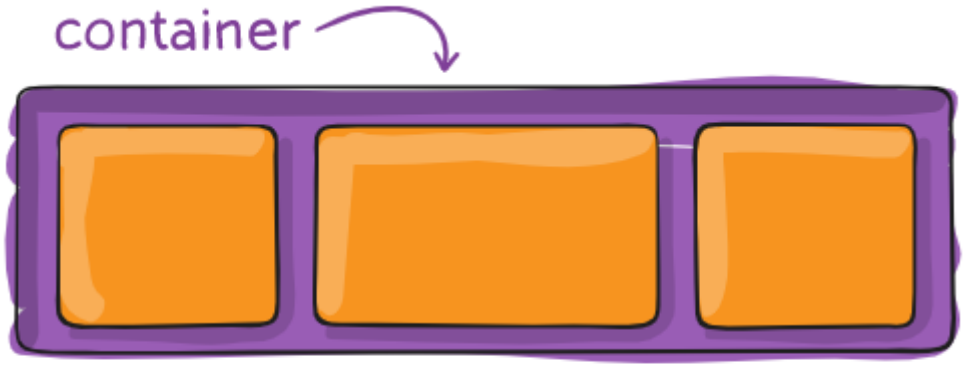
Flexbox

Source : https://css-tricks.com/snippets/css/a-guide-to-flexbox/



Properties for the Parent
(flex container)

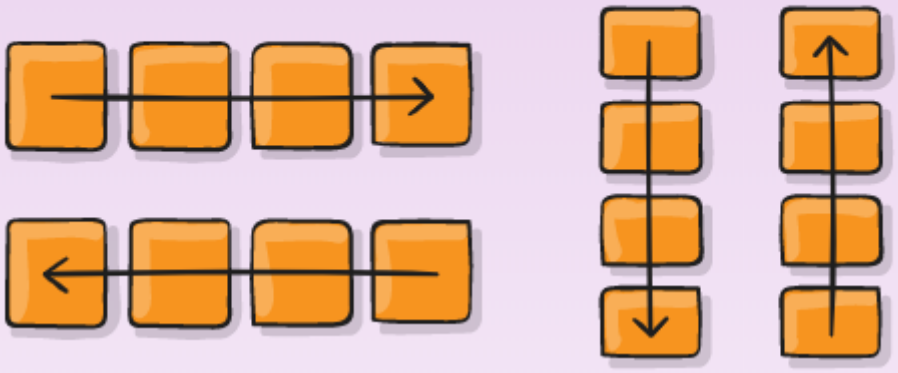
display

This defines a flex container; inline or block depending on the given value. It enables a flex context for all its direct children.

```css
.container {
  display: flex; /* or inline-flex */
}
```

Note that CSS columns have no effect on a flex container.

flex-direction

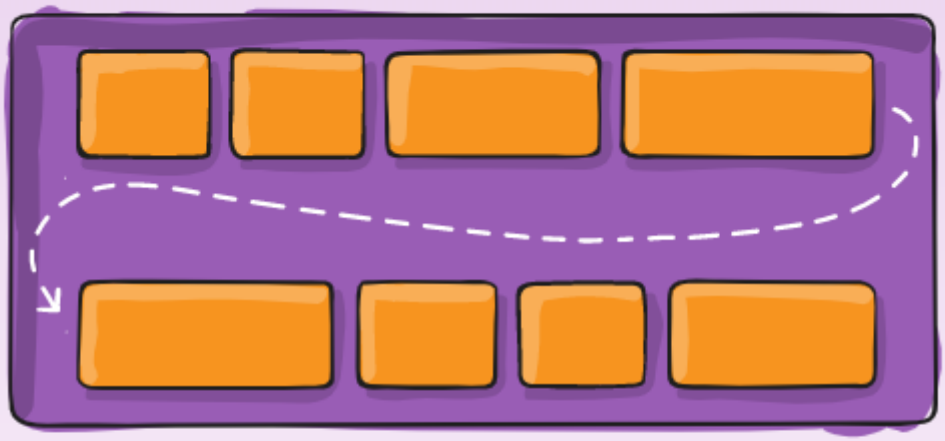


This establishes the main-axis, thus defining the direction flex items are placed in the flex container. Flexbox is (aside from optional wrapping) a single-direction layout concept. Think of flex items as primarily laying out either in horizontal rows or vertical columns.

