

COMPLETE CSS COURSE

World Best **CSS** Course Ever



COURSE TOPICS



BASICS

- What is **CSS**?
- CSS rule structure
- How to use CSS in html?
- Types of **Selectors**?
- Comments in CSS
- Colors & Background Prop.
- CSS Units & Dimensions
- Fonts & Text Properties
- CSS **Box Model**
- Border, Padding & Margin
- CSS Display, Floats etc..
- CSS **Positions** & Z-index
- CSS Overflow

ADVANCED

- CSS3 Gradients
- CSS3 Shadows & Filters
- CSS Combinators
- CSS Pseudo Class & Element
- CSS3 Column Layout
- CSS3 **Flexbox & Grid**
- CSS3 Animations, Transform
- Transitions & Perspective
- CSS Specificity & Prefixes
- CSS Media & Cont. Queries
- CSS BEM, SMACSS etc..
- CSS3 Variables, Nesting etc..
- New CSS3 Features & Bonus

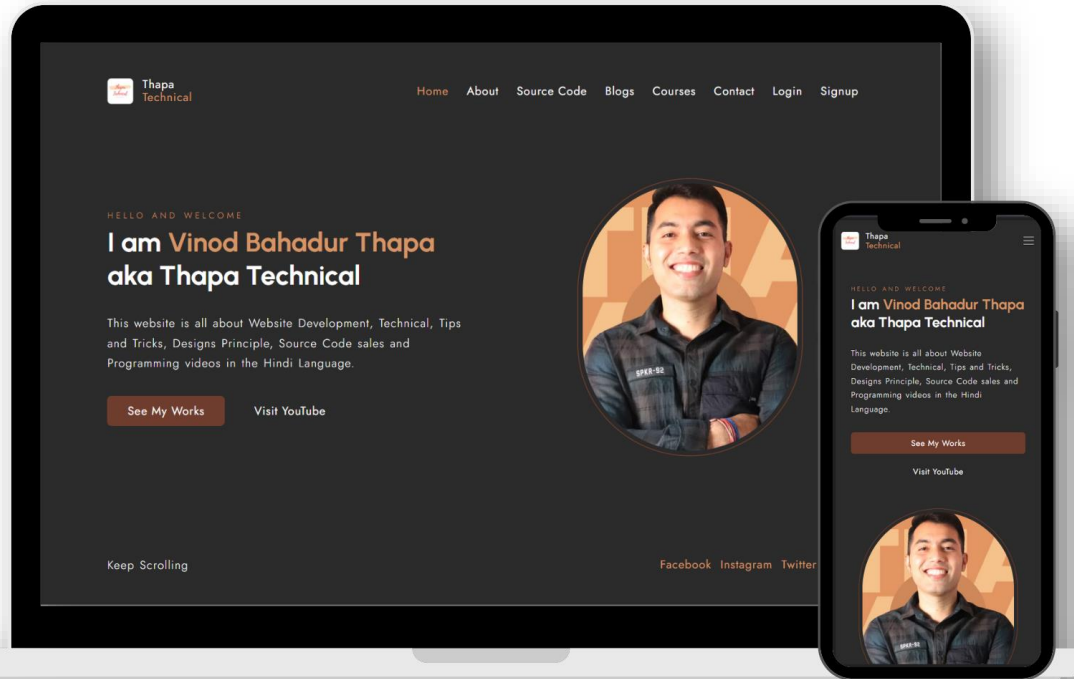
PRO LEVEL

- 50+** Interview Questions
- 30+** Tips & Tricks
- Complete Notes** + Codes
- 100+** Animated Slides
- 10+** Animated Projects
- PROJECT** – Complete Multipage **WEBSITE** Using HTML & CSS
- CSS** Performance and Optimization
- SEO + Testing + LIVE HOSTING** (free & Paid)



01

HOW WEBSITE WORKS?



 **Subscribe Thapa Technical**

CLIENT VS SERVER



BUILDING BLOCK OF WEBSITE

HTML

Provides the structure and content of a webpage.

