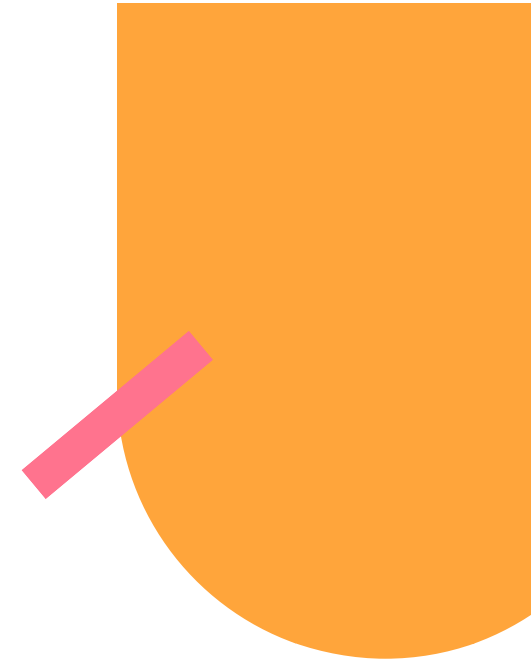
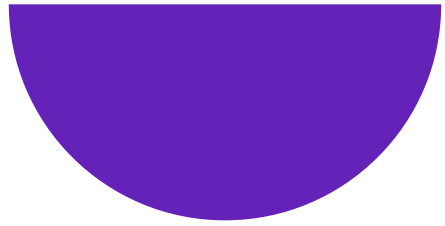




Header

CSS Foundations





Flexbox + Grid

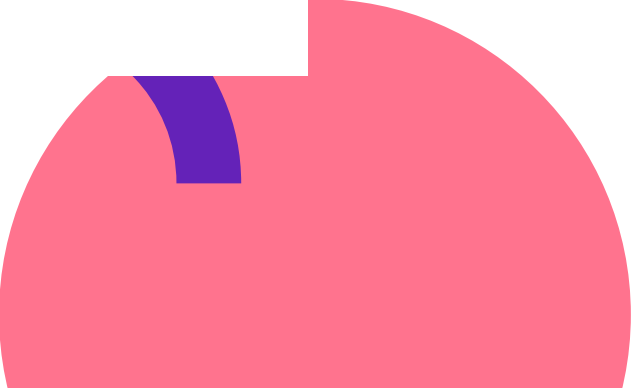
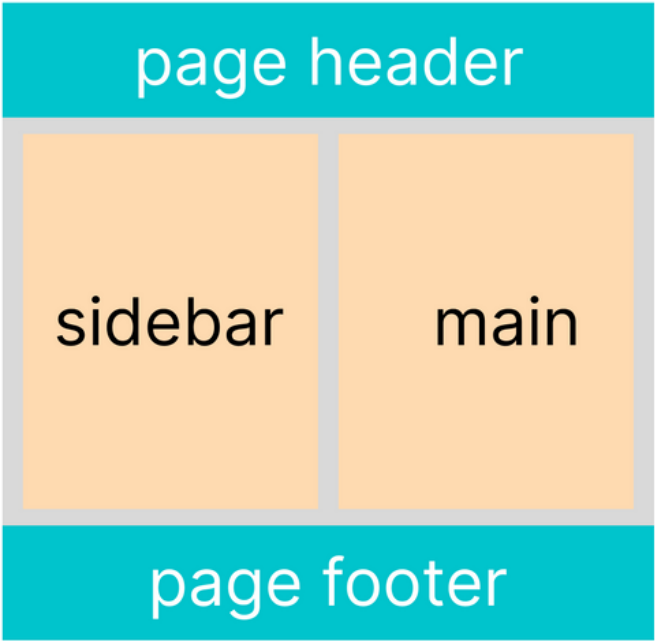
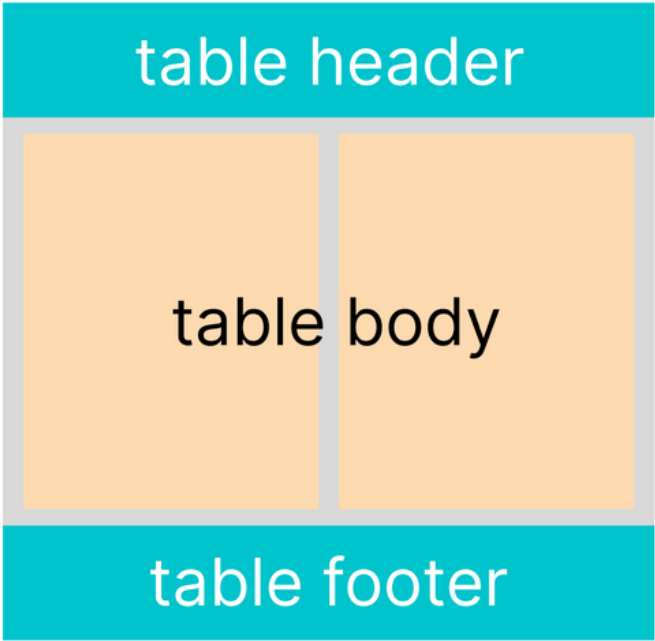




A History Of CSS Layouts

Table







A History Of CSS Layouts

`<table role="presentation">`





A History Of CSS Layouts

Display





```
<ul>
  <li>One</li>
  <li>Two</li>
  <li>Three</li>
</ul>
```

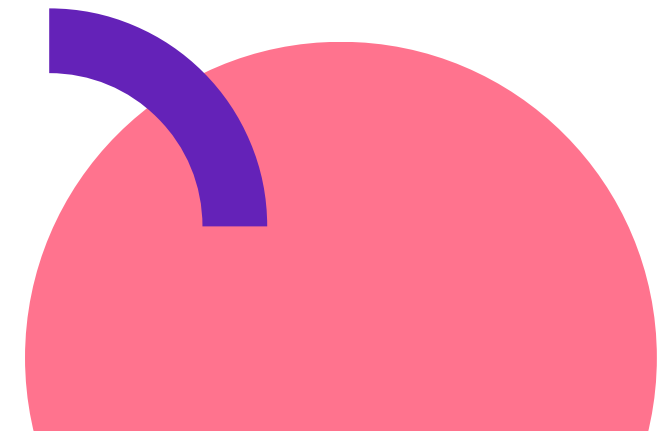


```
li {
  background: blue;
  color: white;
  padding: 16px;
  display: inline-block;
}
```

One

Two

Three



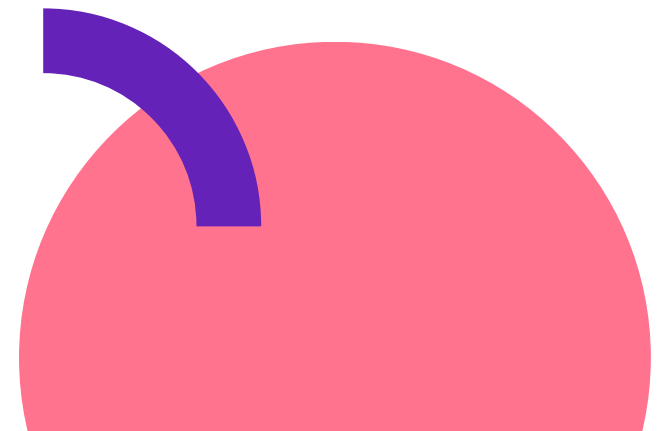


```
<ul>
  <li>One</li>
  <li>Two</li>
  <li>Three</li>
</ul>
```



```
li {
  background: blue;
  color: white;
  padding: 16px;
  display: inline-block;
  margin-right: -4px;
}
```

One Two Three





A History Of CSS Layouts

Floats





```
  
<p>...</p>  
<p>...</p>  
<p>...</p>  
<p>...</p>
```



Lorem ipsum dolor sit amet, consectetur adipiscing elit. Mollitia suscipit deleniti adipisci rerum quia in

reprehenderit saepe at fuga soluta, consequatur, minima ducimus? Illo maiores ad mollitia optio. Autem, rem.

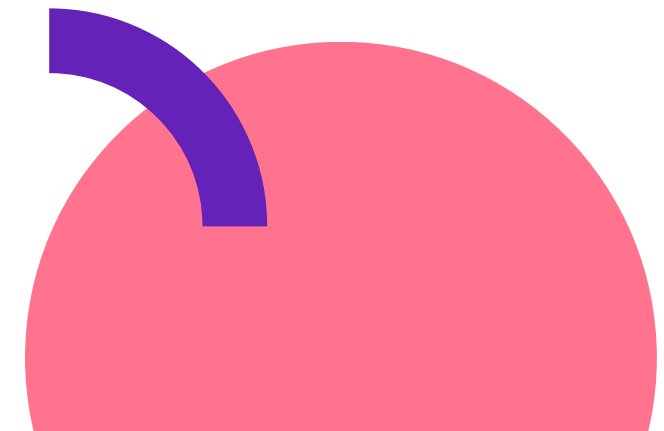
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Mollitia suscipit deleniti adipisci rerum quia in reprehenderit saepe at fuga soluta, consequatur, minima ducimus? Illo maiores ad mollitia optio. Autem, rem.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Mollitia suscipit deleniti adipisci rerum quia in reprehenderit saepe at fuga soluta, consequatur, minima ducimus? Illo maiores ad mollitia optio. Autem, rem.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Mollitia suscipit deleniti adipisci rerum quia in reprehenderit saepe at fuga soluta, consequatur, minima ducimus? Illo maiores ad mollitia optio. Autem, rem.



```
img {  
  width: 300px;  
  float: left;  
  margin: 0 16px 16px 0;  
}
```





```
<div>
  
  <p>...</p>
</div>
```

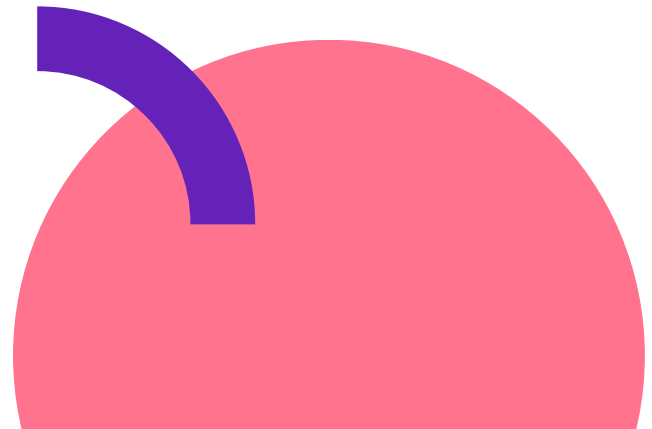


```
div {
  height: 160px;
  border: 2px solid black;
}

img {
  width: 300px;
  float: left;
  margin: 0 16px 16px 0;
}
```



Lorem ipsum dolor sit amet, consectetur adipiscing elit. Mollitia suscipit deleniti adipisci rerum quia in reprehenderit saepe at fuga soluta, consequatur, minima ducimus? Illo maiores ad mollitia optio. Autem, rem.