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

- `row` (default): left to right in `ltr` ; right to left in `rtl`
- `row-reverse` : right to left in `ltr` ; left to right in `rtl`
- `column` : same as `row` but top to bottom
- `column-reverse` : same as `row-reverse` but bottom to top

flex-wrap

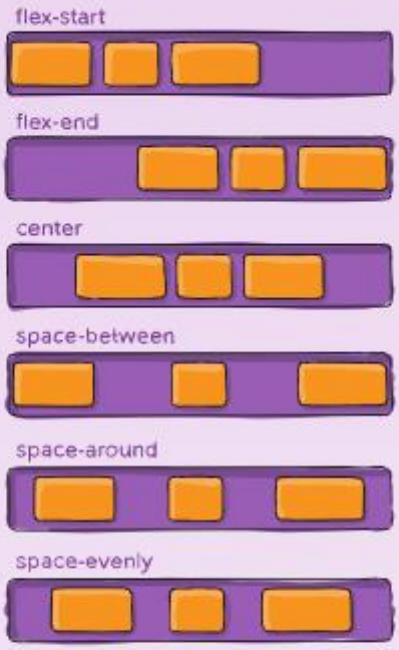


By default, flex items will all try to fit onto one line. You can change that and allow the items to wrap as needed with this property.

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

- `nowrap` (default): all flex items will be on one line
- `wrap` : flex items will wrap onto multiple lines, from top to bottom.
- `wrap-reverse` : flex items will wrap onto multiple lines from bottom to top.

justify-content

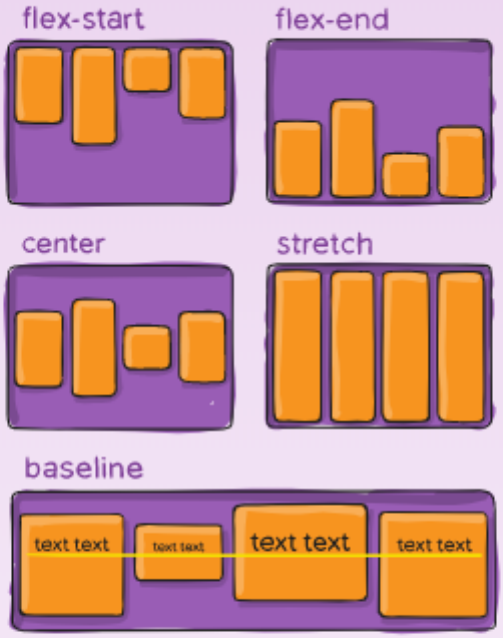


This defines the alignment along the main axis. It helps distribute extra free space leftover when either all the flex items on a line are inflexible, or are flexible but have reached their maximum size. It also exerts some control over the alignment of items when they overflow the line.

```css
.container {
  justify-content: flex-start | flex-end | center | space-between | space-around |
}
```

- `flex-start` (default): items are packed toward the start of the flex-direction.
- `flex-end`: items are packed toward the end of the flex-direction.
- `start`: items are packed toward the start of the `writing-mode` direction.
- `end`: items are packed toward the end of the `writing-mode` direction.
- `left`: items are packed toward left edge of the container, unless that doesn't make sense with the `flex-direction`, then it behaves like `start`.
- `right`: items are packed toward right edge of the container, unless that doesn't make sense with the `flex-direction`, then it behaves like `start`.
- `center`: items are centered along the line
- `space-between`: items are evenly distributed in the line; first item is on the start line, last item on the end line
- `space-around`: items are evenly distributed in the line with equal space around them. Note that visually the spaces aren't equal, since all the items have equal space on both sides. The first item will have one unit of space against the container edge, but two units of space between the next item because that next item has its own spacing that applies.
- `space-evenly`: items are distributed so that the spacing between any two items (and the space to the edges) is equal.