CSS

Styles and designs the appearance of the webpage

JS

Adds interactivity and dynamic behavior to the webpage.

REAL WORLD

Cascading Style Sheets

EXAMPLE



01

What is CSS?



CSS





CSS





Cascading Styl Sheet e s

What is CSS?

- **Cascading Style Sheets (CSS)** is a stylesheet language used to describe the look & presentation of a document written in HTML or XML. It defines how elements are displayed on a web page.
- CSS makes websites visually appealing and user-friendly.



How to code **CSS** ?



```
h1 {  
    color: red;  
    font-size: 32px;  
}
```



Creators & Maintenance of CSS?

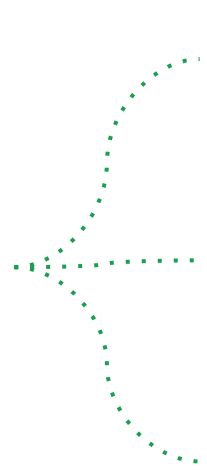
- CSS was created by a group of individuals known as the [World Wide Web Consortium \(W3C\)](#).
- Primary contributors include [Håkon Wium Lie](#) and [Bert Bos](#).
- CSS standards and specifications are [maintained by the W3C](#).
- A community of web developers, designers, and browser vendors also contribute to its evolution.
- Regular updates and new versions ensure CSS remains relevant and adaptable to changing web design needs.



CSS History (Version)



CSS to CSS3



01

CSS1 (1996)

Limited properties and selectors.

02

CSS2 (1998)

CSS 2 was released and work on CSS 3 began

03

CSS 2.1 (2011)

CSS 2.1 was released, which fixed the errors found in CSS 2



02



○

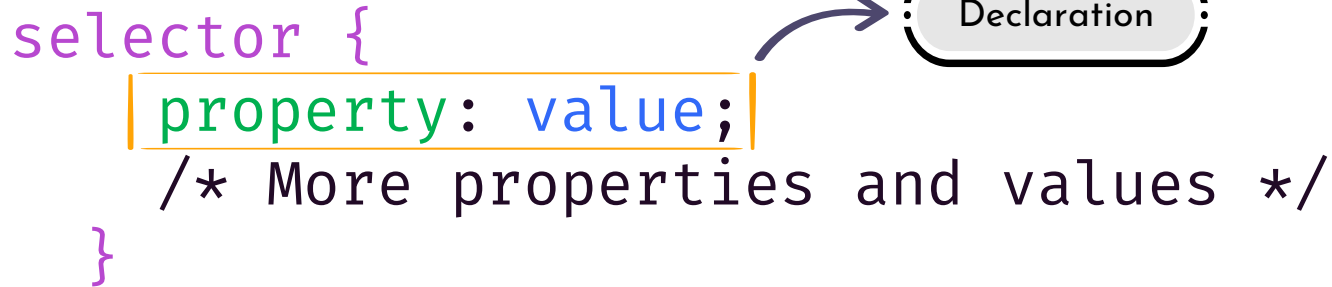
CSS Rule Structure



CSS Rule Structure

- A **CSS rule** consists of a **selector** and a **declaration block**.
- **Declarations** are used to define the style properties for the selected elements.
- Each declaration consists of a property and a value.