A History Of CSS Layouts

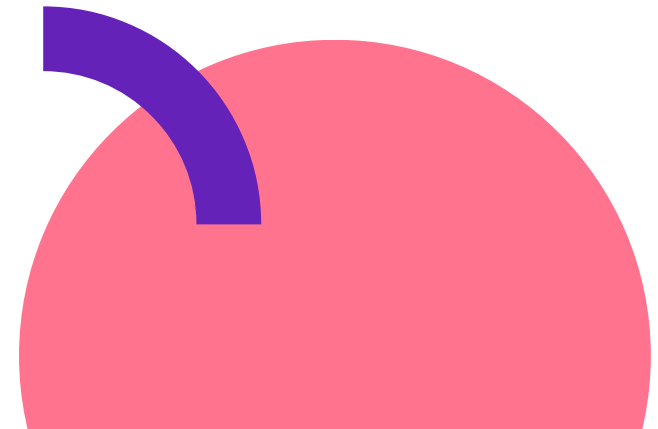
Flexbox



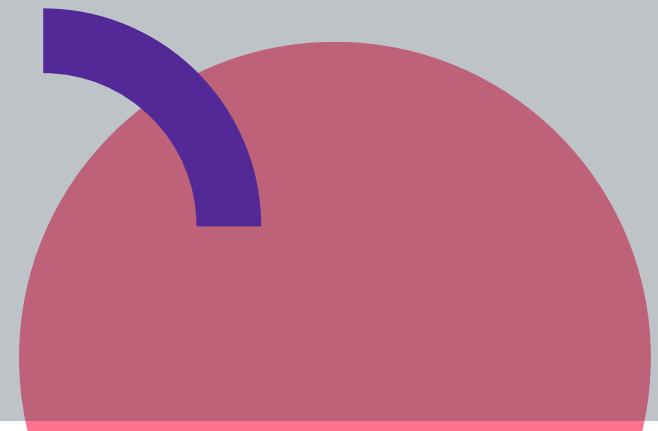


A History Of CSS Layouts

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

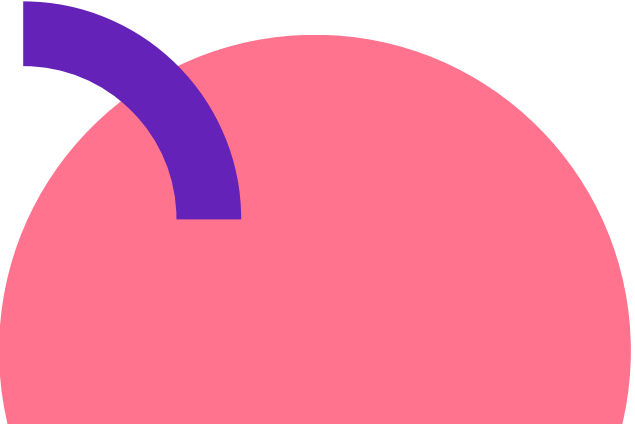


CodePen

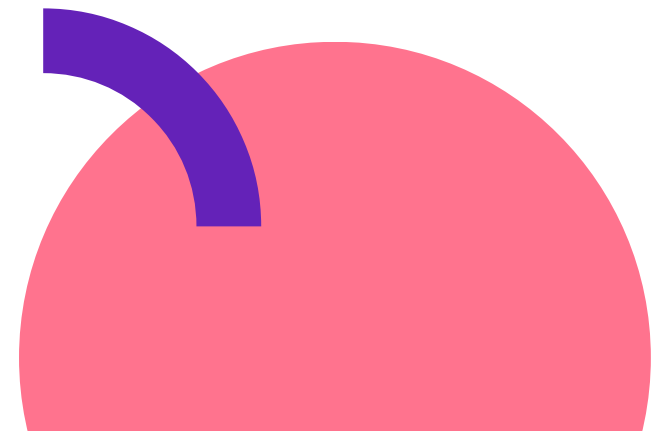
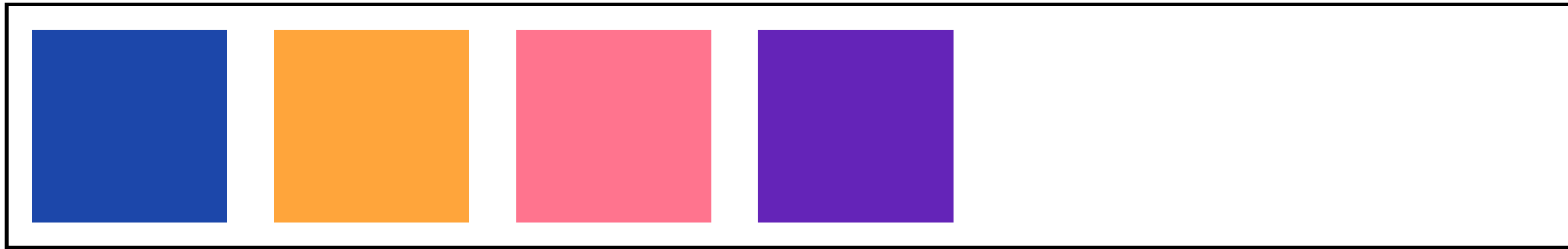




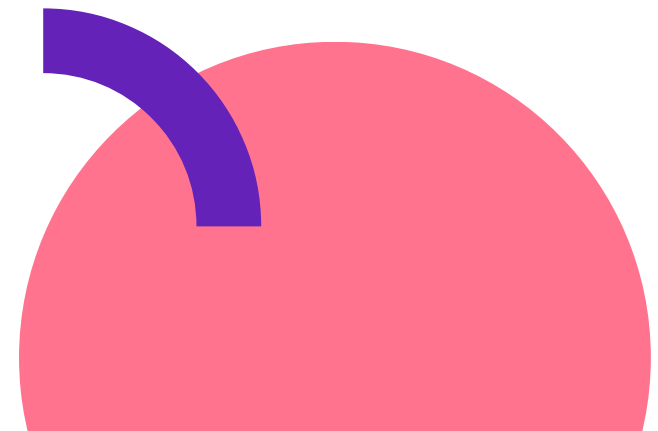
flex-direction

- row
 - row-reverse
 - column
 - column-reverse
- 

flex-direction: row;



flex-direction: row-reverse;



flex-direction: column;

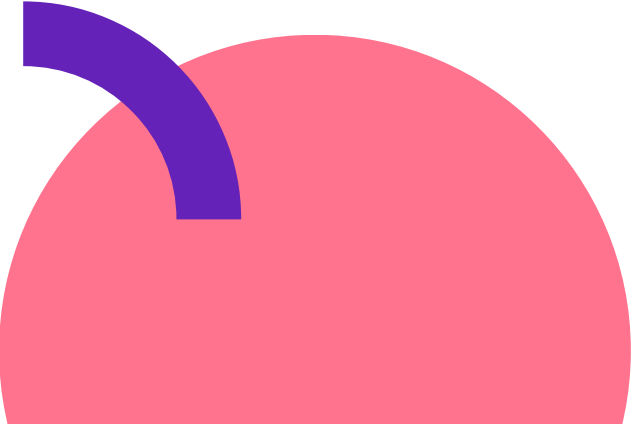


flex-direction: column-reverse;

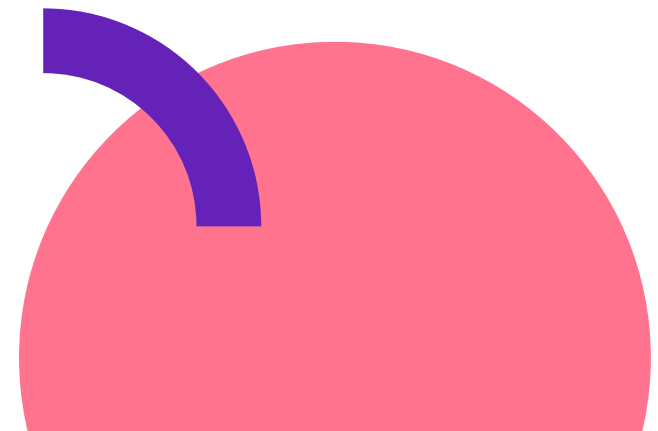
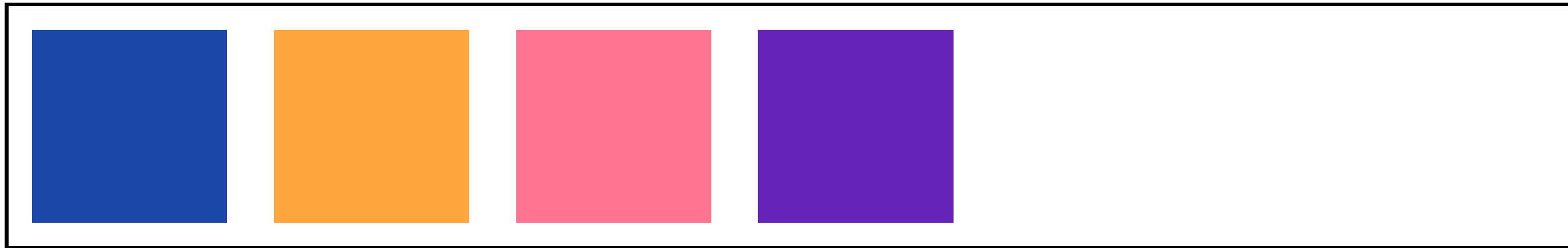




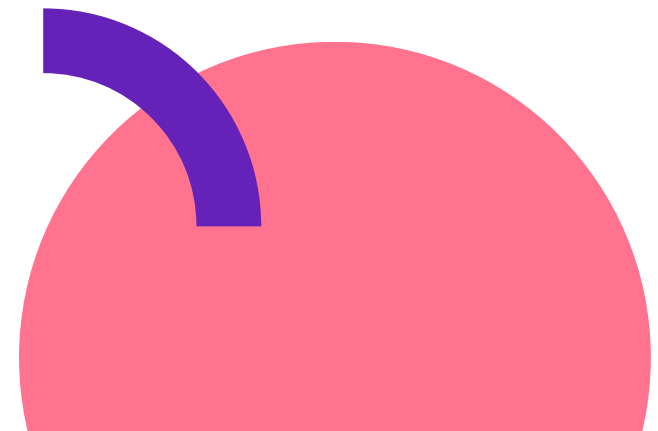
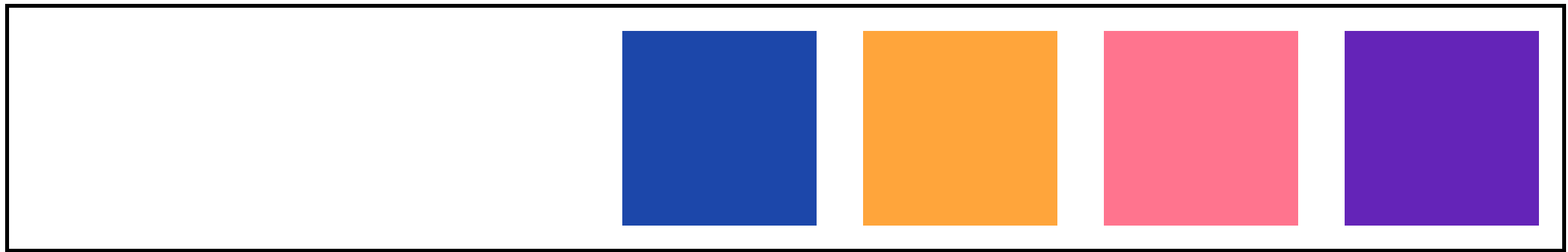
justify-content

- flex-start
 - flex-end
 - center
 - space-between
 - space-around
 - space-evenly
- 

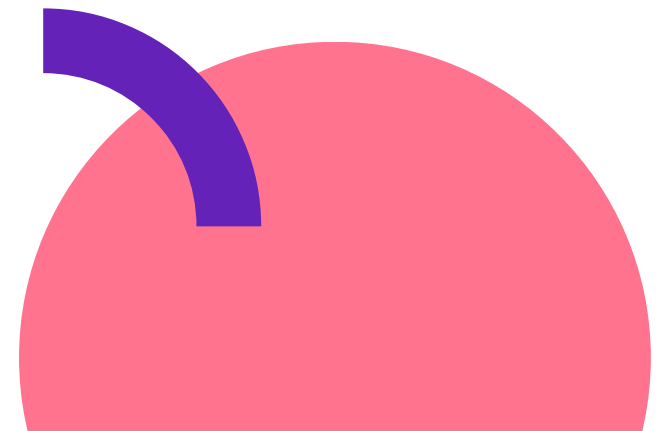
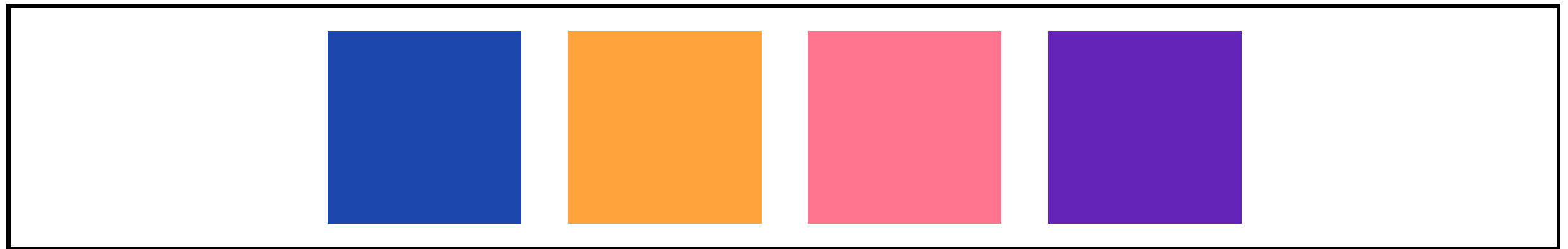
`justify-content: flex-start;`



