

CSS Grid

Introduction

Key capabilities

Allows pieces of a design to be laid out independently of their document source order

Allows you to overlap components of layout

Grids can be nested

Grid vs Flexbox

Grid

For *two-dimensional* layouts

Works from the container in. You define tracks, and they constrain the content. It is all about the container. It provides powerful tools to control layout via the containing element

Flexbox

For *one-dimensional* layout (as either row or column)

Works from the content out - this allows the content to influence how big the container should be

Grid terminology

Grids are made up of:

Grid container: establishes a grid formatting context

Grid item: a thing that participates in grid layout within a grid formatting context (usually a child of a grid container)

Grid track is a continuous run between two adjacent grid lines (analogous to table columns and rows)

Can be '*inflexible*' (size being determined by a length measure) or '*flexible*' (based on the amount of space not consumed by inflexible tracks)

The 'fr' unit allows you to divide the space by some fraction

Grid line: the most fundamental unit

Grid cell: any space bounded by four grid lines, with no grid lines running through it (analogous to a table cell)

Grid area: a rectangular area made up of grid cells

Grid gaps

Grids: Explicit vs Implicit

Explicit: the grid you explicitly define

<https://www.w3.org/TR/css-grid-1/#implicit-grids>

Implicit: the grid tracks and lines created by the container when you position an item outside of the explicitly defined grid

Grid flow: can be either column or row based