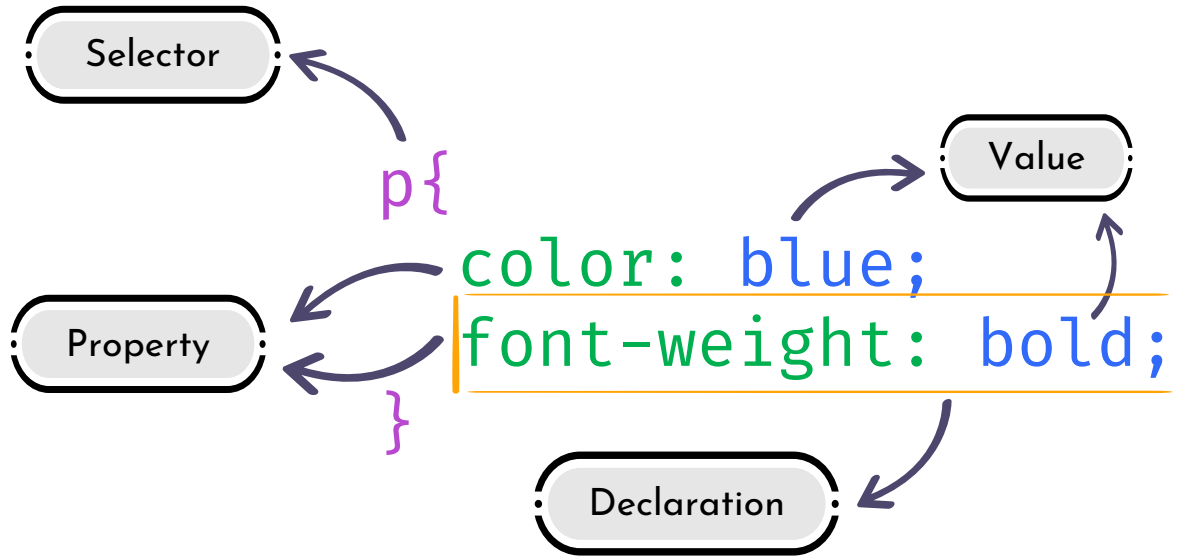
```
selector {  
  | property: value; |  
  /* More properties and values */  
}
```



CSS Rule Structure



Syntax – CSS



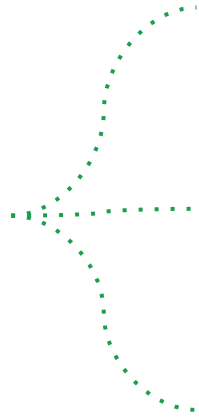
03



How to use CSS in HTML?



3 Ways



01

Inline CSS

Style applied directly to an HTML element using the [style attribute](#).

02

Internal CSS

Styles defined within the [<style>](#) tag within the HTML document's [<head>](#).

03

External CSS

Styles stored in [separate .css files](#) linked to the HTML document using the [<link>](#) element.





04

Types of Selectors




CSS Tag / Element Selector



Class Selector – HTML / CSS

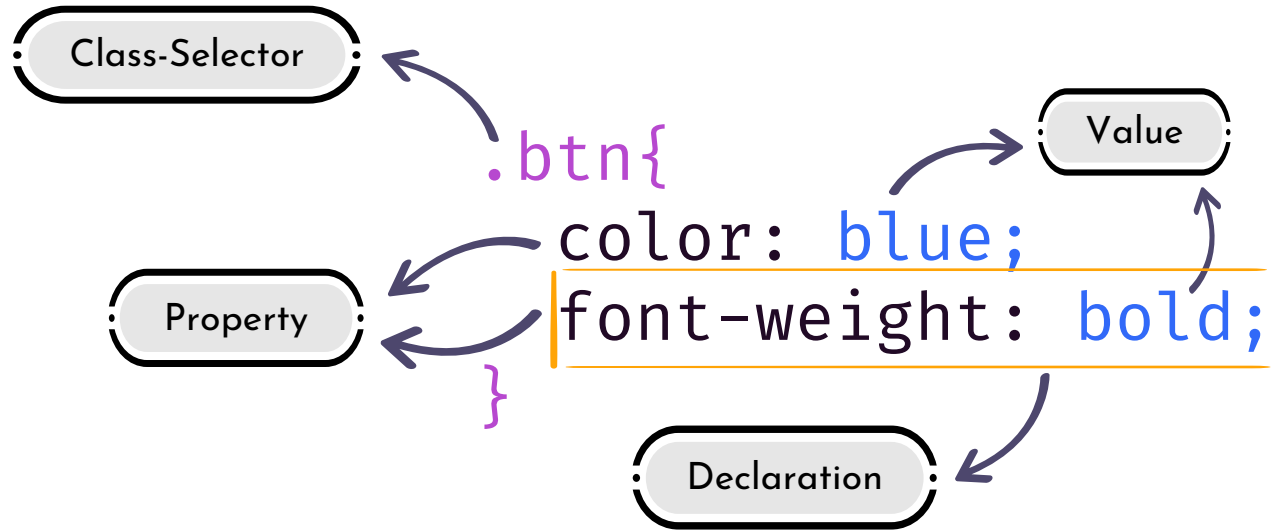
```
<section>  
  <button class="btn">  
    Subscribe Thapa Technical  
  </button>  
</section>
```