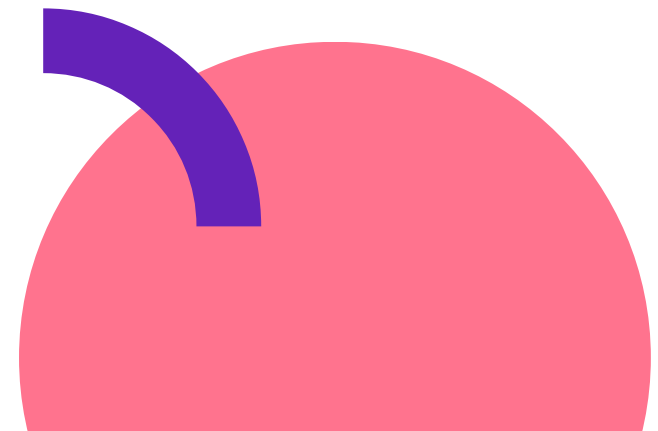
`justify-content: flex-end;`



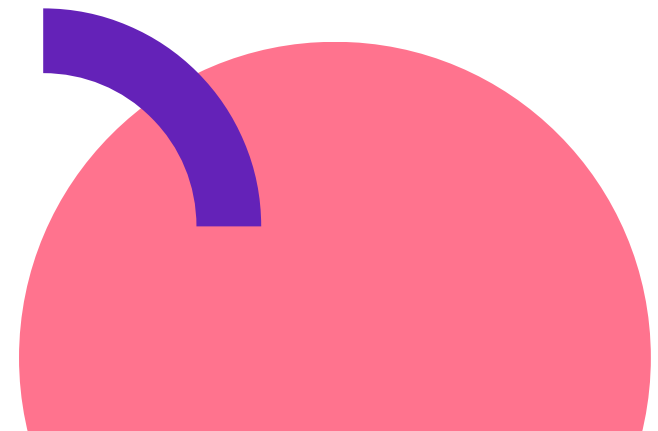
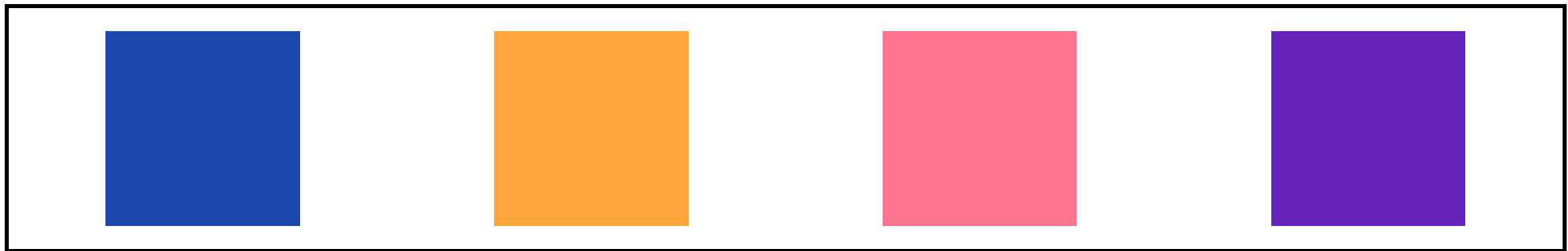
`justify-content: center;`



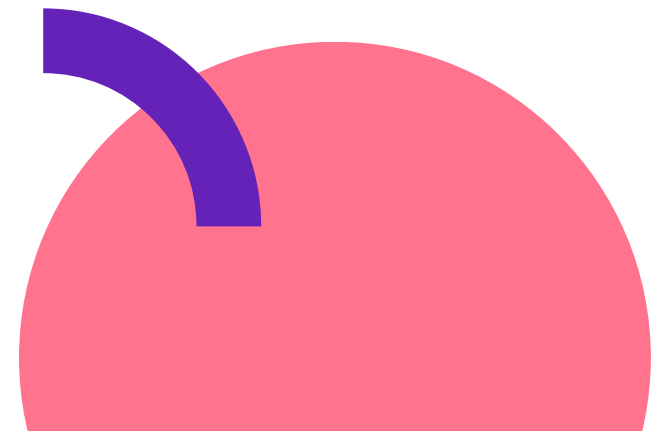
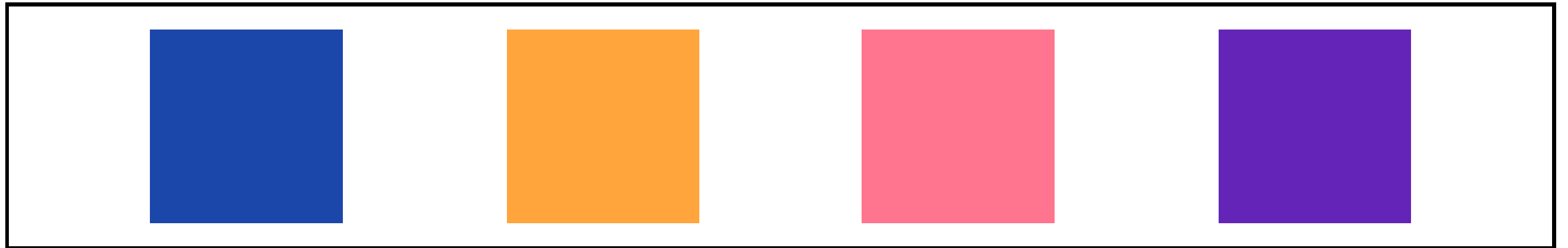
justify-content: space-between;



justify-content: space-around;

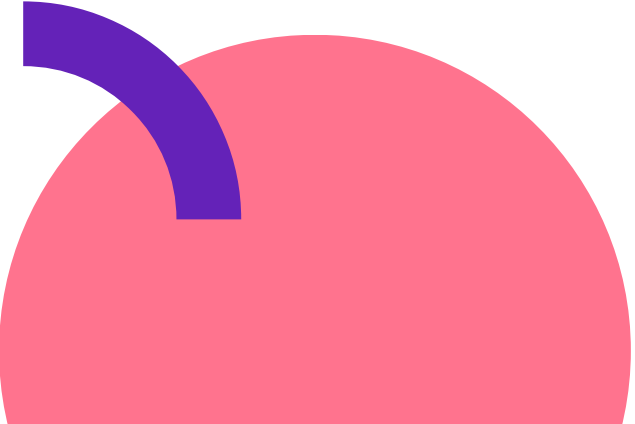


justify-content: space-evenly;

