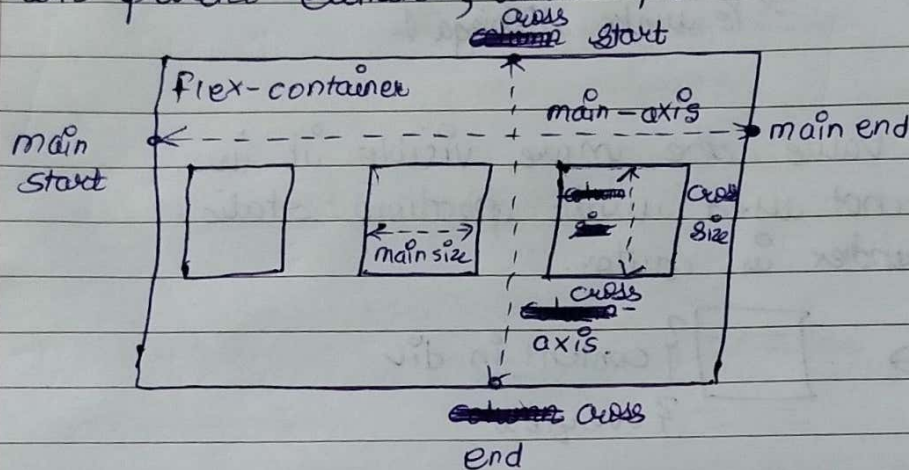


- Flexbox is a layout method to arrange items in rows and columns.

- display: flex;



Select elements which needs arrangement. Use the property on parent element, and parent becomes flex-container



It's child becomes flex-items

- Main axis is axis running in direction the flex items are laid out. (□□□)

→ main-axis → row

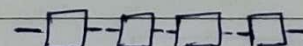
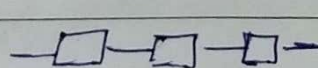
- The cross axis is axis running perpendicular to main-axis.

- flex-direction change the main-axis. By default it is row

flex-direction: row/column/row-reverse/column-reverse

- justify-content - works around main axis.

→ start, center, end, space-around, space-between, space-evenly



1st & last will stick

- align-items - works around cross axis.

→ start, end, center, stretch (default), baseline

→ stretch across cross axis.



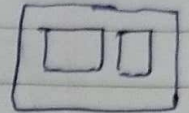
align-items : baseline ;



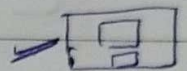
text items ek line mei

- flex-wrap

- wrap → wrap normally
- no-wrap (default) → Will not wrap.
- wrap-reverse → wrap in reverse.

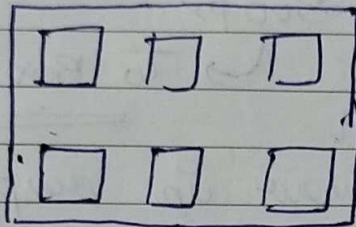


wrap ↓ ← shrink



- align-content → Dealing with flex lines

deals  
with  
this space



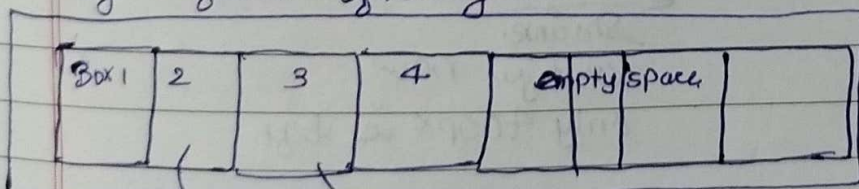
Starts, end,  
center, stretch

## Lecture - 41 - CSS Flexbox

- Order - Default value is 0.  
(-1, 0, ...)