The diagram illustrates the concept of a class selector. A callout box with a black border and rounded corners, containing the text "Class-Selector", has a grey arrow pointing to the "class" attribute in the HTML code snippet above. The code snippet shows a button element with the class attribute set to "btn".




Class Selector – CSS



ID Selector – HTML / CSS

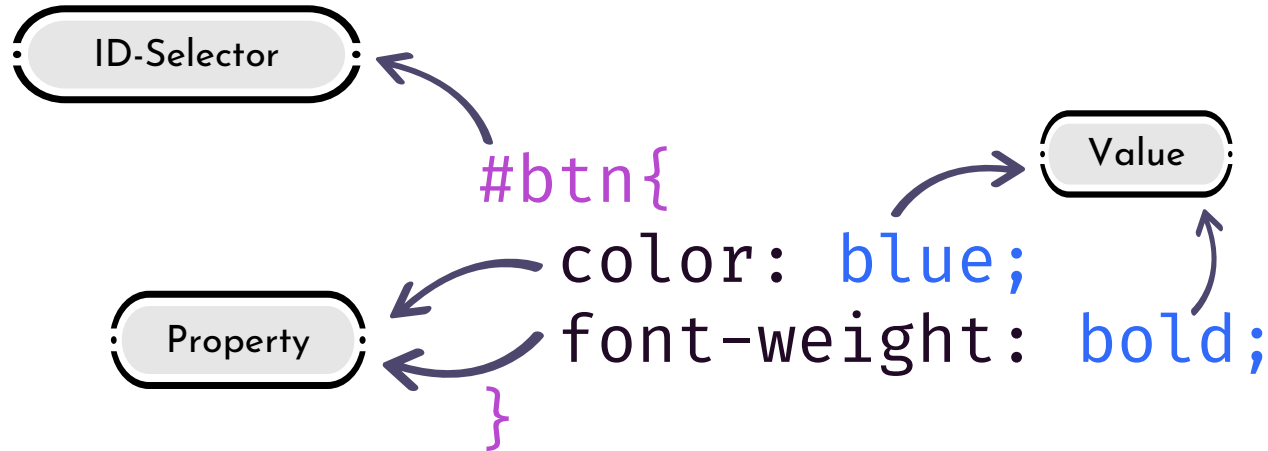
```
<section>
  <button id="btn">
    Subscribe Thapa Technical
  </button>
</section>
```