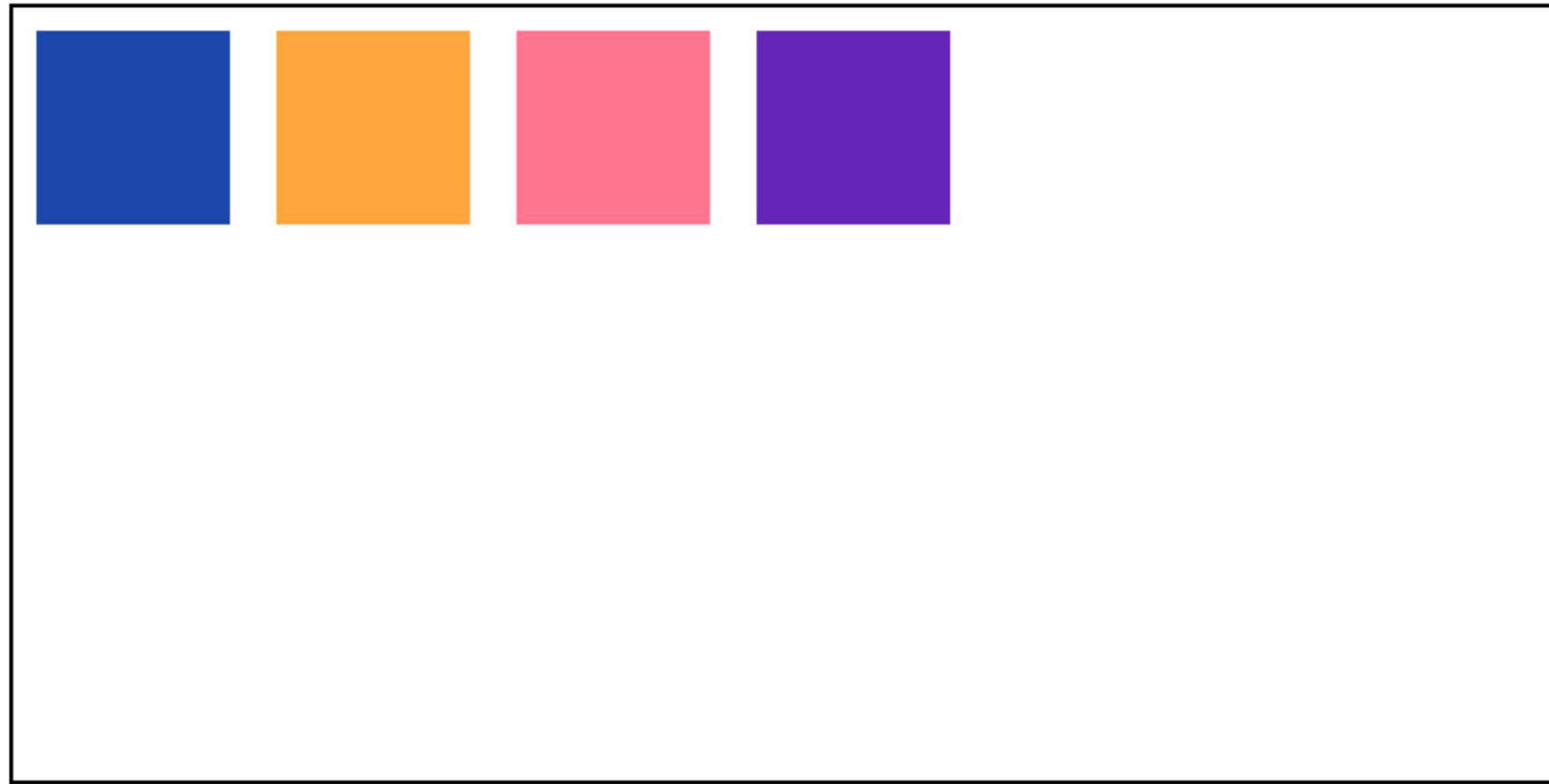




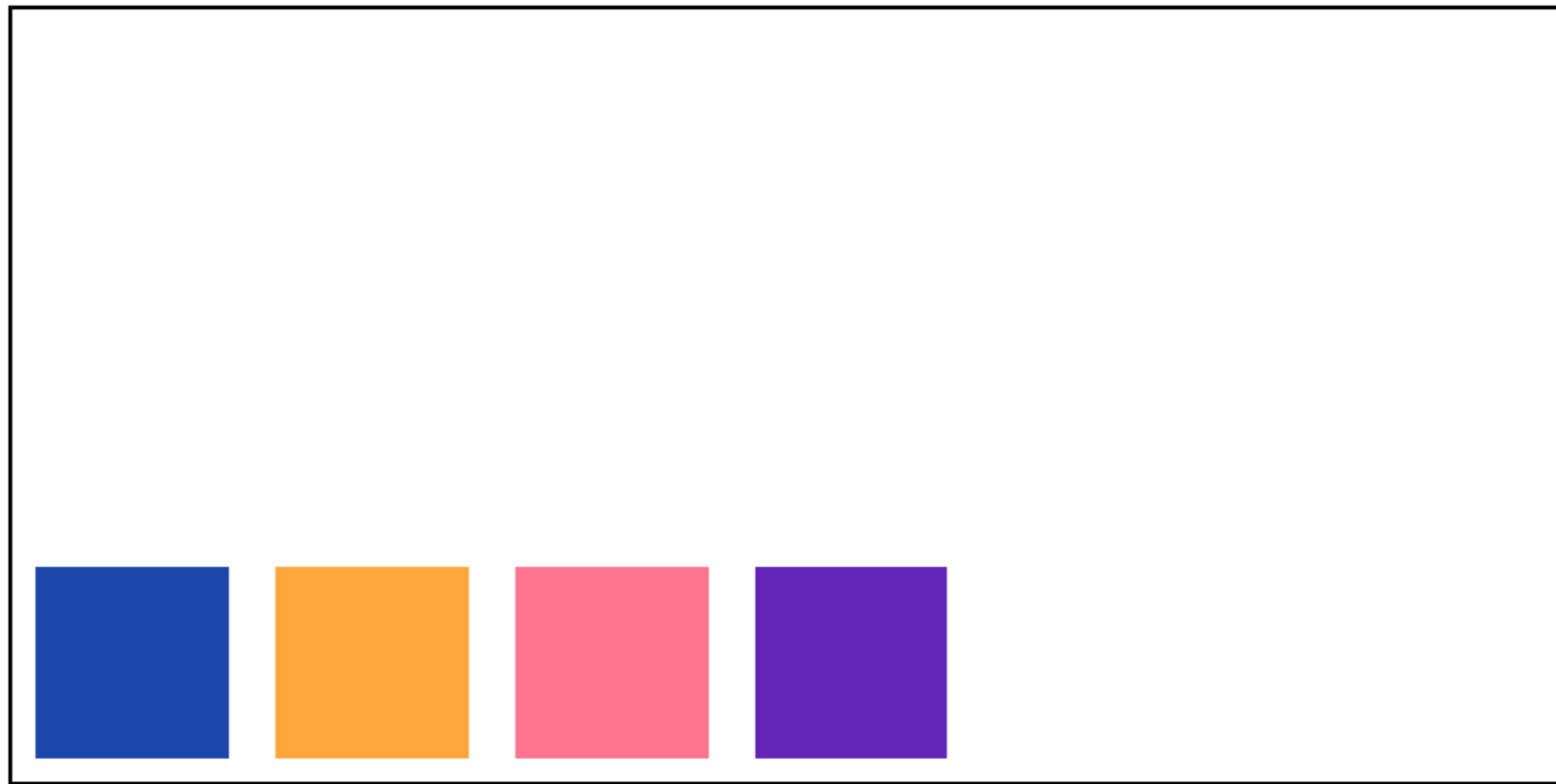
align-items

- flex-start
 - flex-end
 - center
 - stretch
- 

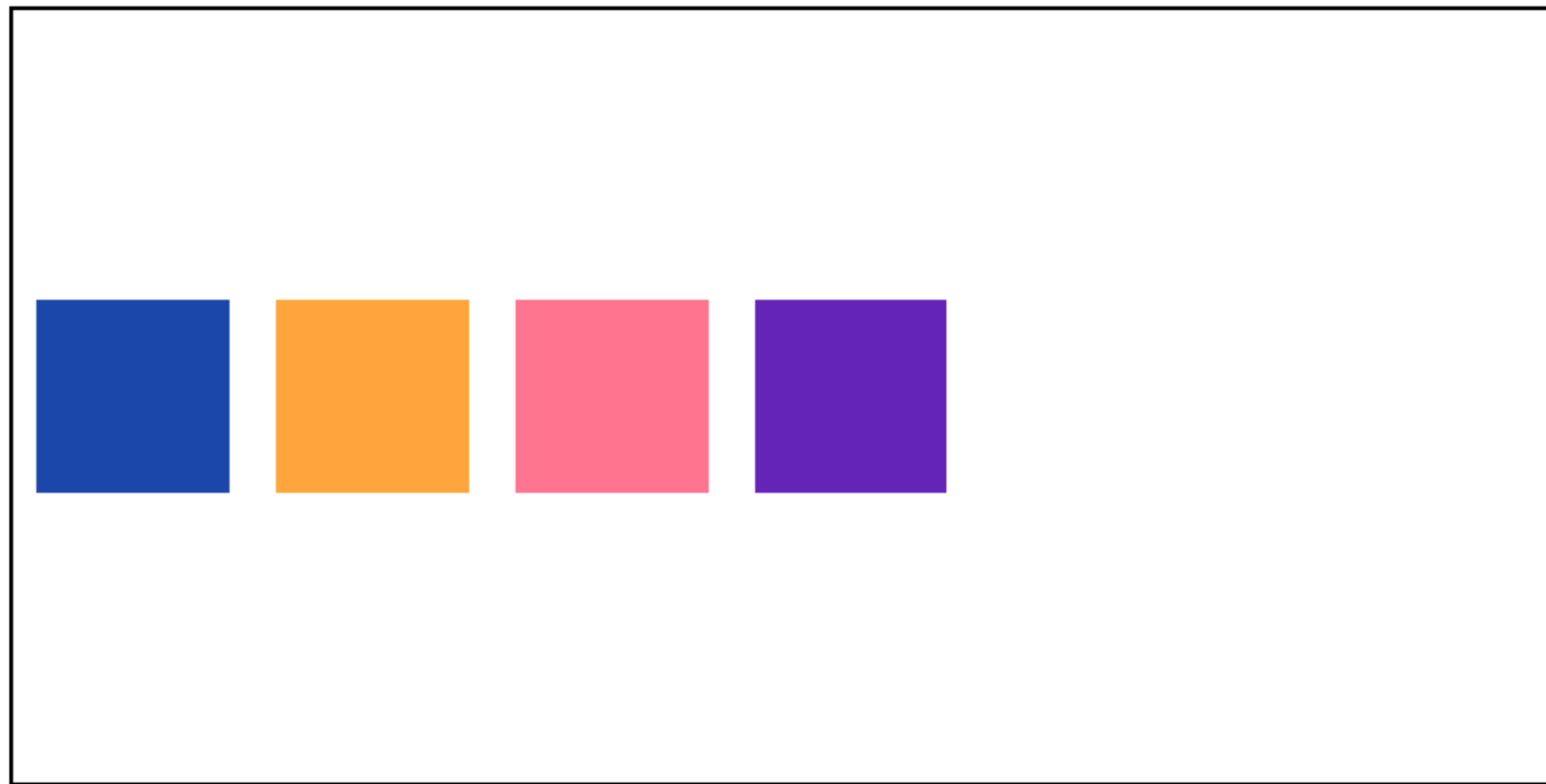
`align-items: flex-start;`



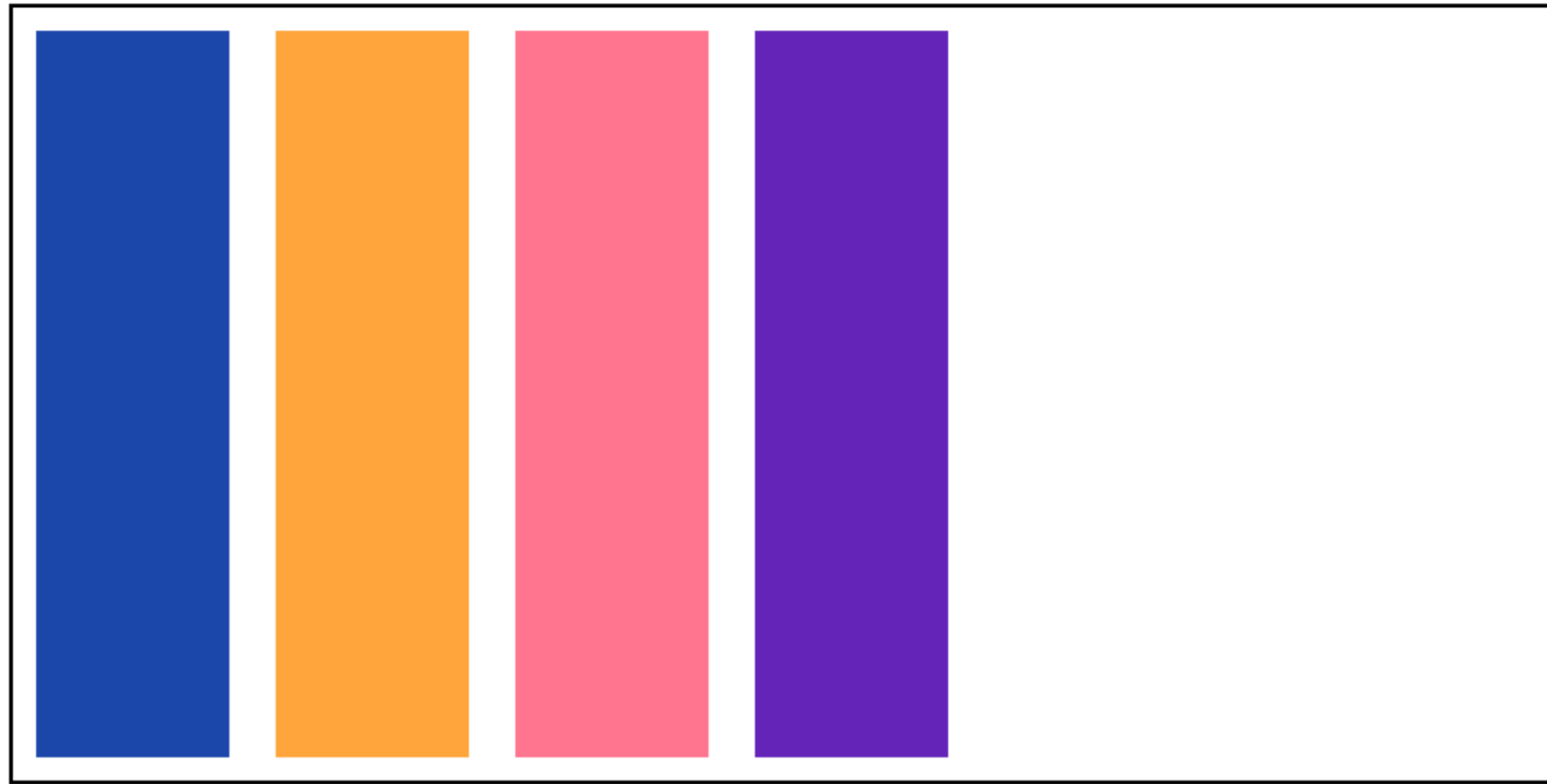
`align-items: flex-end;`



align-items: center;

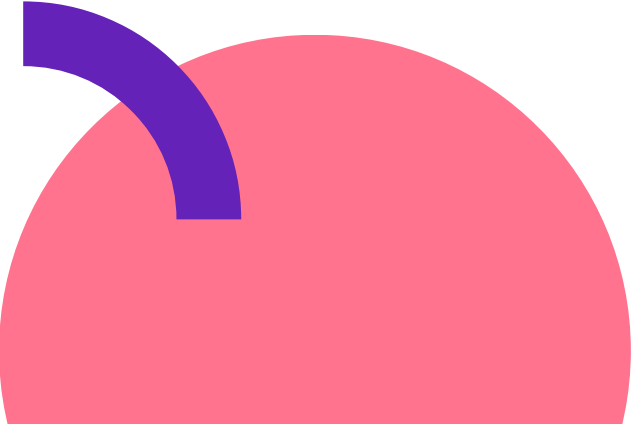


align-items: stretch;

