

[Menu ▼](#)[Log in](#)

CSS Grid Layout Module

[< Previous](#)[Next >](#)

Header

Menu

Main

Right

Footer

[Try it Yourself »](#)

Grid Layout

The CSS Grid Layout Module offers a grid-based layout system, with rows and columns, making it easier to design web pages without having to use floats and positioning.

Browser Support

The grid properties are supported in all modern browsers.

☐ Dark mode



57.0

16.0

52.0

10

44

Grid Elements

A grid layout consists of a parent element, with one or more child elements.

Example

```
<div class="grid-container">
  <div class="grid-item">1</div>
  <div class="grid-item">2</div>
  <div class="grid-item">3</div>
  <div class="grid-item">4</div>
  <div class="grid-item">5</div>
  <div class="grid-item">6</div>
  <div class="grid-item">7</div>
  <div class="grid-item">8</div>
  <div class="grid-item">9</div>
</div>
```

1	2	3
4	5	6
7	8	9

Try it Yourself »

☐ Dark mode



Display Property

An HTML element becomes a grid container when its `display` property is set to `grid` or `inline-grid`.

Example

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

Try it Yourself »

Example

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

Try it Yourself »

All direct children of the grid container automatically become *grid items*.

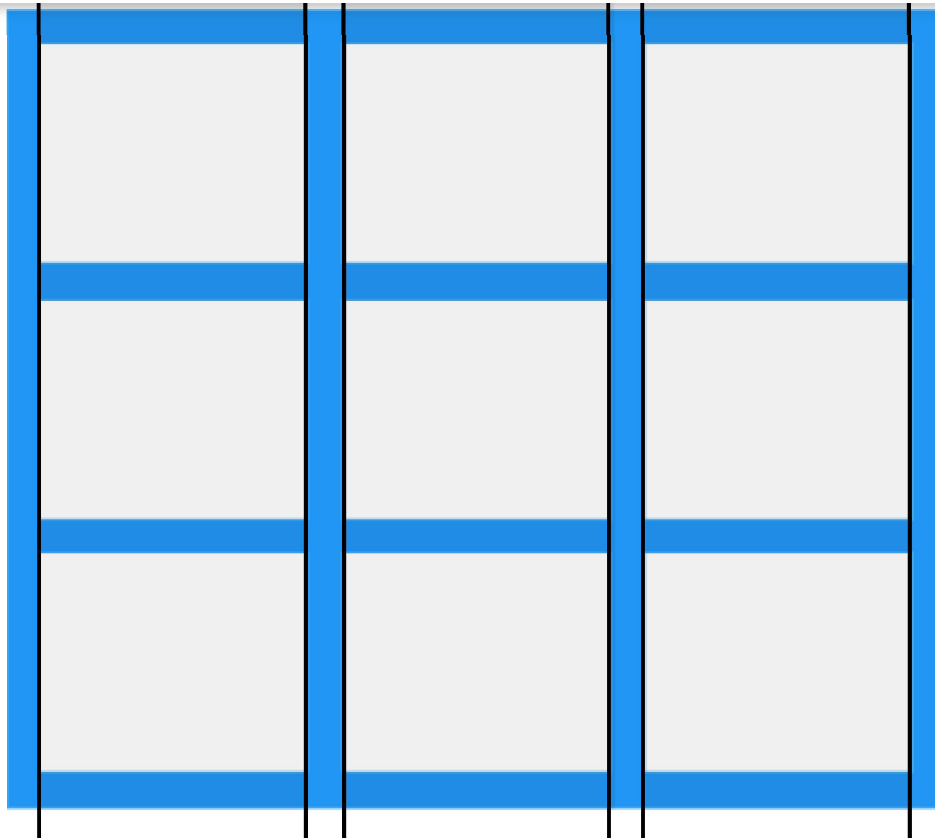
Grid Columns

The vertical lines of grid items are called *columns*.



