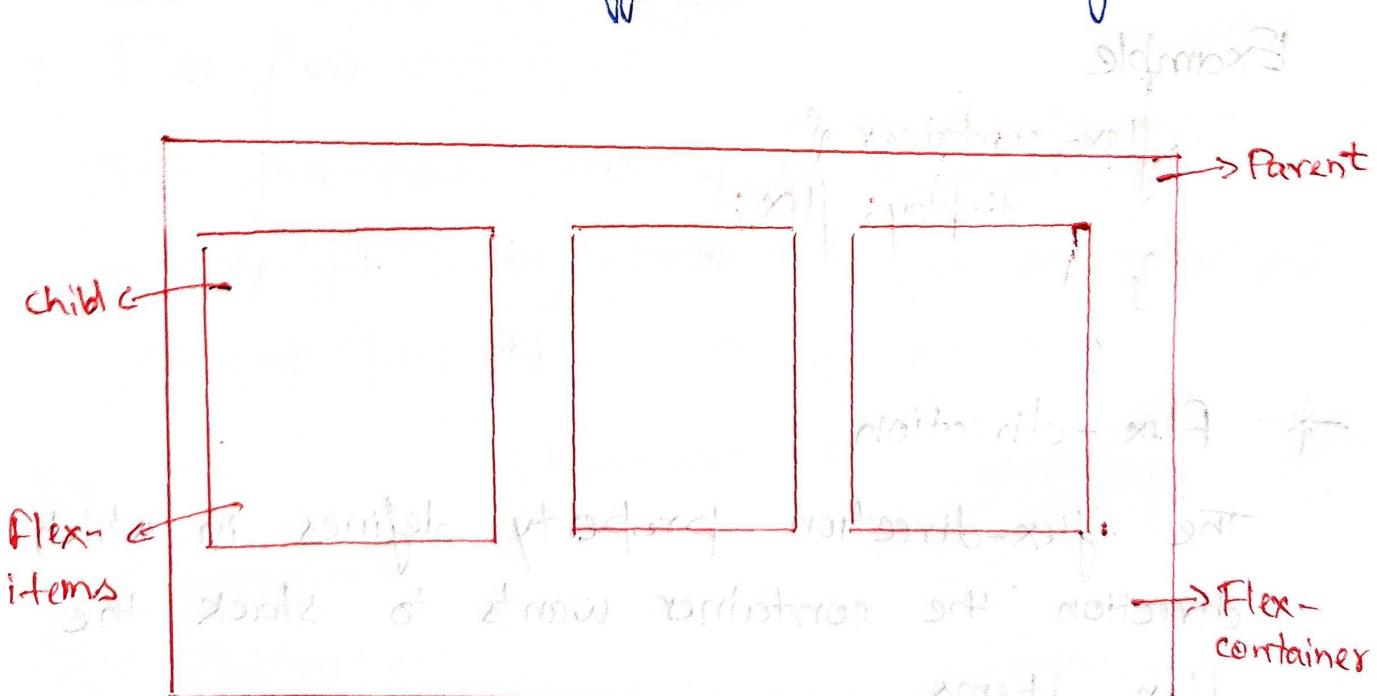


CSS FlexBox

Flexbox is a great way to get more flexibility in your layouts and to simplify responsive layout design.

- * The first step is to set `display: flex` on a "container" element. The "children" to the flex container becomes flex item.

A set of properties can be applied to flex container, and have an effect to all the items as a whole. and a different set of properties can be applied to flex items and have their affect on the targeted items.



Flex-container Properties

Flex-container is your parent container.

The flex container becomes flexible by setting the display property to flex.

The flex container properties are:

* flex-direction

* flex-wrap

* flex-flow

* justify-content

* align-items

* align-content

Example

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

* flex-direction

The flex-direction property defines in which direction the container wants to stack the flex items.

Ex

-flex-direction {

display: flex;

flex-direction: row | column | row-reverse | column-reverse;

}

* Flex-wrap

The flex-wrap property specifies whether the flex items should wrap or not.

to make self-unit explicit value stressed

Example

-flex-container {

display: flex;

flex-wrap: wrap | nowrap | wrap-reverse;

Default

* Flex-flow

The flex-flow property is a shorthand property for setting both the flex-direction and flex-wrap property.

Ex

-flex-container {

display: flex;

flex-flow: row wrap;

}

* Justify-content

Justify-content property is used to align the flex items.

Imp It is responsible for the alignment in horizontal axis.

Ex Center

The center value aligns the flex items at the center of the container.

```
.flex-container {  
    display: flex;  
    justify-content: center;}
```

Flex-start (Default)

The flex-start value aligns the flex items at the beginning of the container.

```
justify-content: flex-start;
```

Flex-end

The flex-end value aligns the flex items at the end of the container.

justify-content: flex-end;

Space-around

- * The space-around value displays the flex items with space before, b/w, and after the lines.
- * The space b/w boxes will be same, the space of the start and end will be same but the space b/w boxes and of start or end render will not be same.

justify-content: space-around;

Space-between

- * The space-between value displays the flex items with space between the boxes.
- * Equal space distribution b/w the boxes will happen and start/end boxes will move to their extreme positions; This doesn't happen in space-around

justify-content: space-between;

Space-evenly

The space distribution at the start, between and end will be equal.

justify-content: space-evenly;

Baseline

* Align-items

The align-items property is used to align the flex items. Used for single row only.

Imp It is responsible for the alignment of the items of flex items in the vertical axis.

Ex Center

The center value aligns the flex items in the middle of the container.

flex-container {

display: flex;

height: 200px;

align-items: center;

The flex-start value aligns the flex items at the top of the container.

Flex-start

The flex-start value aligns the flex items at the top of the container.

align-items: flex-start;

Flex-end

The flex-end value aligns the flex items at the bottom of the container.