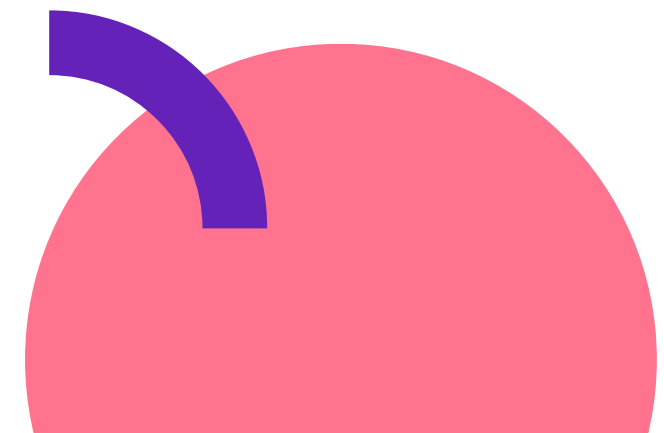
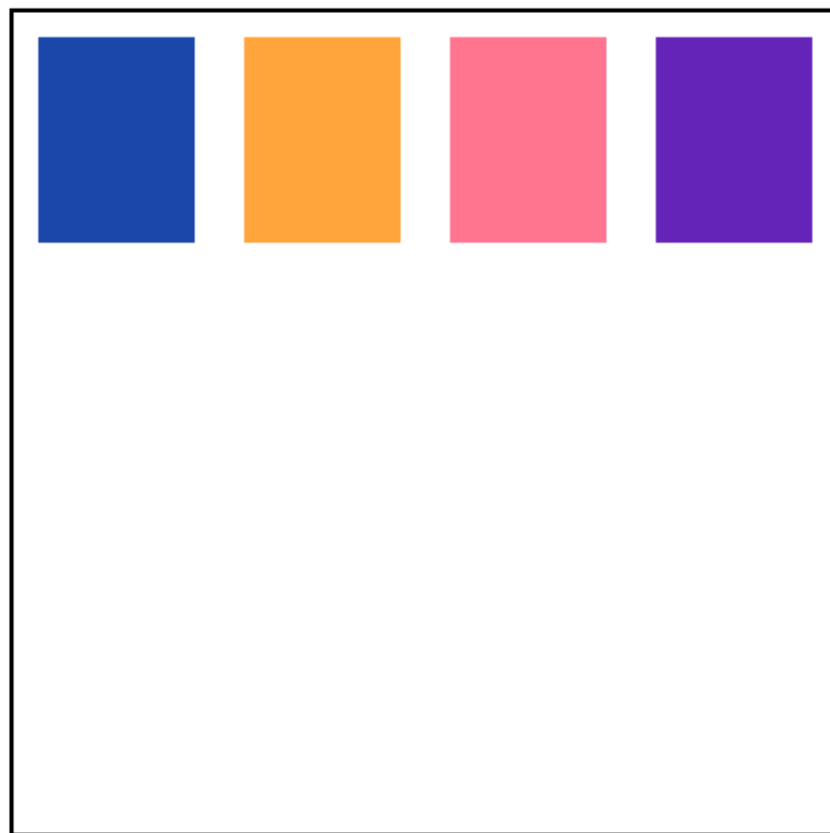




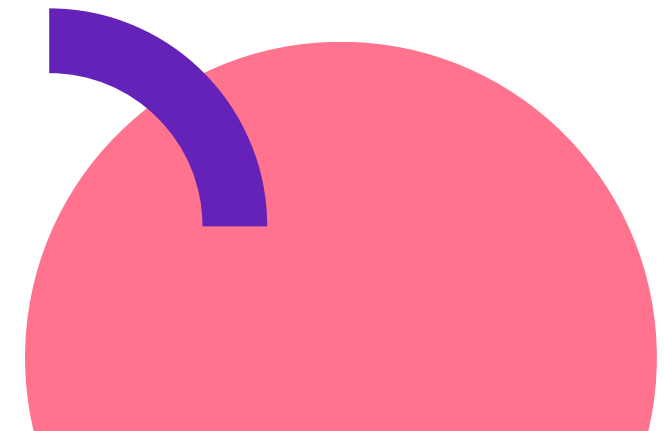
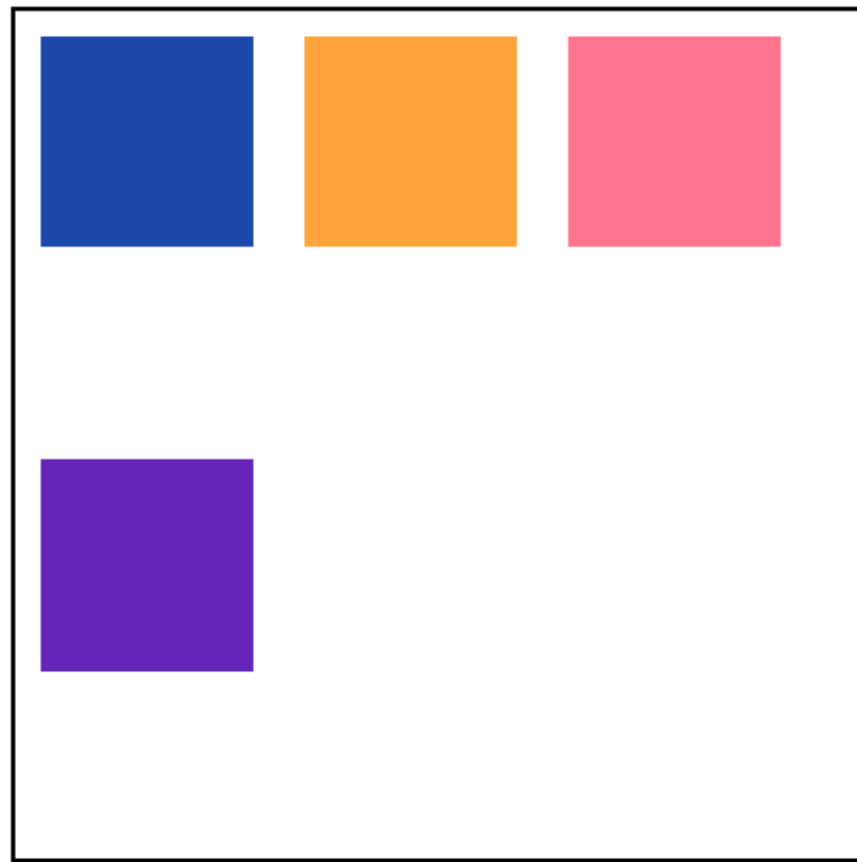
flex-wrap

- no-wrap
 - wrap
 - wrap-reverse
- 
- 

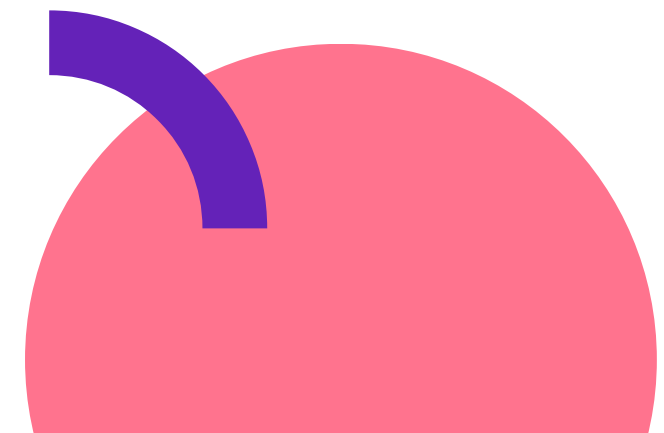
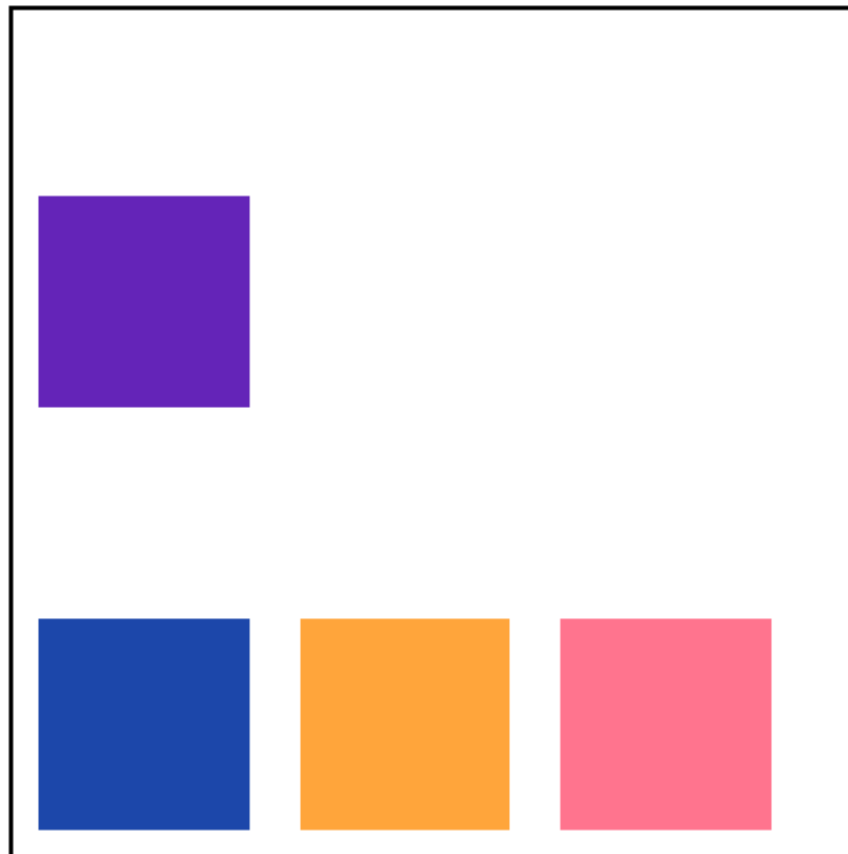
`flex-wrap: no-wrap;`



`flex-wrap: wrap;`



flex-wrap: wrap-reverse;