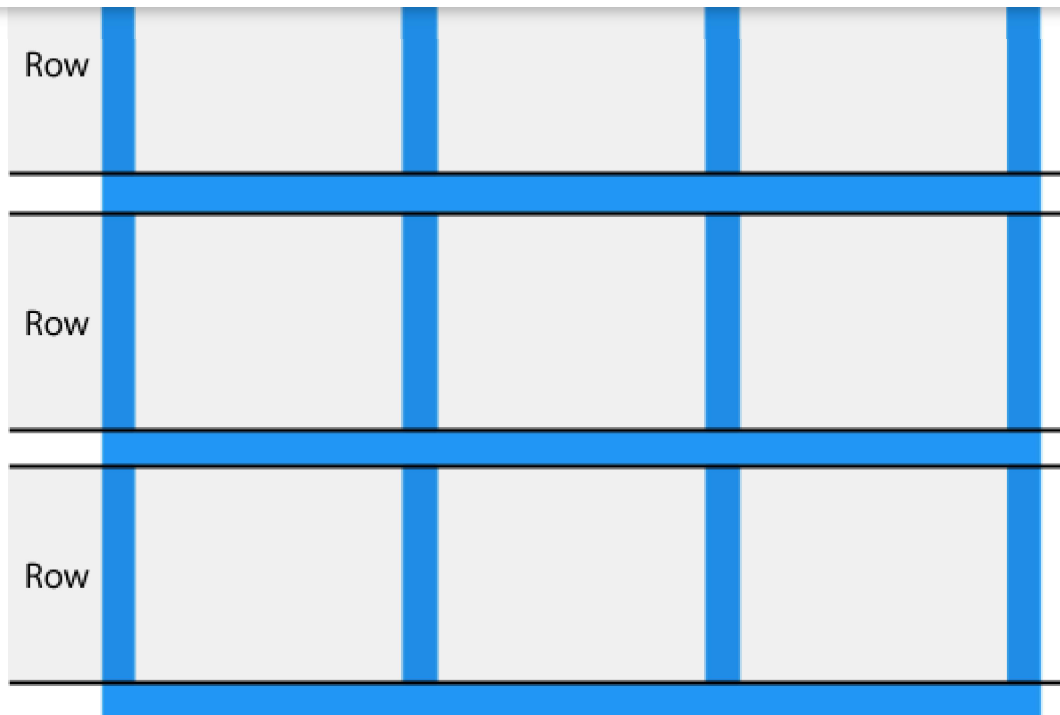
HTML

CSS



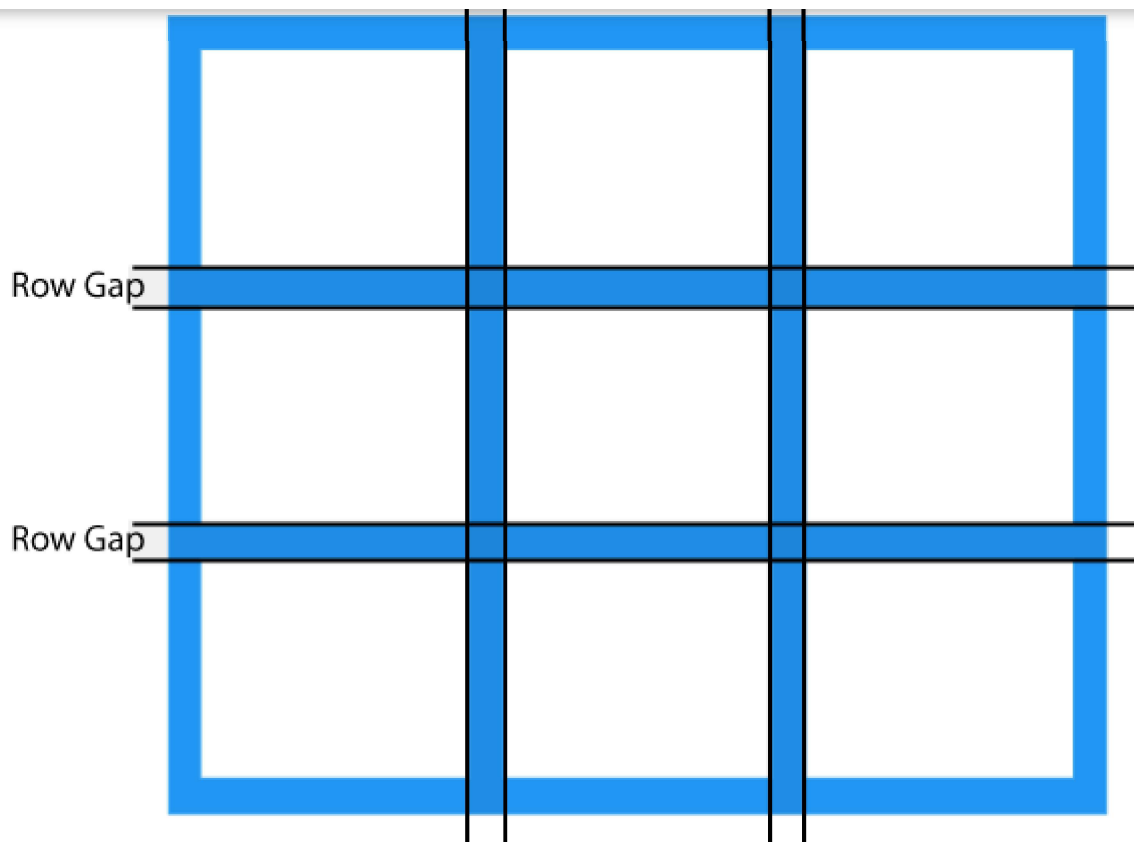
Grid Rows

The horizontal lines of grid items are called *rows*.