align-items

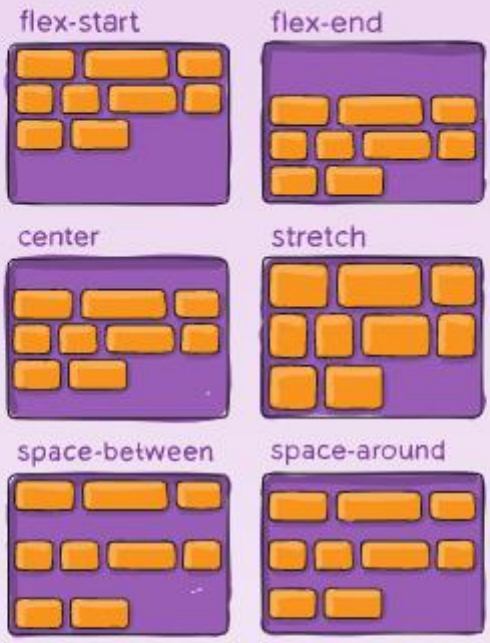


This defines the default behavior for how flex items are laid out along the **cross axis** on the current line. Think of it as the `justify-content` version for the cross axis (perpendicular to the main-axis).

```css
.container {
  align-items: stretch | flex-start | flex-end | center | baseline | first baselin
}
```

- `stretch` (default): stretch to fill the container (still respect min-width/max-width)
- `flex-start` / `start` / `self-start` : items are placed at the start of the cross axis. The difference between these is subtle, and is about respecting the `flex-direction` rules or the `writing-mode` rules.
- `flex-end` / `end` / `self-end` : items are placed at the end of the cross axis. The difference again is subtle and is about respecting `flex-direction` rules vs. `writing-mode` rules.
- `center` : items are centered in the cross-axis
- `baseline` : items are aligned such as their baselines align

align-content

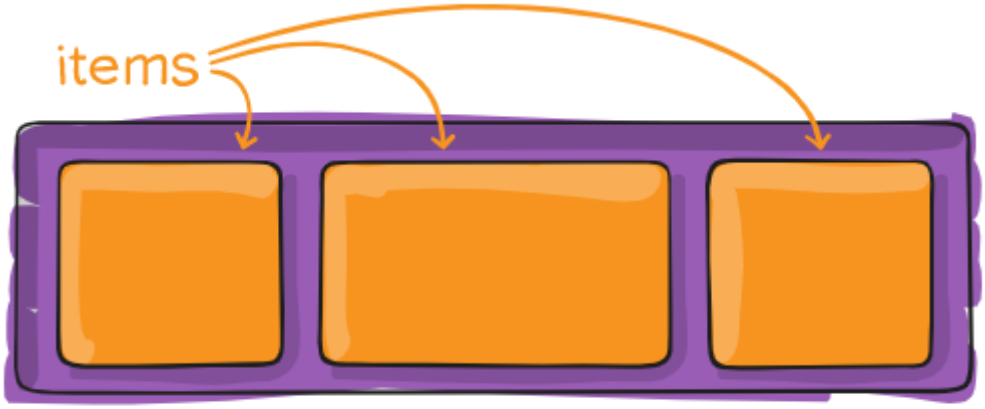


This aligns a flex container's lines within when there is extra space in the cross-axis, similar to how `justify-content` aligns individual items within the main-axis.

Note: this property has no effect when there is only one line of flex items.

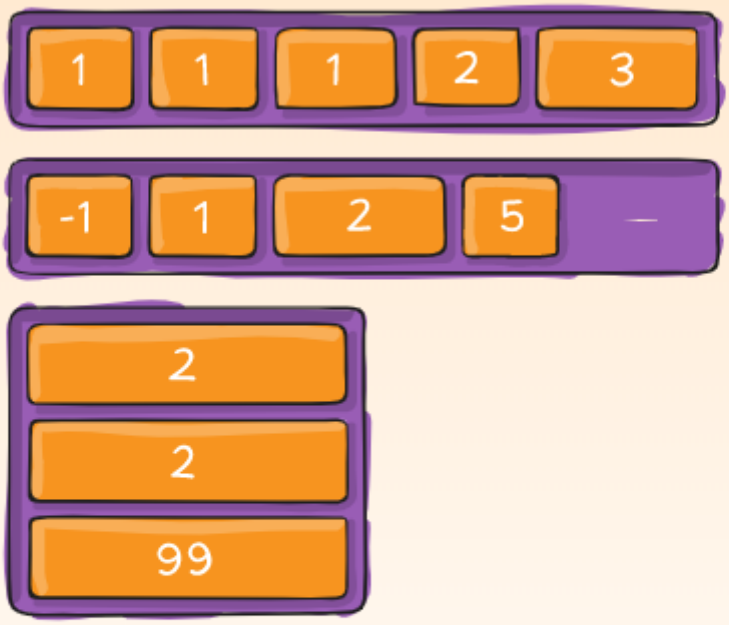
```css
.container {
  align-content: flex-start | flex-end | center | space-between | space-around | s
}
```

