



CSS Layout

Software Development Bootcamp



Topic

CSS Layout



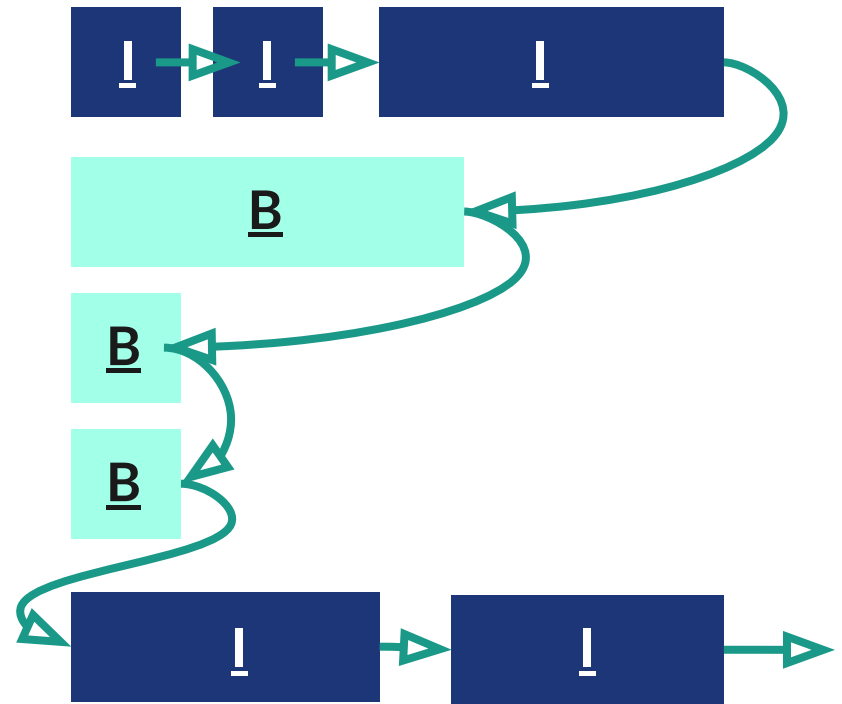
What Is CSS Layout?

CSS layout is a set of CSS properties and values designed to control how elements are positioned and sized on a web page.

CSS has a default layout: **flow**.

CSS Layout: Flow

- Elements flow from top to bottom
- Inline elements flow from left to right
- Block elements stack vertically

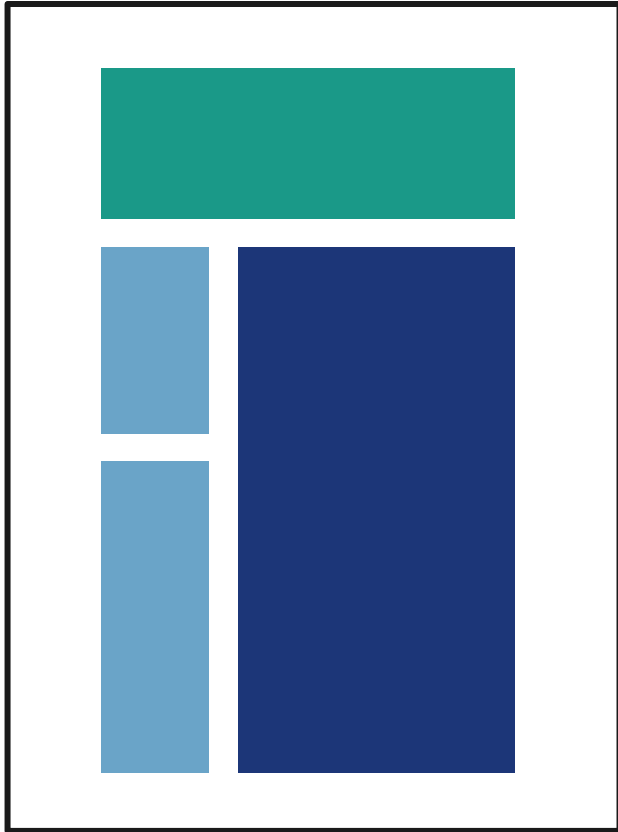




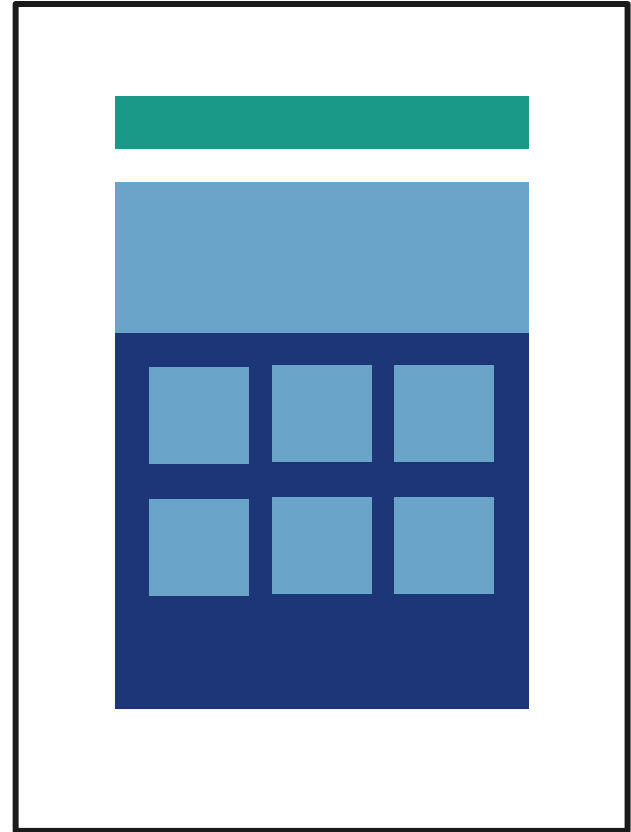
Why Change The Default?