Grid Gaps

The spaces between each column/row are called *gaps*.



You can adjust the gap size by using one of the following properties:

- `column-gap`
- `row-gap`
- `gap`

Example

The `column-gap` property sets the gap between the columns:

```
.grid-container {  
  display: grid;  
  column-gap: 50px;  
}
```

[Try it Yourself »](#)



Example

The `row-gap` property sets the gap between the rows:

```
.grid-container {  
  display: grid;  
  row-gap: 50px;  
}
```

[Try it Yourself »](#)

Example

The `gap` property is a shorthand property for the `row-gap` and the `column-gap` properties:

```
.grid-container {  
  display: grid;  
  gap: 50px 100px;  
}
```

[Try it Yourself »](#)

Example

The `gap` property can also be used to set both the row gap and the column gap in one value:

```
.grid-container {  
  display: grid;  
  gap: 50px;  
}
```

[Try it Yourself »](#)

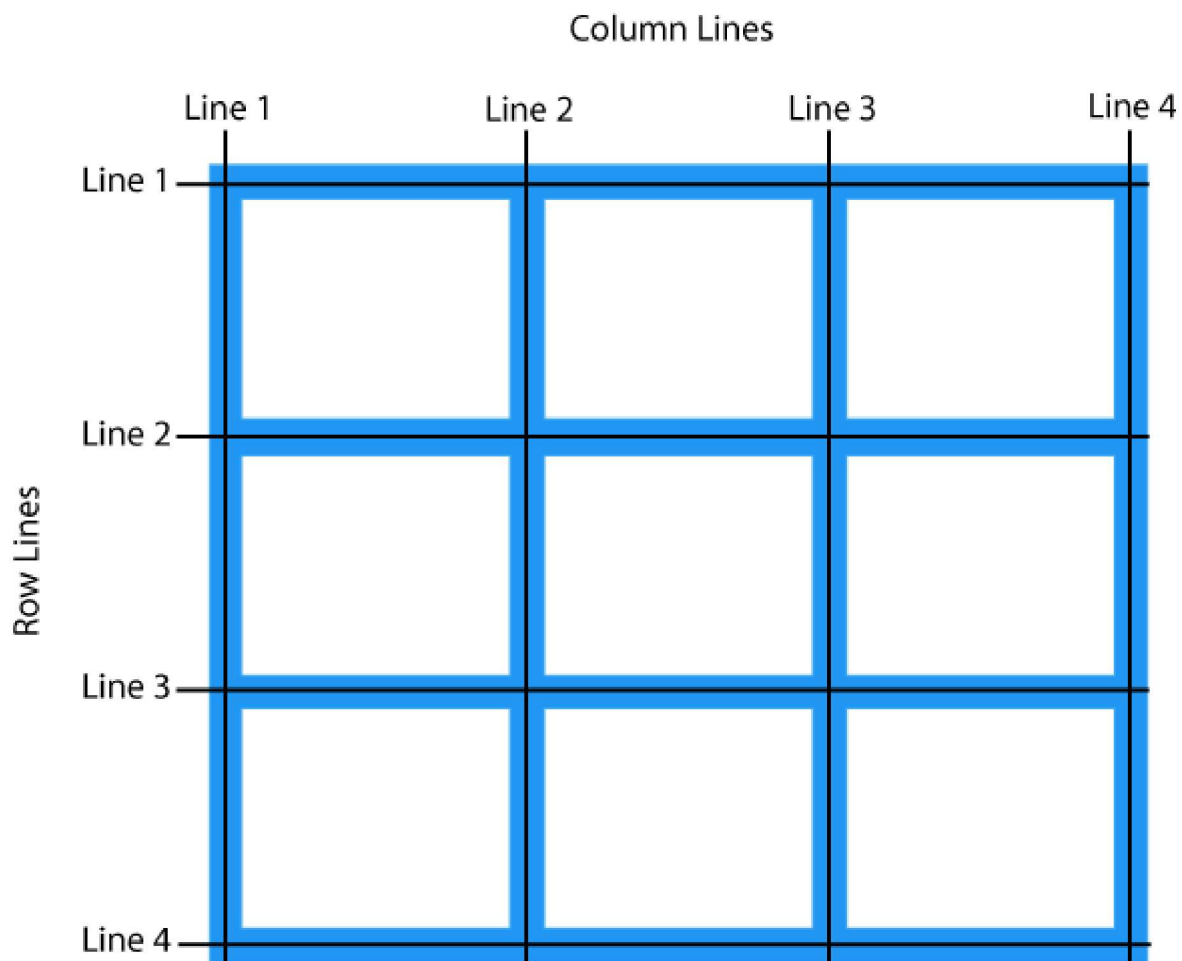
☐ Dark mode



Grid Lines

The lines between columns are called *column lines*.