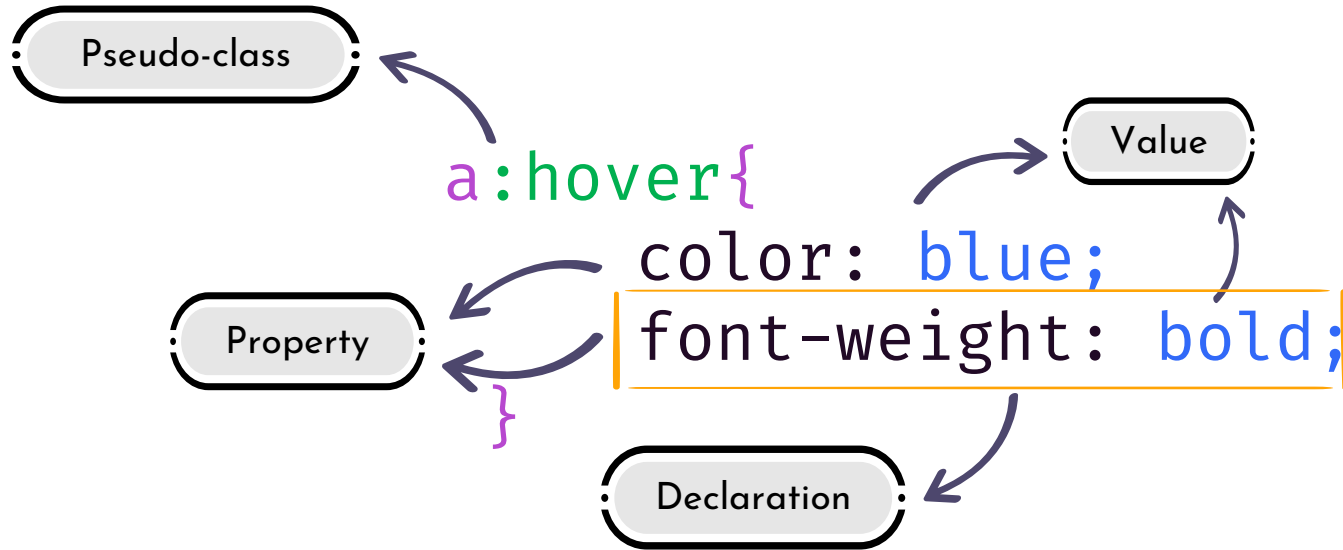
The diagram illustrates the ID selector concept. A callout box with a rounded rectangular border and a light gray background contains the text "ID-Selector". A curved arrow points from the "id" attribute in the HTML code above to this callout box.



