CSS Layout: Flexbox

Software Development Bootcamp

Topic
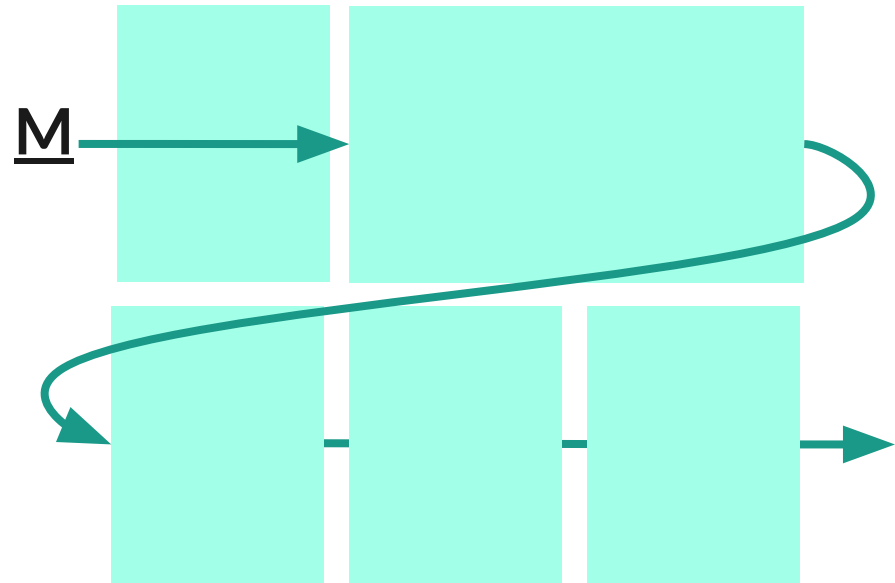
CSS Layout: Flexbox

CSS Layout: Flexbox

CSS Flexbox is another layout option introduced to address the limitations of the default flow layout.

It is a one-dimensional layout system that works with either rows or columns.

CSS Layout: Flexbox

- Elements placed along a main axis
- Default flow is left to right
- Easy to align and distribute space
- Flexible sizing of elements

```
HTML

<div class="wrapper">

    <div>One</div>

    <div>Two</div>

    <div>Three</div>

    <div>Four</div>

    <div>Five</div>

</div>
```

```
CSS

.wrapper {

  display: flex;

  flex-direction:row;

  justify-content:space-between;

}
```

In Code

<div>One</div>

<div>Two</div>

<div>Three</div>

<div>Four</div>

<div>Five</div>

Code Visualization

1

Display Property

- Creates a flex container.

    - Use semantic HTML5 elements (e.g., <main>, <sidebar>) for different sections.

    - Flex properties determine layout and alignment.

2
flex-direction & flex-wrap

Define direction of elements and how elements wrap.

```css
#flex-container {

    display: grid;

    flex-direction:row;

    flex-wrap:wrap;

}
```

3
justify-content & align-items

Define alignment and distribution.

```css
#flex-container {

    display: grid;

    flex-direction:row;

    flex-wrap:wrap;

    justify-content:space-between;

    align-items:center;

}
```

Topic

Applying Grid & Flexbox

Key Differences

Grid:

- Two-dimensional
- Layout-first design
- Works from the layout in
- Suited for larger-scale layouts

Flexbox:

- One-dimensional
- Content-first design
- Works from the content out
- Suited for smaller-scale layouts within components

When To Use Grid?

- For two-dimensional layouts (rows and columns)
- Complex grid-based designs
- When you need precise control over both row and column placement
- Creating overall page layouts
- Aligning items in both directions simultaneously

When To Use Flexbox?

- For one-dimensional layouts (either row or column)
- Flexible content flow
- When content size should dictate layout
- Aligning items within a container
- Distributing space among items in a single row or column

Combining Grid and Flexbox

- Use Grid for the overall page layout
- Use Flexbox for alignment within Grid cells
- Leverage the strengths of both for complex, responsive designs

Exercise

Floating Images