The lines between rows are called *row lines*.



Refer to line numbers when placing a grid item in a grid container:

Example

Place a grid item at column line 1, and let it end on column line 3:

```
.item1 {  
  grid-column-start: 1;  
  grid-column-end: 3;  
}
```




Example

Place a grid item at row line 1, and let it end on row line 3:

```
.item1 {  
  grid-row-start: 1;  
  grid-row-end: 3;  
}
```

Try it Yourself »

All CSS Grid Properties

Property	Description
<u>column-gap</u>	Specifies the gap between the columns
<u>gap</u>	A shorthand property for the <i>row-gap</i> and the <i>column-gap</i> properties
<u>grid</u>	A shorthand property for the <i>grid-template-rows</i> , <i>grid-template-columns</i> , <i>grid-template-areas</i> , <i>grid-auto-rows</i> , <i>grid-auto-columns</i> , and the <i>grid-auto-flow</i> properties
<u>grid-area</u>	Either specifies a name for the grid item, or this property is a shorthand property for the <i>grid-row-start</i> , <i>grid-column-start</i> , <i>grid-row-end</i> , and <i>grid-column-end</i> properties
<u>grid-auto-columns</u>	Specifies a default column size
<u>grid-auto-flow</u>	Specifies how auto-placed items are inserted in the grid
<u>grid-auto-rows</u>	Specifies a default row size
<u>grid-column</u>	A shorthand property for the <i>grid-column-start</i> and the <i>grid-column-end</i> properties

☐ Dark mode



<u>grid-column-gap</u>	Specifies the size of the gap between columns
<u>grid-column-start</u>	Specifies where to start the grid item
<u>grid-gap</u>	A shorthand property for the <i>grid-row-gap</i> and <i>grid-column-gap</i> properties
<u>grid-row</u>	A shorthand property for the <i>grid-row-start</i> and the <i>grid-row-end</i> properties
<u>grid-row-end</u>	Specifies where to end the grid item
<u>grid-row-gap</u>	Specifies the size of the gap between rows
<u>grid-row-start</u>	Specifies where to start the grid item
<u>grid-template</u>	A shorthand property for the <i>grid-template-rows</i> , <i>grid-template-columns</i> and <i>grid-areas</i> properties
<u>grid-template-areas</u>	Specifies how to display columns and rows, using named grid items
<u>grid-template-columns</u>	Specifies the size of the columns, and how many columns in a grid layout
<u>grid-template-rows</u>	Specifies the size of the rows in a grid layout
<u>row-gap</u>	Specifies the gap between the grid rows

[< Previous](#)[Next >](#)

NEW

We just launched
W3Schools videos

☐ Dark mode



HTML

CSS

[Explore now](#)

COLOR PICKER



Get certified
by completing
a CSS
course today!

[Get started](#)

CODE GAME

☐ Dark mode

[HTML](#)[CSS](#)[Play Game](#)[Report Error](#)[Forum](#)[About](#)[Shop](#)

Top Tutorials

[HTML Tutorial](#)[CSS Tutorial](#)[JavaScript Tutorial](#)[How To Tutorial](#)[SQL Tutorial](#)[Python Tutorial](#)[W3.CSS Tutorial](#)[Bootstrap Tutorial](#)[PHP Tutorial](#)[Java Tutorial](#)[C++ Tutorial](#)[jQuery Tutorial](#)

Top References

[HTML Reference](#)[CSS Reference](#)☐ **Dark mode**



HTML

CSS



[Python Reference](#)
[W3.CSS Reference](#)
[Bootstrap Reference](#)
[PHP Reference](#)
[HTML Colors](#)
[Java Reference](#)
[Angular Reference](#)
[jQuery Reference](#)

Top Examples

[HTML Examples](#)
[CSS Examples](#)
[JavaScript Examples](#)
[How To Examples](#)
[SQL Examples](#)
[Python Examples](#)
[W3.CSS Examples](#)
[Bootstrap Examples](#)
[PHP Examples](#)
[Java Examples](#)
[XML Examples](#)
[jQuery Examples](#)

Web Courses

[HTML Course](#)
[CSS Course](#)
[JavaScript Course](#)
[Front End Course](#)
[SQL Course](#)
[Python Course](#)
[PHP Course](#)
[jQuery Course](#)
[Java Course](#)
[C++ Course](#)
[C# Course](#)
[XML Course](#)

[Get Certified »](#)

W3Schools is optimized for learning and training. Examples might be simplified to improve reading and learning. Tutorials, references, and examples are constantly reviewed to avoid errors, but we cannot warrant full correctness of all content. While using W3Schools, you agree to have read and accepted our terms of use, cookie and privacy policy.

Copyright 1999-2022 by Refsnes Data. All Rights Reserved.
W3Schools is Powered by W3.CSS.

☐ Dark mode