↑  
Set order

- flex-grow - It specifies how much flex-item will grow relative to rest of flex items.
- By default flex-grow is 0.



flex-grow: 1

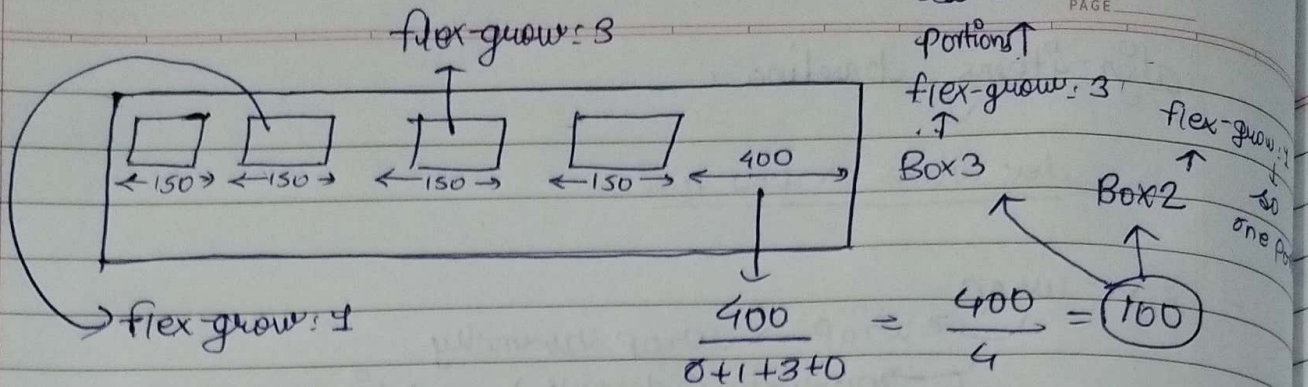
flex-grow: 3

1 + 3 = 4

→ Now empty space will be divided in 4 sections

↓  
1 section to Box 2 & 3 section to Box 3.





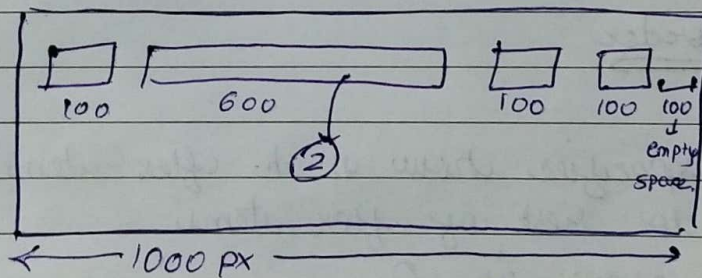
$$\left[ \frac{\text{flex-grow}}{\text{Sum of flex-grow}} \times \text{Total Space} \right]$$

$$\frac{3}{4} \times 400 = 300 \text{ px}$$

→ To Box 3

- The flex-items will grow in respective to its main-axis.

3) flex-shrink - It defines how much a flex-item should shrink relative to other items when the container is too small to fit.  
Default → 0 nahi hoti. Default value is 1.



Shrink  
Kardhaya now  
only 400px is left

$$\begin{aligned} 100 \times 1 &= 100 \\ 600 \times 2 &= 1200 \\ 100 \times 1 &= 100 \\ 100 \times 1 &= 100 \end{aligned}$$

$$\frac{1200}{1500} \times (900 - 400) = 400 \text{ px will be shrunk}$$

$$\frac{100}{1500} \times 500 = 33.3 \text{ px will be shrunk}$$



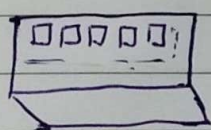
4) flex-basis - Sets the initial <sup>length</sup> ~~width~~ of flex-items

5) flex: [flex-grow] [flex-shrink] [flex-basis];

↓  
Shorthand  
property.

6) align-self property - It specifies the alignment for a selected item  
→ start, end, center, stretch

\* Media Query - It is used to create different layouts for mobile and laptops and others



Laptop



Phone

↑      ↓  
[Align device ke size ke hisse CSS]

```
@media (max-width : 400px) {  
    background-color : black;
```