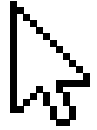




Computer Science :

HTML & CSS



Week 6: Advanced CSS Techniques



01

CSS Grid

For Grid-Based Layout System



1. Grid Elements HTML

Example:

```
<div class= "grid_elements">  
  <div>1</div>  
  <div>2</div>  
  <div>3</div>  
  <div>4</div>  
  <div>5</div>  
</div>
```

Create a grid with items inside. Set a overall class



2. Grid display properties

```
Example: .grid_elements{  
    display: grid;  
    column-gap: 10px;  
}
```

1. Set `display` with values - `grid` or `inline-grid`
2. Define specific grid properties Grid Properties





Grid Container properties

Grid template properties:

grid-template-columns: auto auto; 2columns with the same width

- a space separated list where each value is the width of its corresponding column

grid-template-rows defines the height corresponding row

Others:

justify-content used to align the elements within the container

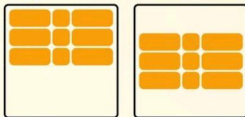
align-content used to vertically align the elements in the container





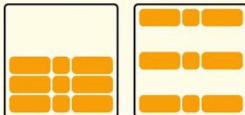
CSS Grid Layout

align-content



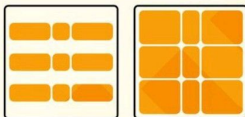
start

center



end

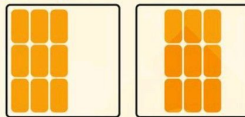
space-between



space-around

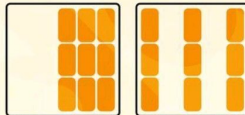
stretch

justify-content



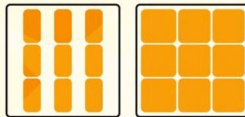
start

center



end

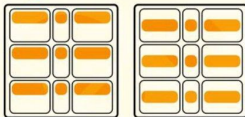
space-between



space-around

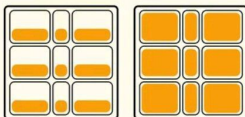
stretch

align-items



start

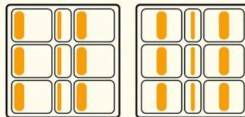
center



end

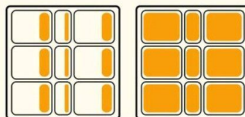
stretch

justify-items



start

center



end

stretch



Grid Item properties

grid-columns: 1/5 ; item starts at column 1 and ends before column 5

- defines which column the item will start and end

grid-rows defines which row the item will start and end

grid-area: 1 /2 /5 /6; item starts row line 1 column line 2, and ends on row line 5 column line 6

- Shorthand for **grid-row-start**, **grid-column-start**, **grid-row-end** and the **grid-column-end**
- Can be used to assign names to items
- Used to position items on the grid





02

Pseudo Class

Style of elements after user interaction



Syntax

Example: `selector:pseudo-class{`
`property: value;`
`}`

Some examples

`:hover` (mouse hovers over link)

`:visited` (visited link)

`:active` (selected link)

`:link` (unvisited link)





03

Pseudo Elements

Style of specific parts of elements



Syntax

Example: `selector::pseudo-elements{
 property: value;
}`

Some examples

::**first-letter** [add style to the first letter]

::**first-line** [add style to the first line of text]

::**before** [can insert content before element]

::**marker** [selects the markers of list items]

