

Intro to CSS Grid

November 8, 2023

Introduction to Grid Concepts

01

Grid container is the direct parent element of the grid items.

02

Grid line refers to the lines between the columns and rows.

03

Grid track is the space between two adjacent grid lines, representing either a column or row.

Defining Rows and Columns

CSS Property: Grid-template-rows

Defines the rows of the grid.

Allows for the specification of row sizes in the grid layout.

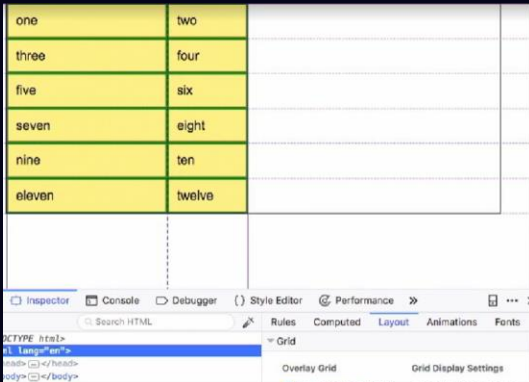
Enables the creation of flexible and responsive grid structures.

CSS Property: Grid-template-columns

Specifies the columns of the grid.

Allows for the specification of column sizes in the grid layout.

Enables the creation of complex grid structures with different column widths.



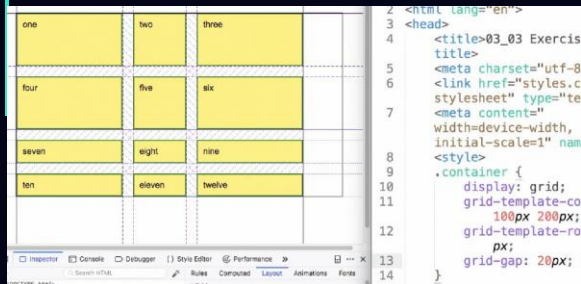
| | |
|--------|--------|
| one | two |
| three | four |
| five | six |
| seven | eight |
| nine | ten |
| eleven | twelve |

Understanding Grid Gap

Grid gap is a shorthand for grid-row-gap and grid-column-gap, setting the size of the space between rows and columns respectively.

Grid-row-gap sets the size of the grid lines (the space between rows), while grid-column-gap sets the size of the grid lines (the space between columns).

Understanding grid gap is important for controlling the spacing and layout of grid items within the grid container.



Sizing Rows and Columns

Grid-template-rows

angiver antallet (og højderne) af rækkerne i en gitterlayout.

Grid-template-columns

angiver antallet (og bredderne) af kolonnerne i en gitterlayout.

Placing Grid Items

Grid-auto-flow

Sætter gitterelementets flow gennem gitteret

Grid-column

Angiver størrelsen af gitterkolonnerne

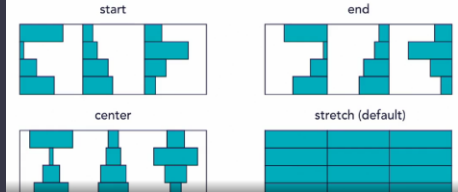
Grid-row

Angiver størrelsen af gitterrækkerne.

Grid Alignment Overview

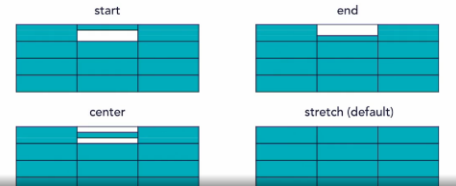
Justify-items

- Placere gitterelementet horisontalt inden for kolonnen



Align-self

- Justerer enkelte gitterelementer lodret



Aligning tracks

- justerer gitteret inden for gitterbeholderen horisontalt.
- Align-content justerer gitteret inden for gitterbeholderen lodret."