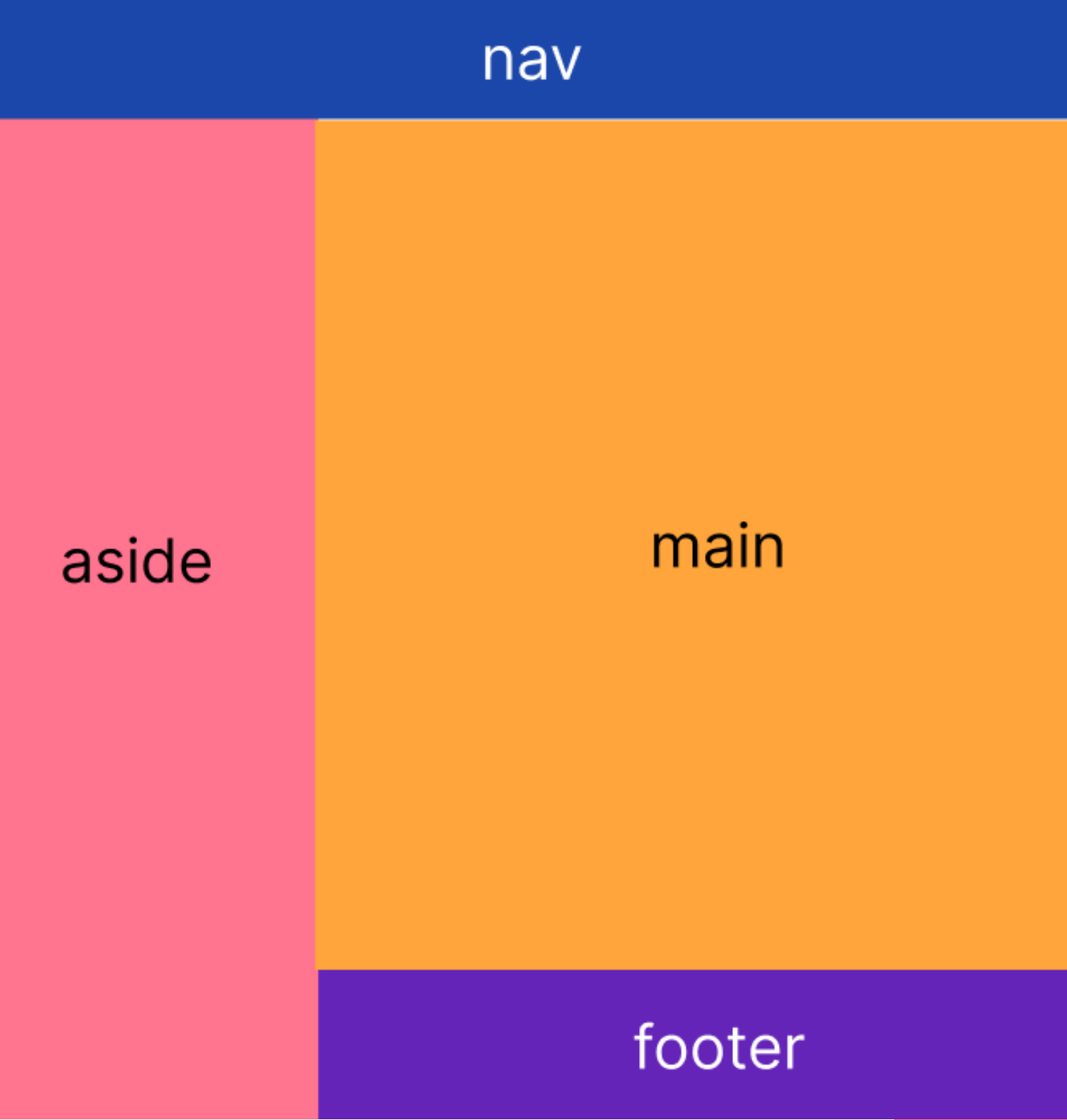
A History Of CSS Layouts

Grid



Grid

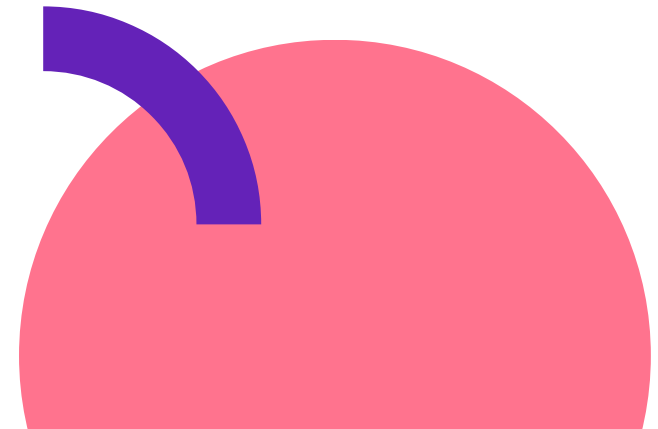
```
● ● ●  
  
.container {  
  display: grid;  
}
```

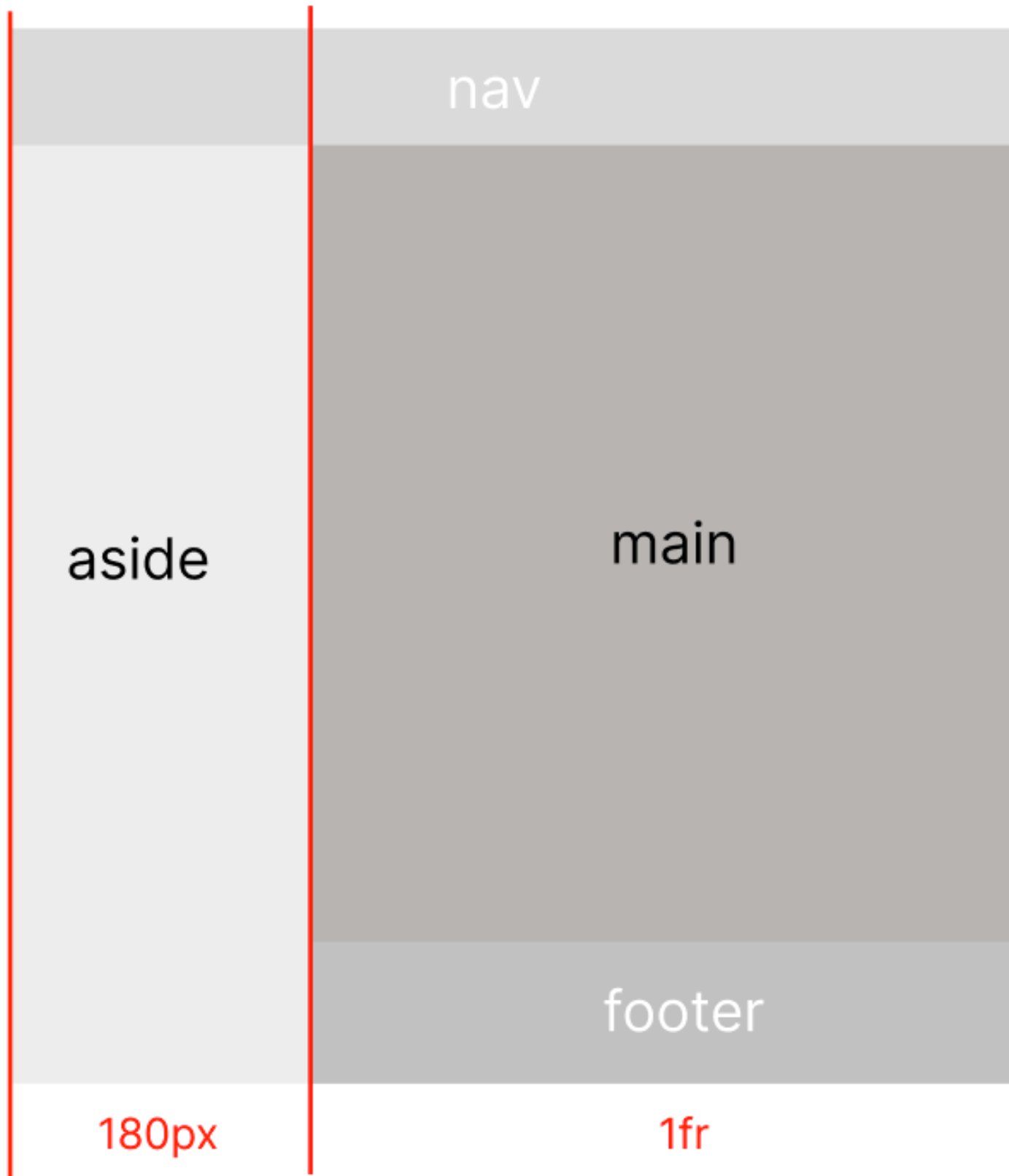




grid-template-columns

- `<track-size>`: length, percentage, fraction of free space using 'fr'

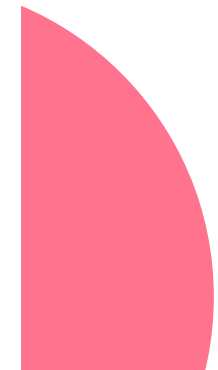
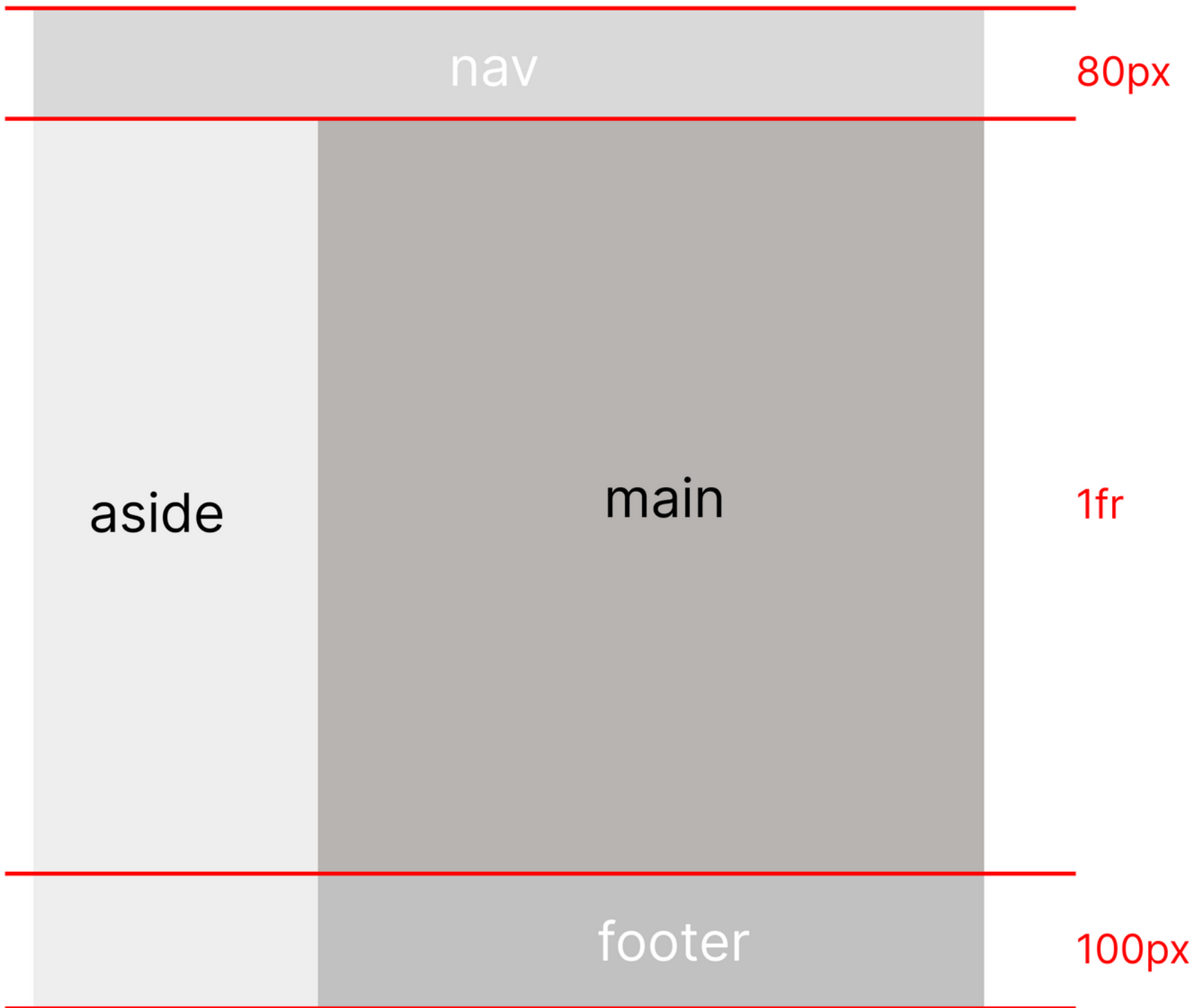




Grid



```
.container {  
  display: grid;  
  grid-template-columns: 180px 1fr;  
}
```