- `flex-start` / `start` : items packed to the start of the container. The (more supported) `flex-start` honors the `flex-direction` while `start` honors the `writing-mode` direction.
- `flex-end` / `end` : items packed to the end of the container. The (more support) `flex-end` honors the `flex-direction` while end honors the `writing-mode` direction.
- `center` : items centered in the container
- `space-between` : items evenly distributed; the first line is at the start of the container while the last one is at the end
- `space-around` : items evenly distributed with equal space around each line
- `space-evenly` : items are evenly distributed with equal space around them
- `stretch` (default): lines stretch to take up the remaining space



Properties for the Children
(flex items)

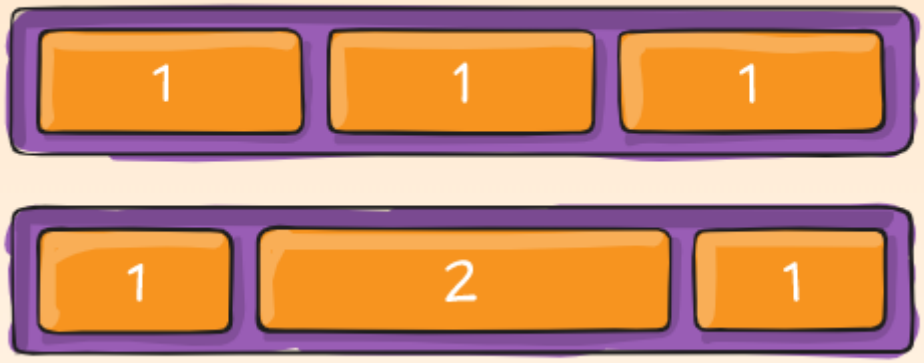
order



By default, flex items are laid out in the source order. However, the `order` property controls the order in which they appear in the flex container.

```css
.item {
  order: <integer>; /* default is 0 */
}
```

flex-grow



This defines the ability for a flex item to grow if necessary. It accepts a unitless value that serves as a proportion. It dictates what amount of the available space inside the flex container the item should take up.

If all items have `flex-grow` set to 1, the remaining space in the container will be distributed equally to all children. If one of the children has a value of 2, the remaining space would take up twice as much space as the others (or it will try to, at least).

```css
.item {
  flex-grow: <number>; /* default 0 */
}
```

Negative numbers are invalid.

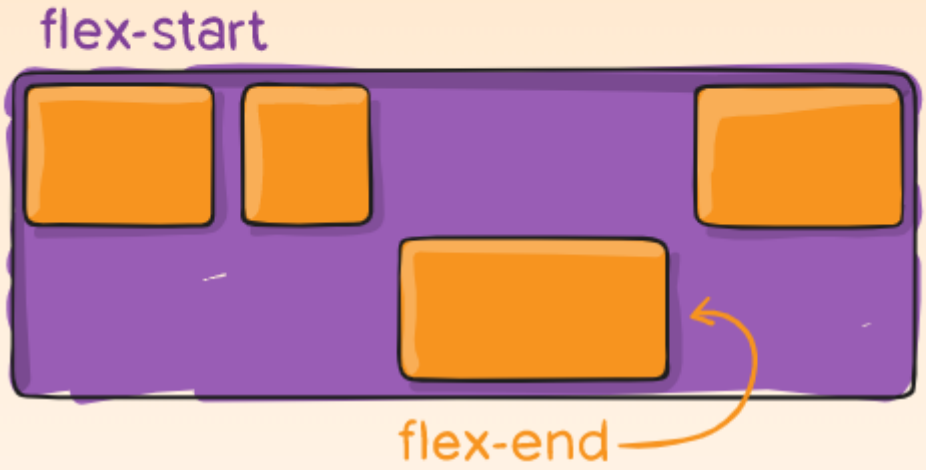
flex-shrink

This defines the ability for a flex item to shrink if necessary.

```css
.item {
  flex-shrink: <number>; /* default 1 */
}
```

Negative numbers are invalid.

align-self



This allows the default alignment (or the one specified by `align-items`) to be overridden for individual flex items.

Please see the `align-items` explanation to understand the available values.

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