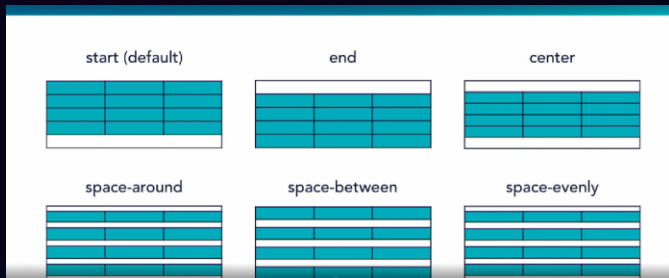
Aligning Tracks

Align-content

This property aligns the grid within the grid container vertically.

It is used to align the grid tracks when there is extra space in the grid container.

The possible values for align-content are start, end, center, stretch, space-between, space-around.



Justify-content

This property aligns the grid within the grid container horizontally.

It is used to align the grid tracks when there is extra space in the grid container.

The possible values for justify-content are start, end, center, stretch, space-between, space-around.

Aligning Grid Items Within Tracks

Justify-items

Aligns grid items horizontally

Distributes grid items along the inline axis

Works with single and multiple grid items

Align-items

Aligns grid items vertically

Applies to single and multiple grid items

Works with flex and grid containers



Aligning Individual Grid Items



Justify-self - Aligns an individual grid item horizontally



Align-self - Aligns an individual grid item vertically



You can use the justify-self and align-self properties to control the horizontal and vertical alignment of individual grid items within their grid cells.

Advanced Concepts: Variable Columns, Grid Template Areas, Naming Grid Lines, and Ordering Grid Items



Ordering Grid Items

The order property specifies the order in which grid items are laid out, allowing for precise control over the arrangement of grid items within the grid layout.



Grid Template Areas

Grid template areas provide a visual way to define the layout of a grid, making it easier to create complex and visually appealing designs.



Variable Columns

Variable columns allow for flexible and responsive grid layouts, adjusting to different screen sizes and content requirements.

Ordering grid items

- Order - ændre på ordre af elementer
- Standard ordreværdi for hvert element er 0

| |
|-------|
| one |
| two |
| three |
| four |
| six |
| five |

```
8 / <meta content="
9 width=device-width,
10 initial-scale=1" name="vi
11 <style>
12 .container {
13     display: grid;
14     grid-gap: 10px;
15 }
16 .item5 {
17     order: 1;
```

Grid template areas

- grid-template-area – definerer områder I grid, der kan refereres ved navn
- grid-area – placerer elementet I en navngivet celle

| | | |
|---------------------|--------------------|------|
| eleven apple | one orange | two |
| eight banana | banana | four |
| five plum | three mango | six |
| seven | nine | ten |
| twelve | | |

```
11 grid-gap: 10px;
12 grid-template-columns: repeat(
13     3, 1fr);
14 grid-template-areas:
15     "apple orange"
16     "banana banana"
17     "plum mango";
18
19 .item3 {
20     grid-area: mango;
21 }
22 .item11 {
23     grid-area: apple;
24 }
25 .item8 {
26     grid-area: banana;
27 }
```

Variable columns

```
grid-gap: 10px;  
grid-template-columns: repeat(  
  auto-fill, 150px);
```

- grid-template-columns: repeat (auto-fill)
- grid-template-columns: repeat (auto-fit)
- justify-content: space-between

| | | |
|-------|--------|--------|
| one | two | three |
| four | five | six |
| seven | eight | nine |
| ten | eleven | twelve |

| | | | | |
|--------|--------|-------|------|------|
| one | two | three | four | five |
| six | seven | eight | nine | ten |
| eleven | twelve | | | |

| | |
|--------|--------|
| one | two |
| three | four |
| five | six |
| seven | eight |
| nine | ten |
| eleven | twelve |

```
8  
9  
10  
11  
12  
13  
14  
15  
16  
initial <style> {  
  <style>  
  .container {  
    display: grid;  
    grid-gap: 10px;  
    grid-template-columns: repeat(  
      auto-fill, minmax(150px, 1  
      fr));  
    justify-content: space-between  
    ;  
  }  
}
```