

Day 12

Introduction to Flexbox

Flexbox is a powerful CSS layout module designed for creating flexible and responsive layouts. It allows for easy alignment and distribution of space among items in a container, even when their sizes are unknown or dynamic.

Container Properties:

- **display: flex;** Turns the container into a flex container, enabling flexbox layout for its children.
- **flex-direction:** Defines the direction in which the flex items are placed in the flex container (row, column, row-reverse, or column-reverse).
- **justify-content:** Aligns flex items along the main axis (horizontal by default), with options like flex-start, center, space-between, and space-around.
- **align-items:** Aligns flex items along the cross axis (vertical by default), with options such as stretch, center, flex-start, and flex-end.
- **flex-wrap:** Controls whether flex items should wrap onto multiple lines (wrap, nowrap, or wrap-reverse).

Item Properties:

- **flex-grow:** Defines how much a flex item will grow relative to other items if there is extra space.
- **flex-shrink:** Determines how much a flex item will shrink relative to other items if there is not enough space.
- **flex-basis:** Sets the initial size of a flex item before any space distribution happens, with values like pixels, percentages, or auto.
- **align-self:** Allows individual flex items to override the align-items setting, aligning them independently.

Flexbox simplifies the creation of complex layouts by providing tools for easy alignment, spacing, and responsiveness, making it a versatile choice for modern web design.