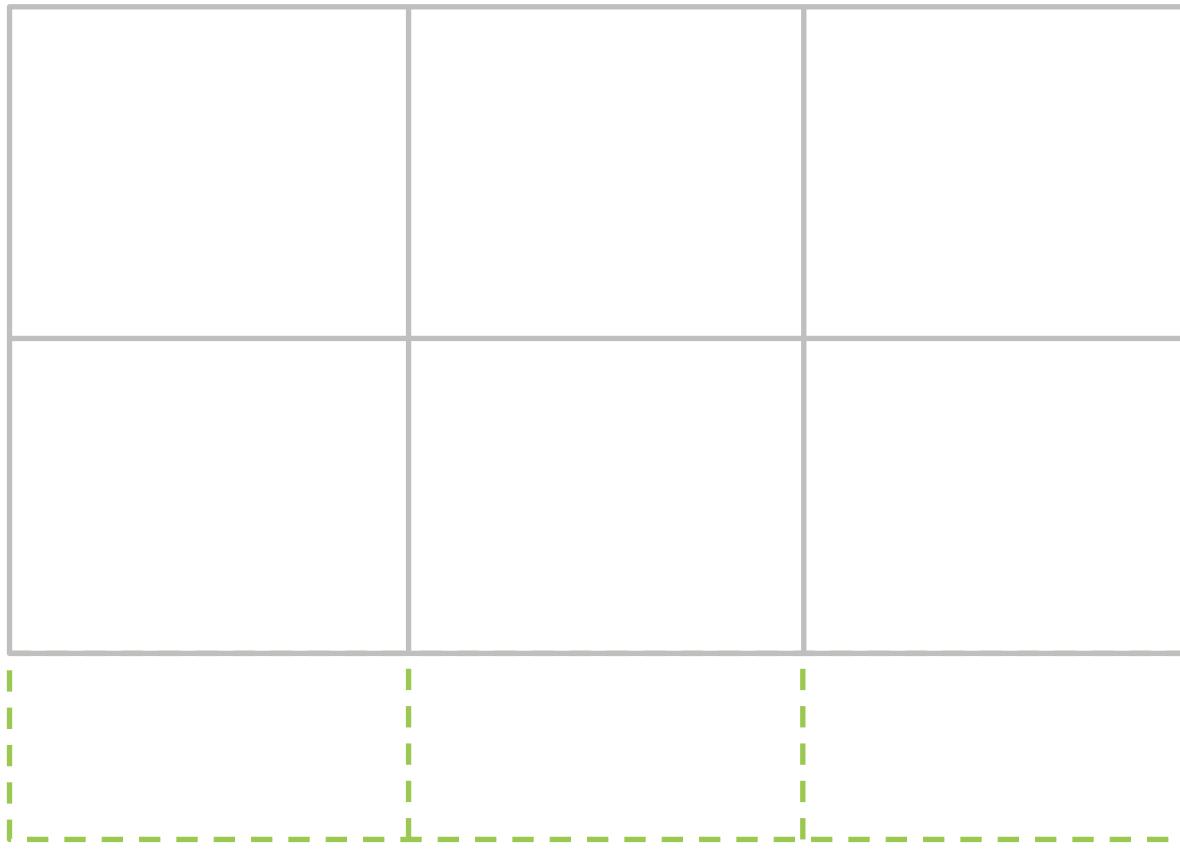
Spacing Between Items

column-gap

row-gap

Auto Grid Features

Implicit Grid Lines



Grid Shorthand



grid: row row / column column;



grid-row: row-start / row-end;

grid-column: column-start / column-end;



grid-area: row-start / column-start / row-end / column-end;

Span

Ugh, all
those grid
lines!



Custom Named Grid Lines

A photograph of a modern architectural building with a glass facade featuring a diamond pattern. The building is set against a bright blue sky with scattered white clouds. A large, semi-transparent green rectangular box is overlaid on the upper left portion of the image, containing the text.

Don't want to have to
count all those lines?

The background of the image shows a modern architectural structure with a glass facade featuring a diamond pattern. The building is set against a bright blue sky with scattered white, fluffy clouds.

