**CSS Grid Layout Module**

CSS Grid Layout is used to design responsive web layouts with rows and columns. It allows you to place items exactly where you want, making it easier to create flexible and modern web pages.

Unlike older methods like floats, CSS Grid gives more control over alignment and adapts well to different screen sizes.

**Currently Active Property**

grid-template-columns: auto;

**Syntax**

.**class** {  
 display:grid;  
}

<**html**>

<**head**>

<**style**>

.**grid-container** {

**display**: **grid**;

**grid-template-columns**: **auto** **auto**;

**gap**: 10px;

}

</**style**>

</**head**>

<**body**>

<**div** class="grid-container">

<**div** class="grid-item">Item 1</**div**>

<**div** class="grid-item">Item 2</**div**>

<**div** class="grid-item">Item 3</**div**>

<**div** class="grid-item">Item 4</**div**>

</**div**>

</**body**>

</**html**>

* The .**grid-container** uses **display: grid;** to define a grid layout with two columns (grid-template-columns: auto auto;) and a 10px gap between items.

**CSS Grid Layout Properties**

Below is a list of key CSS Grid properties with descriptions:

| **Property** | **Description** |
| --- | --- |
| [**column-gap**](https://www.geeksforgeeks.org/css-column-gap-property/) | Defines the amount of space between columns in a multi-column layout, often used with column-count in CSS Grid. |
| [**gap**](https://www.geeksforgeeks.org/css-gap-property/) | Specifies the spacing (also called gutter) between rows and columns in CSS Grid and Flexbox layouts. |
| [**grid**](https://www.geeksforgeeks.org/css-grid-property/) | A grid-based layout system in CSS that provides rows and columns, simplifying the design without using floats or positioning. |
| [**grid-area**](https://www.geeksforgeeks.org/css-grid-area-property/) | IDefines the size and location of a grid item within a CSS grid layout by specifying the start and end lines. |
| [**grid-auto-columns**](https://www.geeksforgeeks.org/css-grid-auto-columns-property/) | Sets the size of columns that are automatically generated in a CSS Grid layout when more content is added. |
| [**grid-auto-flow**](https://www.geeksforgeeks.org/css-grid-auto-flow-property/) | It specifies exactly how auto-placed items get flow into the grid. |
| [**grid-auto-rows**](https://www.geeksforgeeks.org/css-grid-auto-rows-property/) | It is used to specify the size for the rows of implicitly generated grid containers. |
| [**grid-column**](https://www.geeksforgeeks.org/css-grid-column-property/) | It describes the number of properties that allow to design of grid structures and control the placement of grid items using CSS. |
| [**grid-column-end**](https://www.geeksforgeeks.org/css-grid-column-end-property/) | It explains the number of columns an item will span, or on which column-line the item will end. |
| [**grid-column-gap**](https://www.geeksforgeeks.org/css-grid-column-gap-property/) | It is used to set the size of the gap between the columns in a grid layout. |
| [**grid-column-start**](https://www.geeksforgeeks.org/css-grid-column-start-property/) | It defines for which column line item will start. |
| [**grid-gap**](https://www.geeksforgeeks.org/css-grid-gap-property/) | It is used to sets the size of the gap between the rows and columns in a grid layout. |
| [**grid-row**](https://www.geeksforgeeks.org/css-grid-row-property/) | It is used to specify the size and location in a grid layout. |
| [**grid-row-end**](https://www.geeksforgeeks.org/css-grid-row-end-property/) | It is used to define the grid item’s end position within a grid row by specifying the inline edge of its grid area. |
| [**grid-row-gap**](https://www.geeksforgeeks.org/css-grid-row-gap-property/) | It is used to define the size of the gap between the grid elements. |
| [**grid-row-start**](https://www.geeksforgeeks.org/css-grid-row-start-property/) | It is used to define the grid items’ start position within the grid row by specifying the inline start edge of its grid area. |
| [**grid-template**](https://www.geeksforgeeks.org/css-grid-template-property/) | It is a [shorthand property](https://www.geeksforgeeks.org/css-shorthand-properties/) for defining grid columns, rows, and areas. |
| [**grid-template-areas**](https://www.geeksforgeeks.org/css-grid-template-areas-property/) | It is used to specify the area within the grid layout. |
| [**grid-template-columns**](https://www.geeksforgeeks.org/css-grid-template-columns-property/) | It is used to set the number of columns and size of the columns of the grid. |
| [**grid-template-rows**](https://www.geeksforgeeks.org/css-grid-template-rows-property/) | It is used to set the number of rows and height of the rows in a grid. |

More Examples of CSS Grid Layout Module

**Three-Column Layout**

<**html**>

<**head**>

<**style**>

.**grid-container** {

**display**: **grid**;

**grid-template-columns**: 1fr 1fr 1fr;

**gap**: 10px;

}

.**grid-item** {

**background-color**: #f0f0f0;

**padding**: 20px;

**text-align**: **center**;

}

</**style**>

</**head**>

<**body**>

<**div** class="grid-container">

<**div** class="grid-item">Column 1</**div**>

<**div** class="grid-item">Column 2</**div**>

<**div** class="grid-item">Column 3</**div**>

</**div**>

</**body**>

</**html**>