CSS Flow cannot achieve the modern standards for website design.

- Elements stack vertically
- Limited horizontal alignment options
- No easy way to create complex grids



X



X

CSS Flow Limitations



Topic

CSS Layout: Grid



CSS Layout: Grid

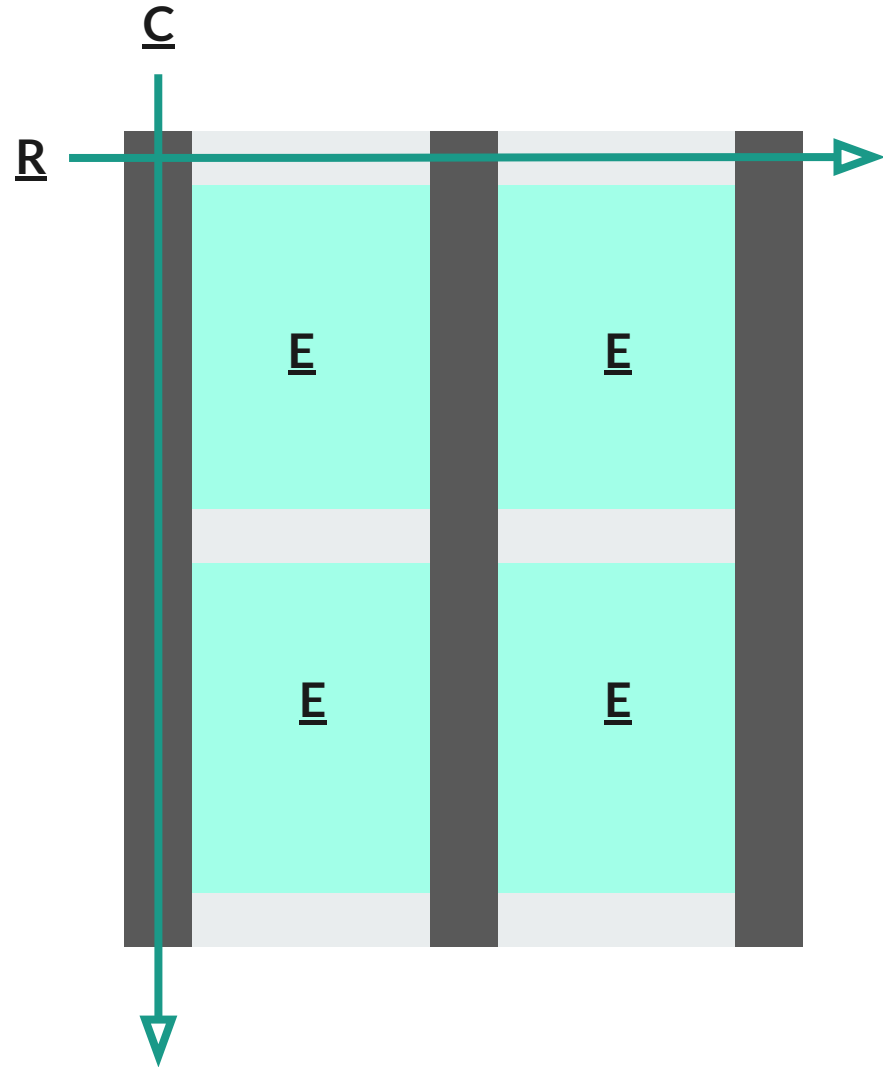
CSS Grid is one layout option introduced to address the limitations of the default flow layout.

It is a two-dimensional layout system with rows and columns.



CSS Layout: Grid

- Elements placed into cells defined by row and columns
- Default flow is left to right
- Multiple ways to control flow



HTML

```
<div class="wrapper">
  <div>One</div>
  <div>Two</div>
  <div>Three</div>
  <div>Four</div>
  <div>Five</div>
  <div>Six</div>
</div>
```

CSS

```
.wrapper {
  display: grid;
  grid-template-columns: 200px
200px 200px;
  gap: 4px;
}
```

In Code



Code Visualization



1

Display Property

- Creates a grid container.
 - Use semantic HTML5 elements (e.g., <main>, <sidebar>) for different sections.
 - Grid properties determine layout and alignment.



2

grid-template-rows & grid-template-columns

Define structure and size.

```
#grid-container {  
  display: grid;  
  grid-template-rows: 2fr 1fr 3fr 2fr;  
  grid-template-columns: 1fr 2fr 1fr 1fr;  
}
```



3 gap & column-gap & row-gap

Define space between cells.

```
#grid-container {  
  display: grid;  
  grid-template-rows: 2fr 1fr 3fr 2fr;  
  grid-template-columns: 1fr 2fr 1fr  
  1fr;  
  /* Sets the column gap at 10px */  
  column-gap: 10px;  
  /* Sets the row gap at 15px */  
  row-gap: 15px  
}
```

```
#grid-container {  
  display: grid;  
  grid-template-rows: 2fr 1fr 3fr 2fr;  
  grid-template-columns: 1fr 2fr 1fr  
  1fr;  
  /* Sets both the row and column gap to  
  10px */  
  gap: 10px  
}
```



Exercise

Image Gallery