ID Selector – CSS



Pseudo-Class - CSS





0

05

CSS Comments



CSS Comment

```
/* This is a comment */
```



06

COLORS IN CSS



RGB – CSS

01

RED – #FF 00 00
255, 0, 0

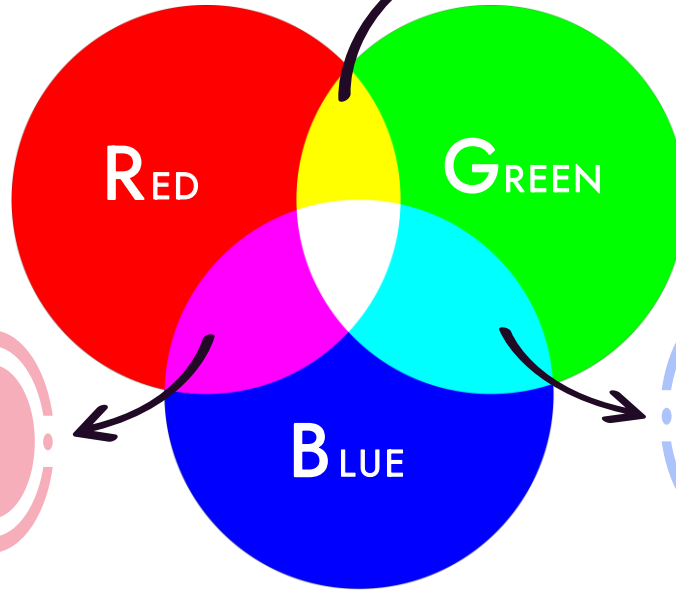
02

GREEN – #00 FF 00
0, 255, 0

03

BLUE – #00 00 FF
0, 0, 255

Magenta
RGB = 255, 0, 255
HEX = #FF 00 FF



YELLOW

RGB = 255, 255, 0
HEX = #FF FF 00

CYAN
RGB = 0, 255, 255
HEX = #00 FF FF

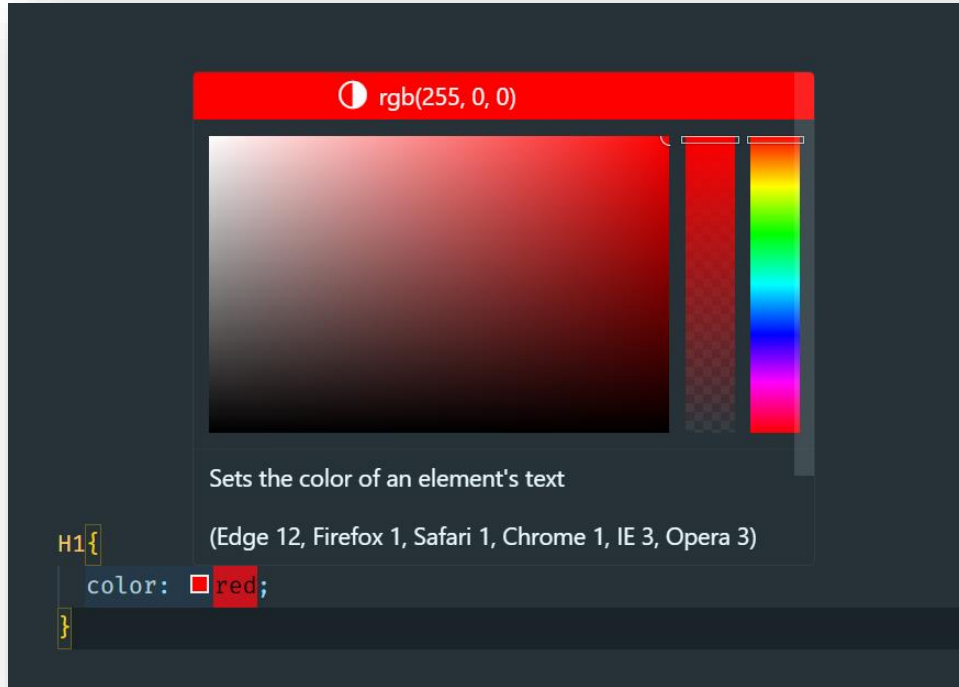




COLORS (BONUS)



GRAPHIC DESIGNER – CSS



Hue: A pure color



Tint: A pure color with just white added



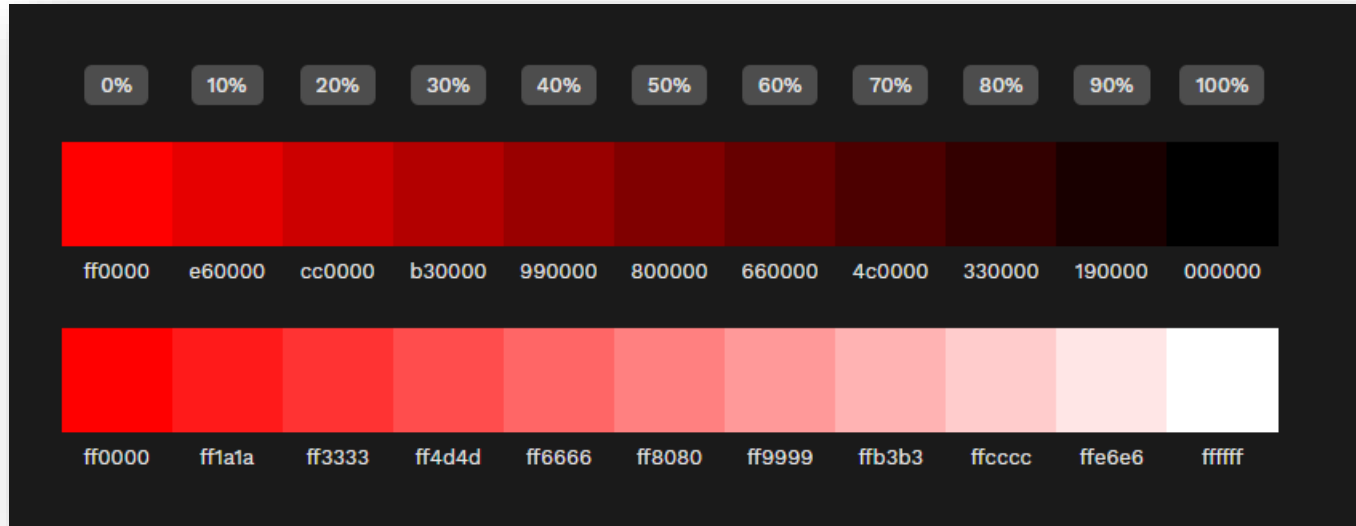
Shade: a pure color with just black added