`align-items: flex-end;` is aligned at each end

Stretch (Default)

The stretch value stretches the flex items to fill the container.

`align-items: stretch;`

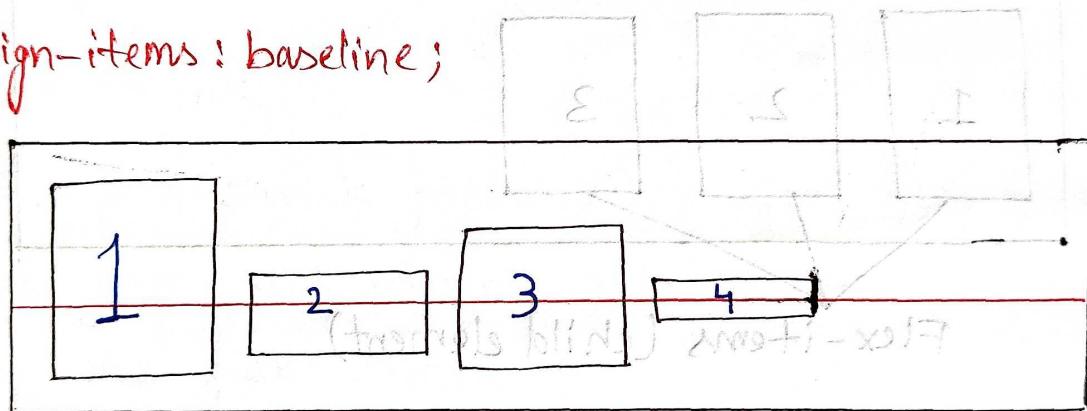
width: 200px height: 225px

Baseline

(baseline) from 3 blind

The baseline value aligns the flex items such as their baselines aligns.

`align-items: baseline;`



* Align-content

It is same as align-items but it is used when our content is of more than one rows.

Properties

- * Space-between
- * stretch
- * flex-start

- * space-around
- * center
- * flex-end

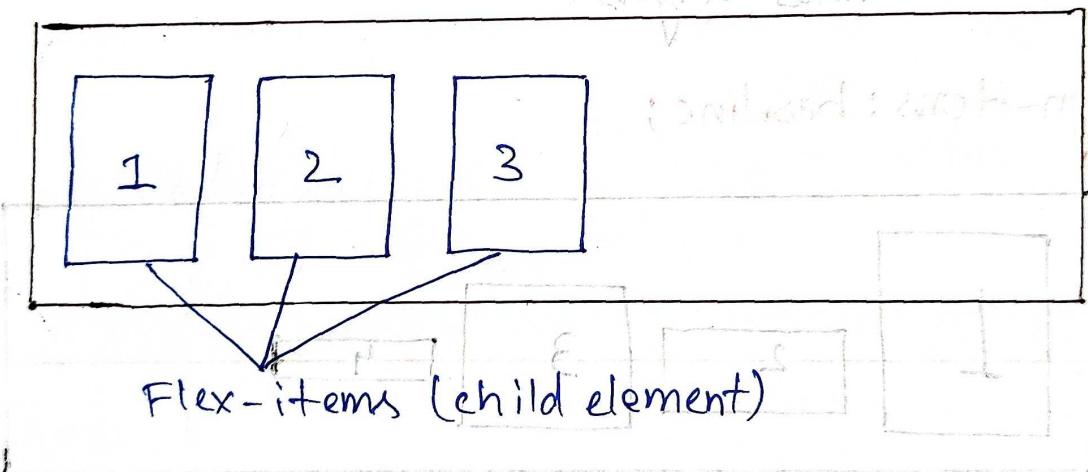
Q How to perfectly center a flex item / div?

Set both the justify-content and align-items properties to center, and the flex item / div will be perfectly centered.

CSS Flex Items

Child Element (Items)

A direct child elements of a flex container automatically becomes flexible (flex) items.



The flex item properties are:

* order

* flex-grow

* flex-shrink

* flex-basis

* flex

* align-self

* Flex-grow

The flex-grow property specifies how much a flex item will grow relative to the rest of the flex items.

The value must be a number, default value is 0.

If can be applied to the individual flex-items.

Ex

```
<div style="flex-grow: 1"> 1 </div>
<div style="flex-grow: 2"> 2 </div>
<div style="flex-grow: 3"> 3 </div>
```

* Flex-shrink

The flex-shrink property specifies how much a flex item will shrink relative to the rest of the flex items.

The value must be a number, default value is 1.

Ex

```
<div> 1 </div>
      2
<div style="flex-shrink: 0"> 3 </div>
      4
```

* Flex-basis

The flex-basis property specifies the initial length of a flex item.

Ex <div>2</div>

3

o New and 2010s especially after 2010

- Q. Difference b/w width and flex-basis. (21)

Width

- * Visually you won't notice any difference when the content is less.

- * When the content is more than the width of the flex, then the additional content will be trimmed out.

- * The overflow will be hidden.

- * ~~Webpage~~ will be no longer responsive
That particular flex.

• down and satisfies preferred distance \rightarrow if $\exists \delta$

- * Visually looks same when content is less.

- * If the content is more than the flex width, then the width will be increased.

- * Content will not be trimmed out.

- * That particular flex will be responsive.

* Flex

The flex property is a shorthand property for the flex-grow, flex-shrink and flex-basis properties.

Syntax

flex: 0 0 200px;
 ↑ ↑ ↑
flex-grow flex-shrink flex-basis

-* Align-self

- ⇒ The align-self property specifies the alignment for the selected item inside the flex container.
- ⇒ The align-self property overrides the default alignment set by the container's align-items property.

Syntax

align-self: center | flex-start | flex-end;