

* what is grid and difference b/w grid and flex

- what is grid

- An intersection of vertical and horizontal lines is known as a grid.

- Major sections of a page are separated using CSS grid layout.

- A grid-based layout system with rows and columns is provided by the grid attribute. it eliminates the need for positioning and floating, making webpages creation simple.

- The grid layout enables us to construct grid structures represented in CSS rather than HTML.

- The user can align the pieces into rows and columns like a table. But using the CSS grid to construct a layout is simpler than using tables.

* Rows and column in Grid

• Introduction to grid layout

The grid layout is a two-dimensional layout system for creating rows and columns. It allows for creating flexible and responsive layouts that can adapt to different screen sizes and devices.

* Grid layout properties

We shall look at the grid properties in two ways

- properties are to be applied on grid containers
- Properties are to be applied to grid items [children]

~~Row and~~

grid-template-columns

The grid-template-columns property defines the number of columns in your grid layout, and it can define the width of each column.

The value is a space-separated list, where each value defines the width of the respective column.

If you want your grid layout to contain 5 columns, specify the width of the 5 columns as "auto". If all columns should have the same width.

Specify

* Special units & Functions

5 repeat() :- The repeat() funcⁿ is used to reduce repetitive declarations.
 10 fr units :- The "fr" unit in CSS is a way to divide up the available space in a grid or layout. it is used to specify how much of the space should be given to a certain element or group of elements. it represents a fraction of the available space.

* Sizing Functions

15 minmax()

The minmax() funcⁿ in CSS is used to set a range of values for a property. it sets a min^m and max^m value for a property.

* 20 grid-template-rows

The grid-template-rows property defines the height of each row. it is used to define the no. of rows and their size in a grid container.

* 25 grid-template-areas

The grid-template-areas property specifies areas within the grid layout.

30 • <grid-area-name> - the name of a grid area specified with grid-area.

• dot (.) - Represents the empty space in the template.

* properties associated with grid items

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• Grid-row:- defines on which row to place an item. You can also state here, where the item will start, and where the item will end. To place an item, you can either use line numbers, or use span to define how many columns the item will span.

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• Grid column:- defines on which column the item is to be placed. Like a row, here too, it can be stated where the item will start and end. Here again, you can either use line nos, or use span to define how many columns the item will span

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• Grid-area:- For the attributes grid-row-start, grid-column-start, grid-row-end, and grid-column-end, the grid-area property can be used as a shorthand.

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* 25 Grid container :- Grid container are made up of grid elements that are arranged in columns and rows.

• This is a beautiful and organized arrangement for any webpage.

30 * grid properties associated with A container

• Grid-template-rows :- it simply states the height of each

35 • Grid-template-column :- it states the no of column in the grid and it can define the width of each column.

Here, there is a provision to use the specification as "auto" if all columns should have the same width.

- Align - content :- Vertically aligns the whole grid inside the specified container, it can be start, center, end, space evenly, space around, space between.
- Justify content :- It aligns the whole grid inside the container. it can be start, center, space around, space between.