CSS Grid Layout

New Core Technology from the W3C

March 2017

- New CSS properties for Grid Layout
 - 18 new properties
 - Three new functions
- Full support
 - Chrome
 - Firefox
 - Safari
 - iOS Safari
 - Android Browser
 - Chrome for Android
 - Edge (soon)
 - IE (unknown)

CSS properties

grid-template-columns

grid-template-areas

grid-template-rows

grid-template

grid-auto-columns

grid-auto-rows

grid-auto-flow

grid

grid-row-start

grid-column-start

CSS function

repeat()

minmax()

grid-row-end

grid-column-end

grid-row

grid-column

grid-area

grid-row-gap

grid-column-gap

grid-gap

fit-content()

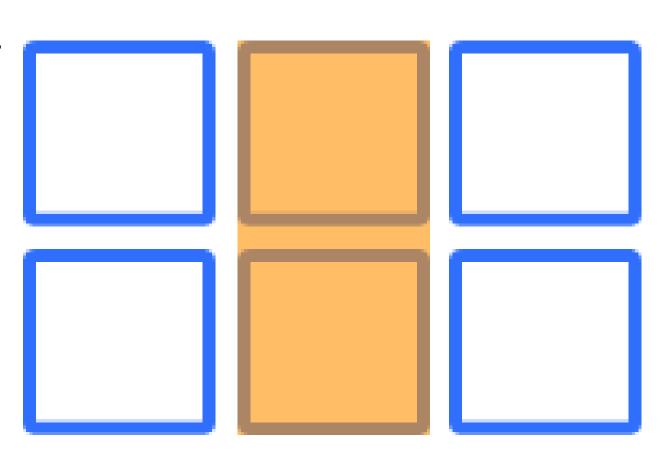
New Terminology and Concepts

Grid Track

The space between two grid lines. This space can be horizontal or vertical

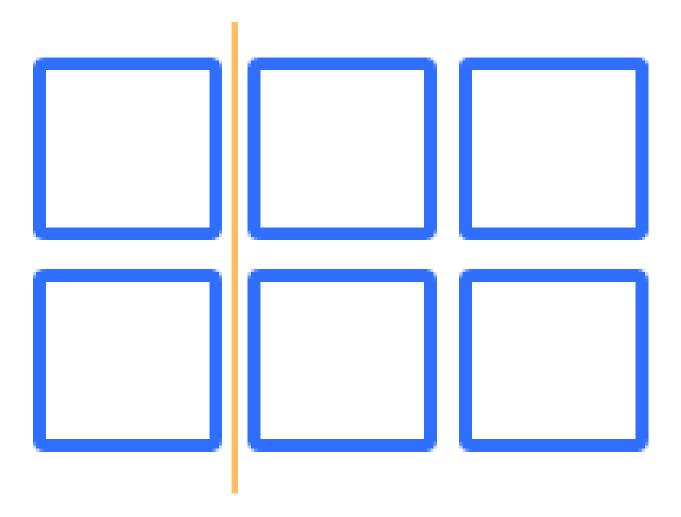
Grid column: a vertical track

Grid row: a horizontal track



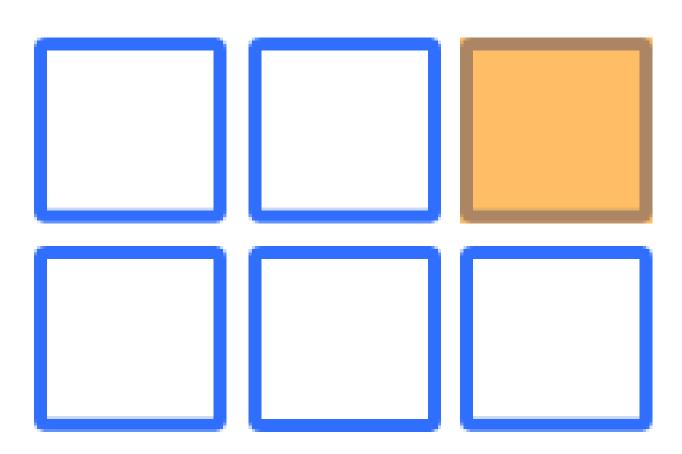
Grid Lines

The vertical and horizontal lines that divide the grid and separate the columns and rows



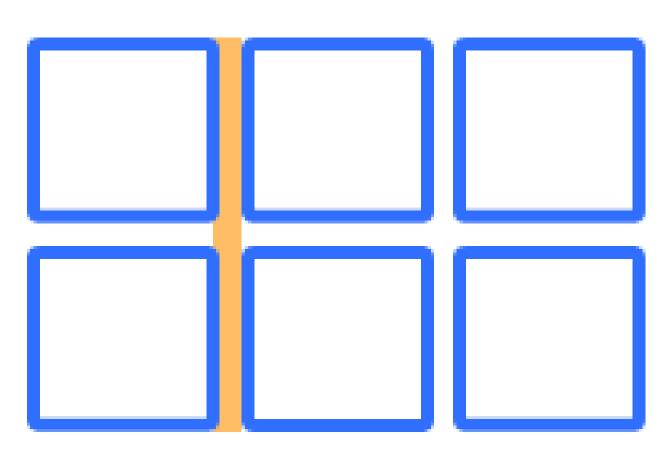
Grid Cell

A single unit of a CSS grid



Grid Gutter

The optional space between rows and columns in a grid



The explicit and implicit grid

Explicit Grid

- When you use: grid-template-columns and grid-template-rows
- Everything you setup within the column and row tracks are explicit

item1 2 item2 5

Implicit Grid

When you use:
 grid-auto-columns and
 grid-auto-rows
 everything is "implicit"



CSS Tricks, The Difference Between Explicit and Implicit Grids, by Manuel Matuzovic, August 10, 2017

Using the Grid Lines for Positioning

item 1

- Use
 grid-column-start and
 grid-column-end, or
 grid-row-start and
 grid-row-end
 ...to have cells span tracks
- Or use their shortcut counterparts:
 grid-column and grid-row
 e.g.
 grid-column: 1 / 4;

grid-row: 1 / 3;

```
item 2
                    item 3
                                            item 4
                                            item 6
                    item 5
```