FlexBox in Css

كيف بدأ الـ Flexbox

- اول مسودة في 2009
- ظهر علشان يحل لنا شوية مشاكل بتظهر مع استخدام الfloat أو كتطوير لامكانيات الـ CSS

- As of December 2022, 99.68% of installed browsers (99.59% of desktop browsers and 100% of mobile browsers) support CSS Flexible Box Layout.

حبة كلام نظرى مهــــــــــــم

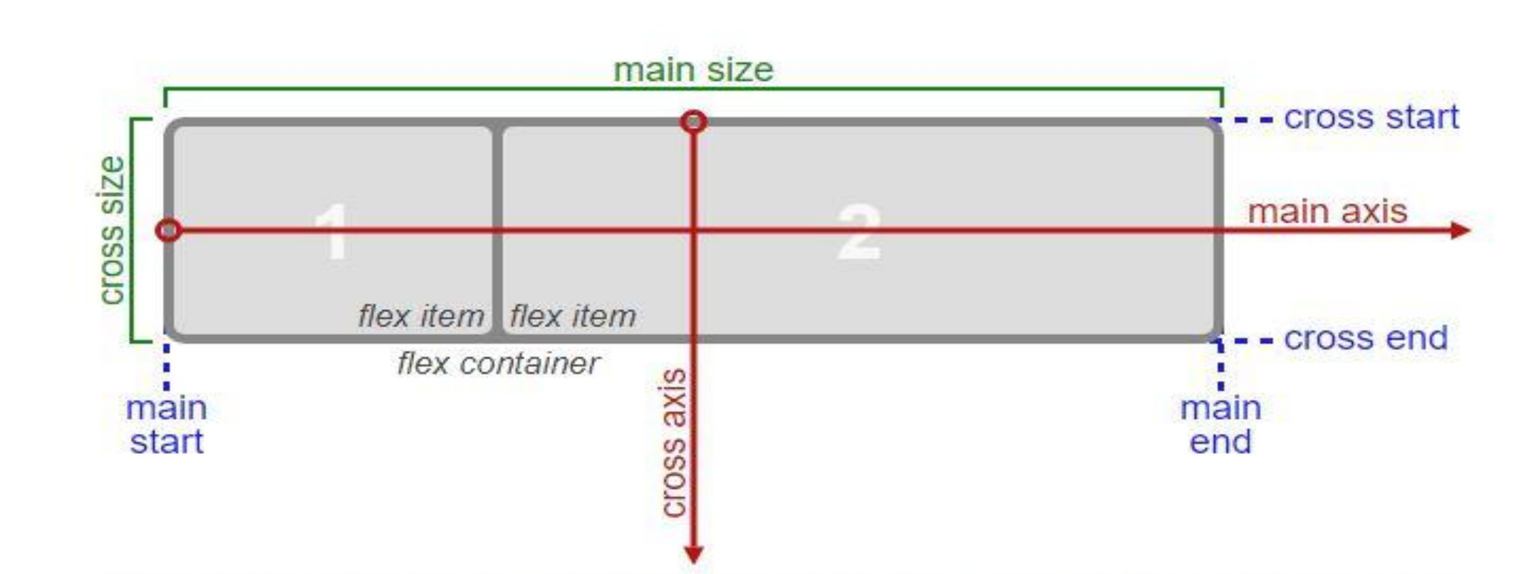
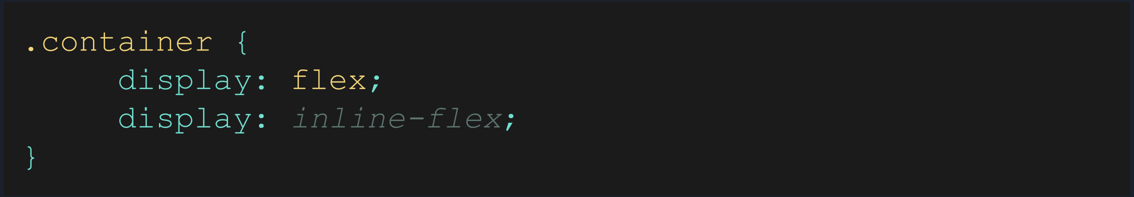