Give them a name!

```
grid-template-columns: [name1] [name2] [name3];  
grid-template-rows: [name1] [name2] [name3];
```

Custom Named Grid Areas

We Can Also Name Grid Areas



Auto, fr, & Overlapping/Layering Items

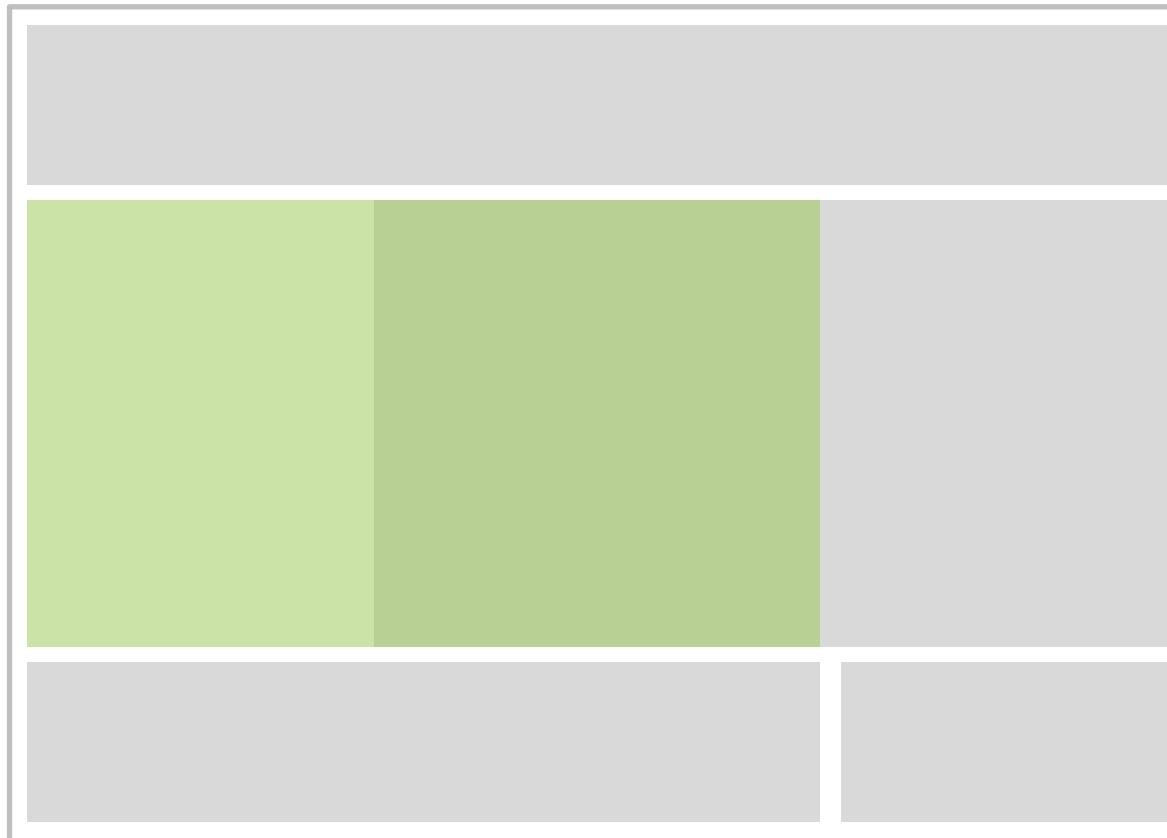
Auto



The “fr” Unit

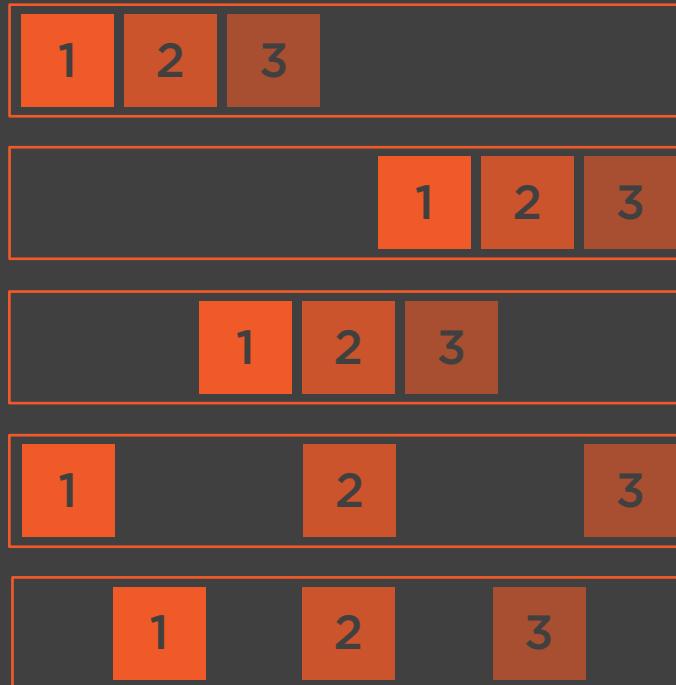


Overlap & Layer

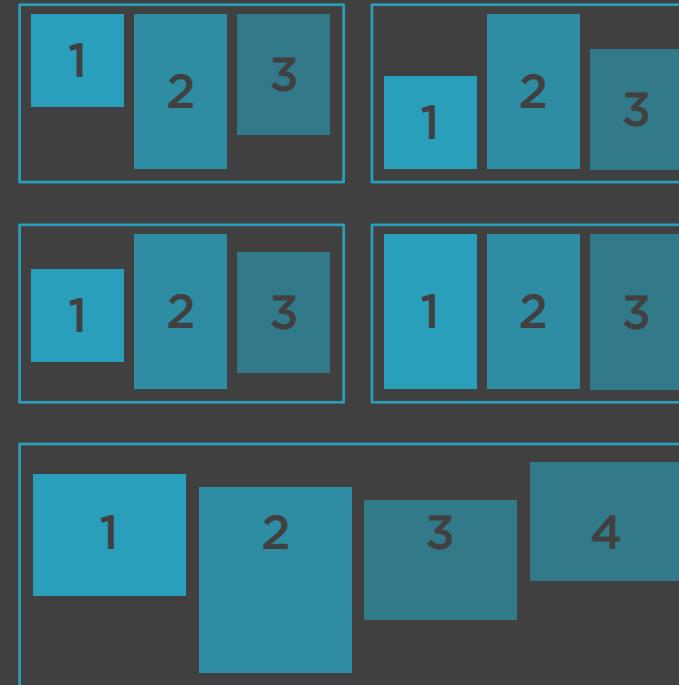


Grid Layout & Box Alignment

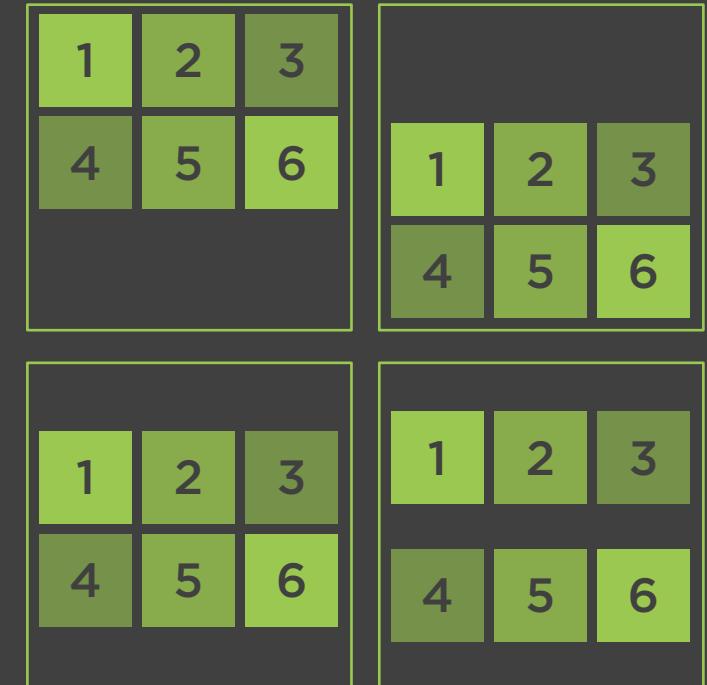
CSS Box Alignment



justify-content



align-items



align-content

CSS Box Alignment Properties

CSS Box Alignment Properties

justify-content

justify-items

align-content

align-items

On the Individual Grid Items

On the Individual Grid Items

justify-self

align-self

Grid in the Real World

Making Layout Easy

And Making it Flexible

Header

Navigation

Main Content

Sidebar

Footer

Header

Image

Image

Image

Image

Image

Image

Image

Image



Just the Tip of the Iceberg

Summary

Grid



Flexible layouts

Two dimensional

Distribute extra space

Align content

Parent > Child relationship

Display: grid/inline-grid

Create rows & columns then place items in them

Use shorthand whenever possible

Auto grid features

Custom names for grid lines & grid areas

Box alignment

Real world examples