Grid

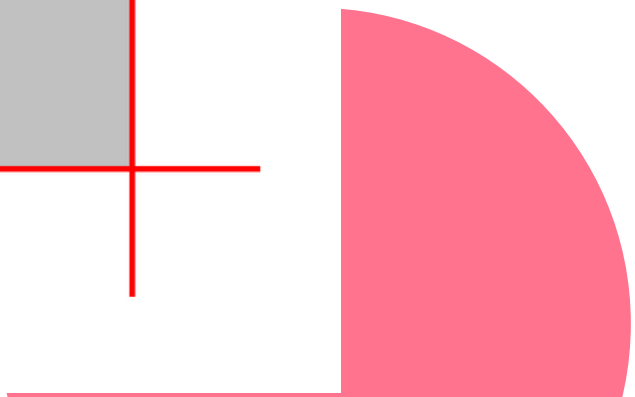
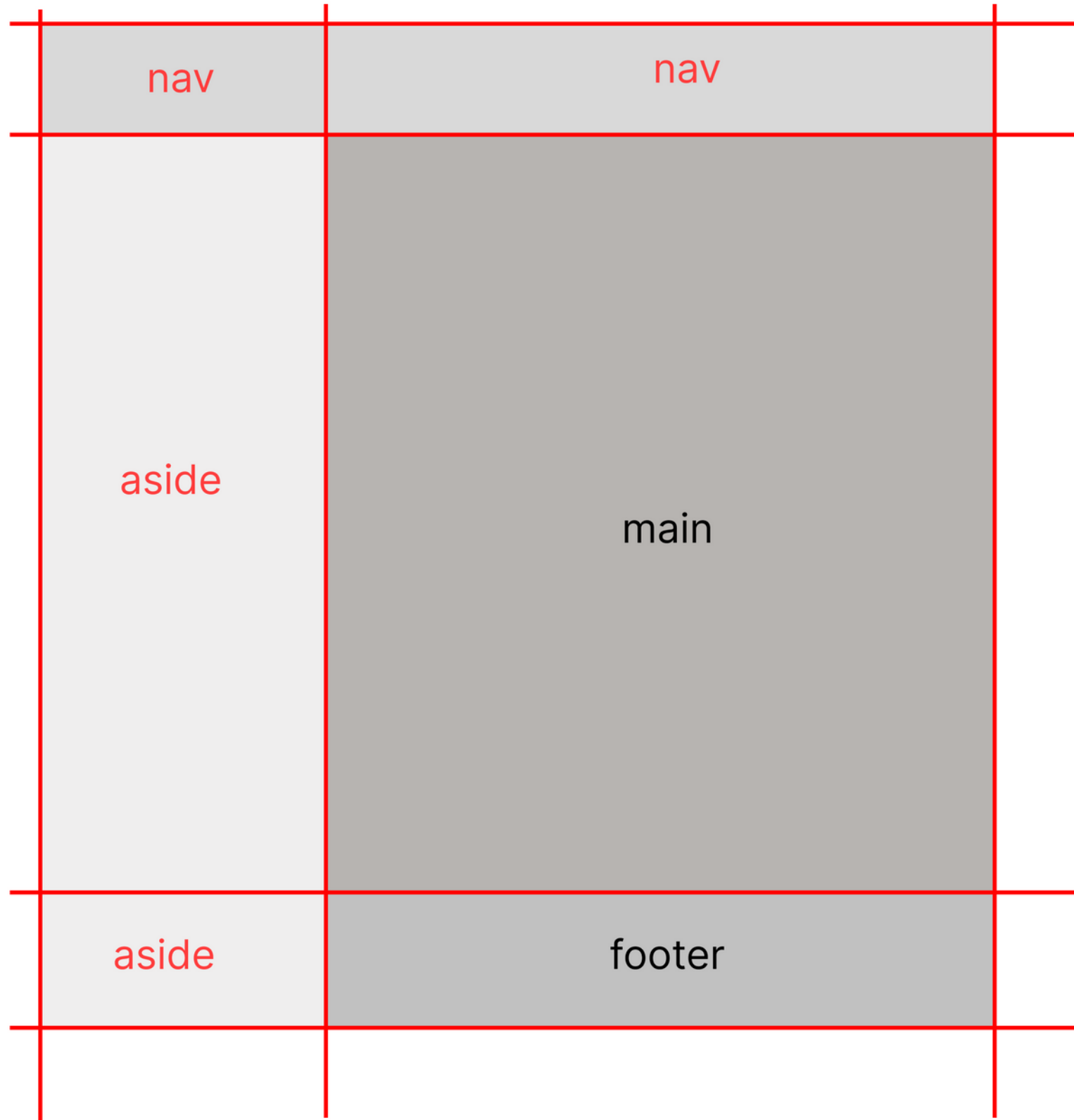


```
.container {  
  display: grid;  
  grid-template-columns: 180px 1fr;  
  grid-template-rows: 80px 1fr 100px;  
}
```

Grid



```
nav { grid-area: 1 / 1 / 2 / 3; }  
aside { grid-area: 2 / 1 / 4 / 2; }  
main { grid-area: 2 / 2 / 3 / 3; }  
footer { grid-area: 3 / 2 / 4 / 3; }
```



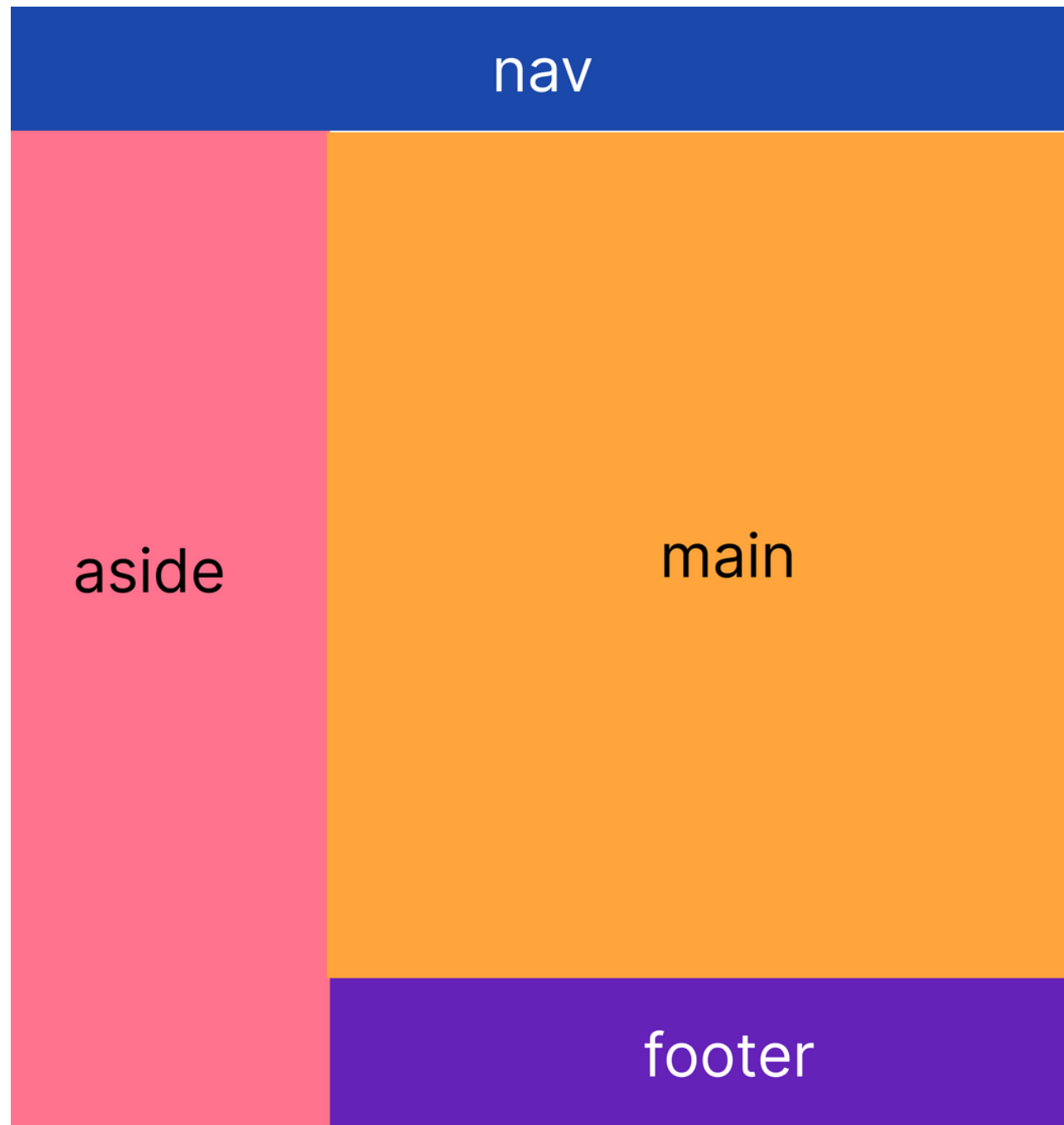
Grid

```
● ● ●  
  
.container {  
  ...  
  grid-template-areas:  
    "nav nav"  
    "aside main"  
    "aside footer";  
}
```

Grid



```
nav { grid-area: nav; }  
aside { grid-area: aside; }  
main { grid-area: main; }  
footer { grid-area: footer; }
```



<https://codepen.io/emmabostian/pen/vYVJGEY>



CSS Grids and Flexbox for Responsive Web Design

Topics: [CSS](#) • [Responsive Design](#)



Jen Kramer

Freelance Instructor

5 hours, 30 minutes

This course has been updated! We now recommend you take the [CSS Grid & Flexbox for Responsive Layouts, v2](#) course.



Starting with a review of floats for context, but quickly moving into Flexbox and CSS grids, this essential course is for web developers that want to build responsive, beautiful web applications faster using less code and best practices. Master CSS Grid and Flexbox, the latest tools and tricks to layout beautiful, responsive web applications with less code.

Published: January 30, 2018

Continue Watching

Bookmarked

Resources and Downloads

[Code & Slides \(Github\)](#)

Table of Contents

Introduction and Setup



Introduction

After introducing herself, Jen provides an overview of the course.

00:00:00 - 00:02:45

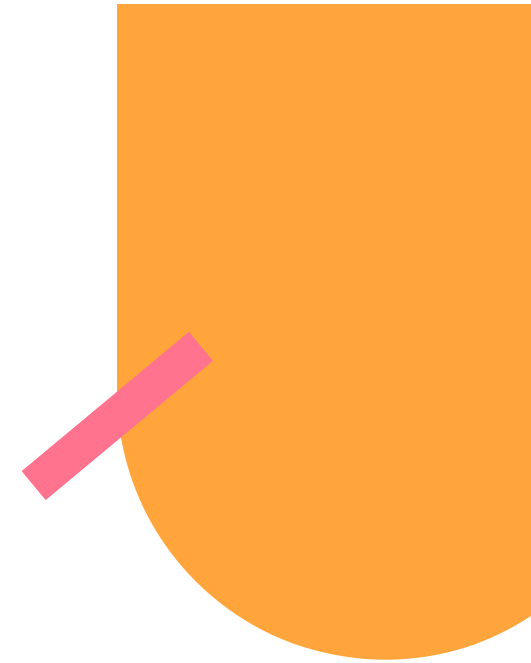


Resources

The GitHub repository for this course is explored and described by Jen.

00:02:46 - 00:05:16





Combinators





Combinators

Combine selectors in a way
that gives them a relationship.





Descendent Selector

ul li a





```
<ul>
  <li><a href="#">Link 1</a></li>
  <li><a href="#">Link 2</a></li>
  <li><a href="#">Link 3</a></li>
</ul>

<a href="#">Link 4</a>
```



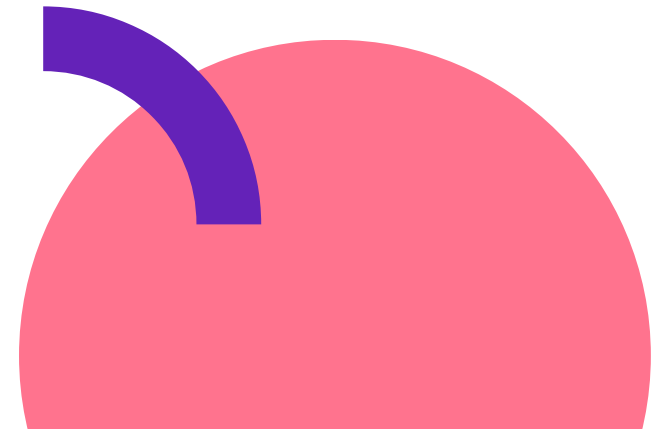
```
ul li a {
  color: red;
}
```

Link 1

Link 2

Link 3

Link 4





```
<ul>
  <li><a href="#">Link 1</a></li>
  <li><a href="#">Link 2</a></li>
  <li><a href="#">Link 3</a></li>
</ul>

<a href="#">Link 4</a>
```



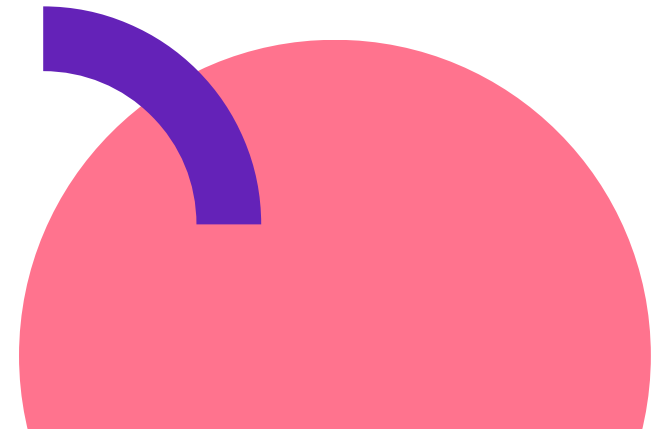
```
ul li a {
  color: red;
}
```

Link 1

Link 2

Link 3

Link 4





Child Combinators (Direct Descendants)

`div.text > p`





```
<div class="text">  
  <p>Here is some text.</p>  
  <div>  
    <p>Here is some more text.</p>  
  </div>  
</div>
```



```
div.text > p {  
  font-weight: bold;  
}
```

Here is some text.