***Figure 2** An illustration of the various directions and sizing terms as applied to a 'row' flex container.*

W3.org

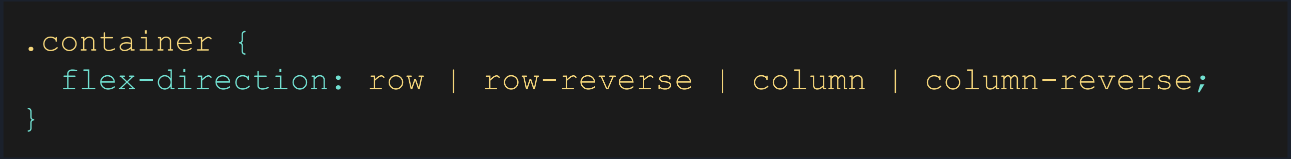
Properties for the Parent | flex container 1

- display:



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

- flex-direction: To define which is the main axis



```
.container {
  flex-direction: row | row-reverse | column | column-reverse;
}
```

Properties for the Parent | flex container 2

- flex-wrap: To allow items to wrap into a new line if they are too large

```
.container {
  flex-wrap: nowrap | wrap | wrap-reverse;
}
```

- flex-flow: direction & wrap

```
.container {
  flex-flow: row nowrap;
}
```

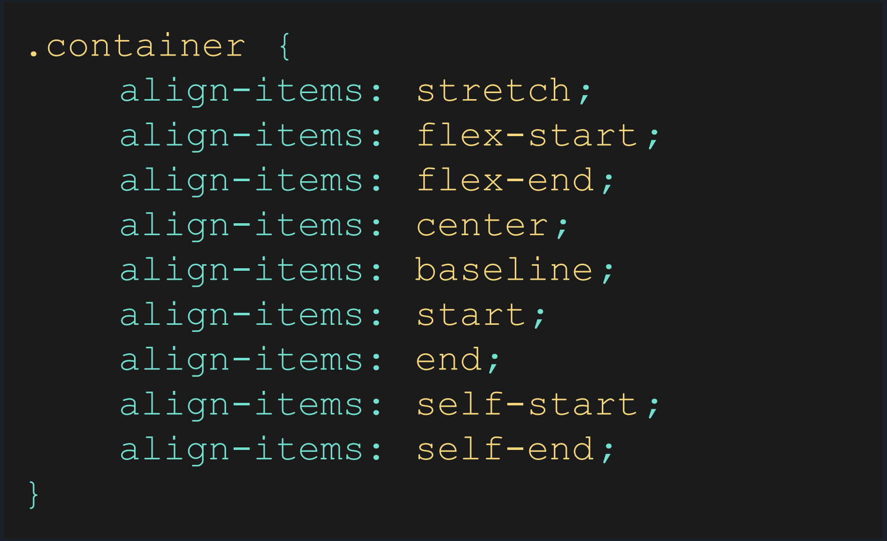
Properties for the Parent | flex container 3

- justify-content: To align items along main axis (horizontally, by default)

```
.container {
    justify-content: flex-start;
    justify-content: flex-end;
    justify-content: center;
    justify-content: space-between;
    justify-content: space-around;
    justify-content: space-evenly;
    justify-content: start;
    justify-content: end;
    justify-content: left;
    justify-content: right;
}
```

Properties for the Parent | flex container   4

- align-items: To align items along cross axis (vertically, by default)



```
.container {
    align-items: stretch;
    align-items: flex-start;
    align-items: flex-end;
    align-items: center;
    align-items: baseline;
    align-items: start;
    align-items: end;
    align-items: self-start;
    align-items: self-end;
}
```

Properties for the Parent | flex container 5

- align-content:

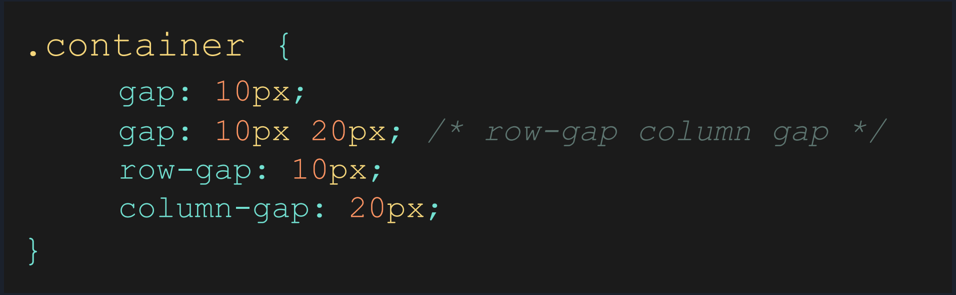
  Only applies when there are multiple lines (flex-wrap: wrap)

```
.container {
    align-content: flex-start;
    align-content: flex-end;
    align-content: center;
    align-content: space-between;
    align-content: space-around;
    align-content: space-evenly;
    align-content: stretch;
    align-content: start;
    align-content: end;
    align-content: baseline;
}
```

- Difference between align-content and align-items:
  - stackoverflow
  - geeksforgeeks

Properties for the Parent | flex container 6

- gap, row-gap, column-gap: To create space between items, without using margin



```css
.container {
     gap: 10px;
     gap: 10px 20px; /* row-gap column gap */
     row-gap: 10px;
     column-gap: 20px;
}
```

Properties for the Children | flex items 1

- order: Controls order of items. -1 makes item first, 1 makes it last

```
.item {
  order: 5; /* default is 0 */
}
```

- flex-grow: To allow an element to grow (0 means no, 1+ means yes)

```
.item {
  flex-grow: 4; /* default 0 */
}
```

- flex-shrink: To allow an element to shrink (0 means no, 1+ means yes)

```
.item {
  flex-shrink: 3; /* default 1 */
}
```

Properties for the Children | flex items 2

- flex-basis: To define an item’s width, instead of the width property

```
.item {
  flex-basis:  | auto; /* default auto */
}
```

- flex: Recommended shorthand for flex-grow, -shrink, -basis.

```
.item {
  flex: none | [ <'flex-grow'> <'flex-shrink'>? || <'flex-basis'> ]
}
```

- align-self: To overwrite align-items for individual flex items

```
.item {
     align-self: auto | flex-start | flex-end |
center | baseline | stretch;
}
```

CSS filter Property

CSS filter Property

- The filter property defines visual effects (like blur and saturation) to an element (often <img>).

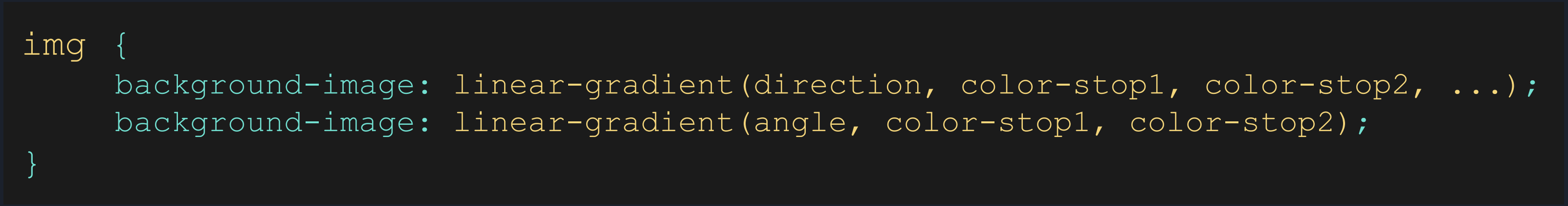
```css
img {
     filter: none | blur() | brightness() | contrast() | drop-shadow() |
grayscale() | hue-rotate() | invert() | opacity() | saturate() | sepia() |
url();
}
```

filter in W3School

CSS Gradients

CSS Gradients

- CSS gradients let you display smooth transitions between two or more specified colors.



```
img {
     background-image: linear-gradient(direction, color-stop1, color-stop2, ...);
     background-image: linear-gradient(angle, color-stop1, color-stop2);
}
```

Gradients in W3School