Here is some more text.



```
<div class="text">  
  <p>Here is some text.</p>  
  <div>  
    <p>Here is some more text.</p>  
  </div>  
</div>
```



```
div.text > p {  
  font-weight: bold;  
}
```

Here is some text.

Here is some more text.



Adjacent Sibling Combinators

img + p





```
<h1>Hello world</h1>  
<p>This is a paragraph!</p>  
<p>This is another paragraph!</p>
```



```
h1 + p {  
  color: red;  
}
```

Hello World

This is a paragraph!
This is another paragraph!



```
<h1>Hello world</h1>
<p>This is a paragraph!</p>
<p>This is another paragraph!</p>
```



```
h1 + p {
  color: red;
}
```

Hello World

This is a paragraph!
This is another paragraph!



```
<h1>Hello world</h1>
<div>
  <p>This is a paragraph!</p>
  <p>This is another paragraph!</p>
</div>
```



```
h1 + p {
  color: red;
}
```

Hello World

This is a paragraph!
This is another paragraph!



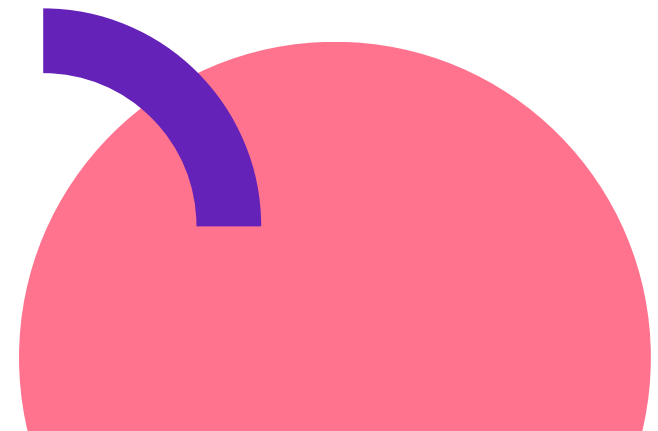
```
<h1>Hello world</h1>
<div>
  <p>This is a paragraph!</p>
  <p>This is another paragraph!</p>
</div>
```




```
h1 + p {
  color: red;
}
```

Hello World

This is a paragraph!
This is another paragraph!





General Sibling Combinators

$p \sim \text{code}$



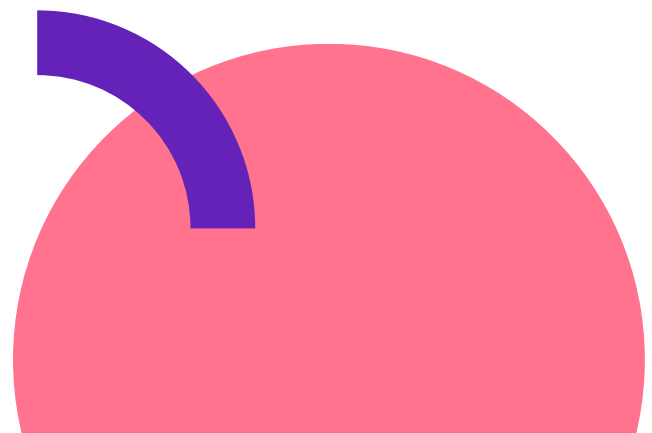


```
<p>This is a paragraph.</p>  
<code>Here is some code</code>  
<code>Here is some more code</code>  
<p>This is another paragraph</p>  
<div>  
  <code>Here is the last block of code</code>  
</div>
```



```
p ~ code {  
  color: red;  
}
```

This is a paragraph.
Here is some code
Here is some more code
This is another paragraph
Here is the last block of code



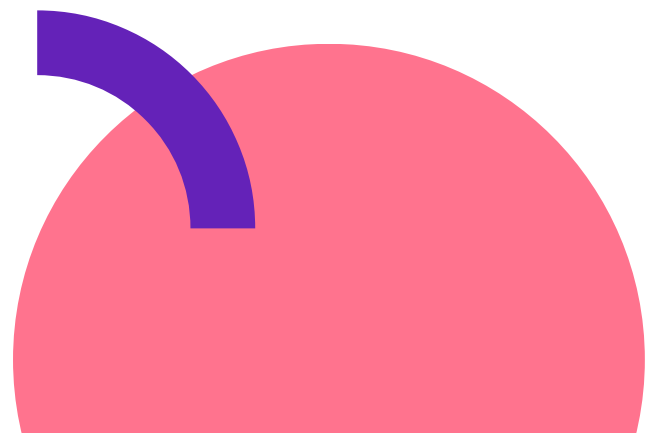


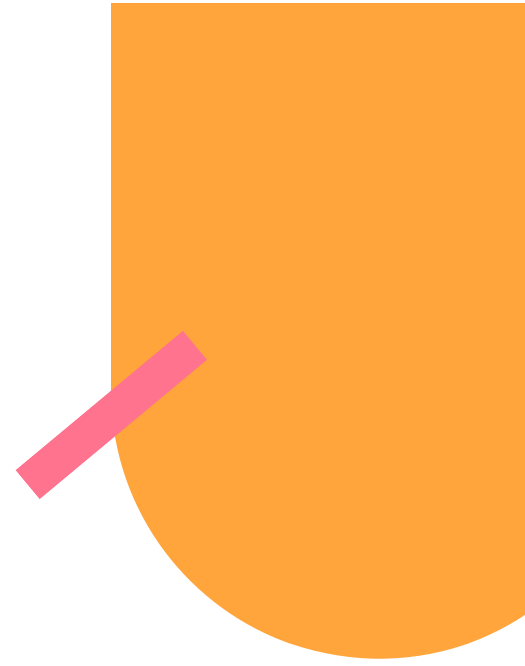
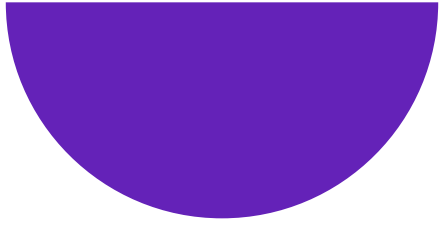
```
<p>This is a paragraph.</p>
<code>Here is some code</code>
<code>Here is some more code</code>
<p>This is another paragraph</p>
<div>
  <code>Here is the last block of code</code>
</div>
```



```
p ~ code {
  color: red;
}
```

This is a paragraph.
Here is some code
Here is some more code
This is another paragraph
Here is the last block of code





BEM





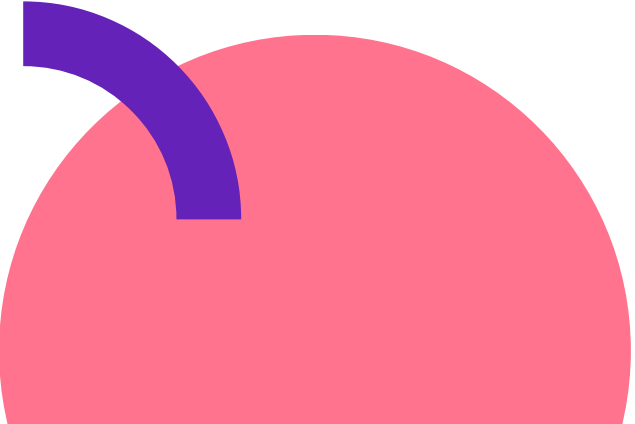
Block Element Modifier (BEM)

Design methodology that helps create reusable components and code sharing.




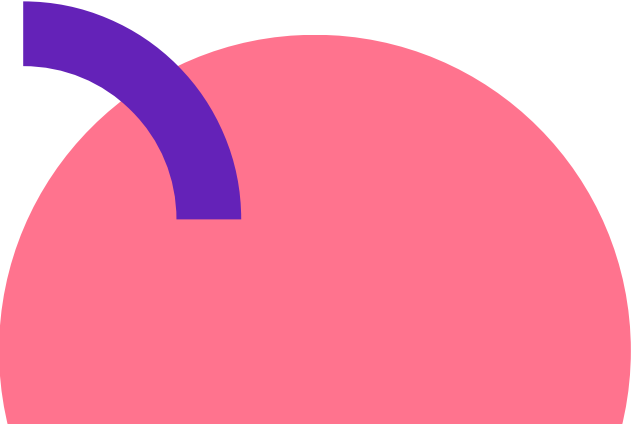


Methodologies

- OOCSS
 - SMACSS
 - SUITCVSS
 - Atomic
 - BEM
- 



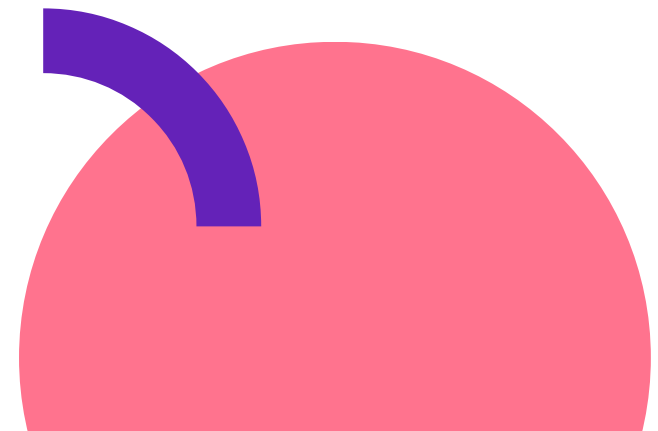
Block

- header
 - menu
 - input
 - checkbox
- 
- 




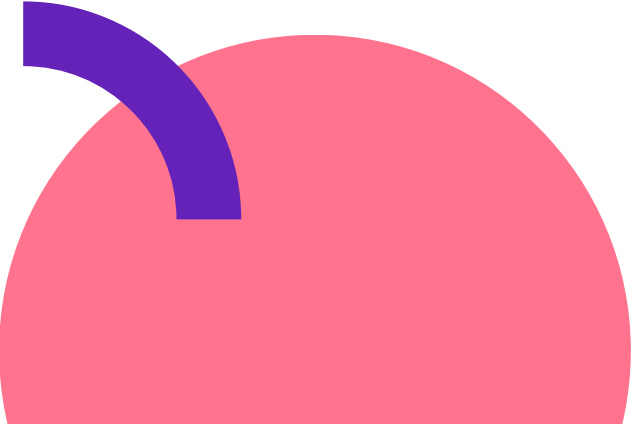
Element

- menu item
- list item
- header title





Modifier

- disabled
 - highlighted
 - checked
 - yellow
- 
- 



BEM In Practice

`.block__element--modifier`



BEM In Practice




```
<form class="form">  
  <input class="form__input" ... />  
  <input class="form__input form__input--disabled" ... />  
  <button class="form__button form__button--large" ... >Button</button>  
</form>
```



```
.form  
.form__input  
.form__input--disabled  
.form__button--large
```



What we've learned

- Layouts with table and floats
 - Flexbox + Grid
 - Combinators
 - BEM
- 



Next Up

Let's build the header of our app.