Tone: A pure color with just grey added



GRAPHIC DESIGNER – CSS



07

BACKGROUND IN CSS



BACKGROUND PROPERTIES – CSS

01

background-color

02

background-image

03

background-repeat

04

background-position

05

background-size

06

background-attachment

08

UNITS IN CSS



Absolute Lengths

01

Pixels (px)

02

Inches (in)

03

Points (pt)

Relative Lengths

04

em

05

Root em (rem)

06

Percentage (%)

08

FONTS IN CSS



FONT PROPERTIES – CSS

01

Font Family

02

Font Size

03

Font Weight

04

Font Style

05

Font Variant

TEXTS IN CSS



TEXT PROPERTIES – CSS

01

Text Alignment

02

Text Decoration

03

Text Transform

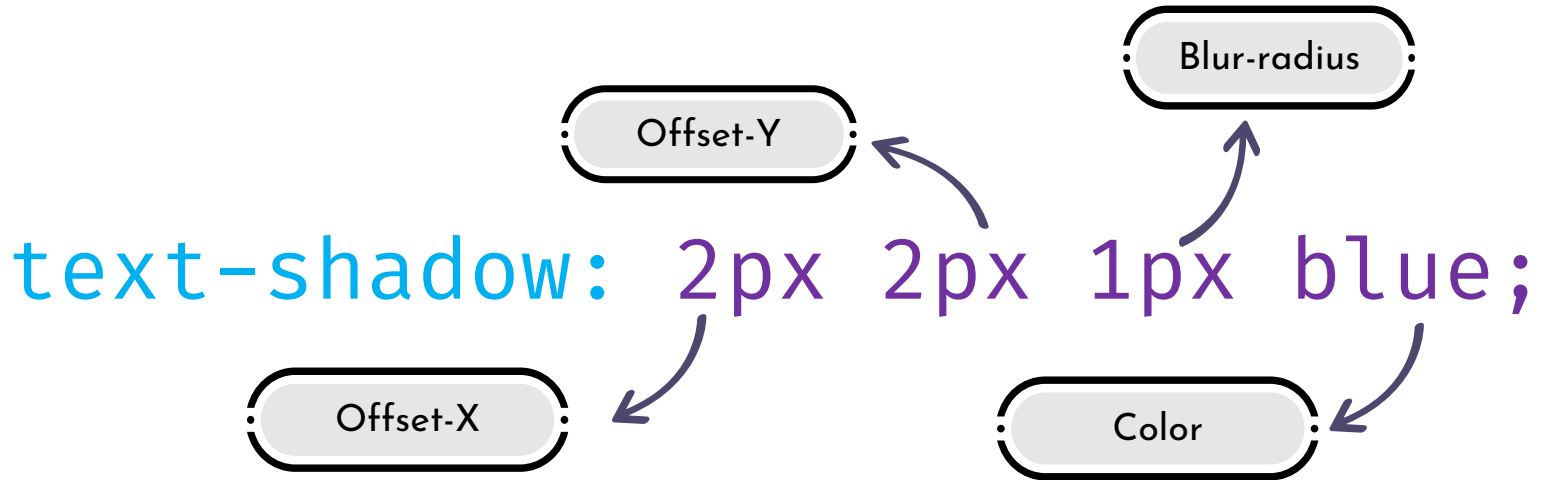
04

Text Spacing

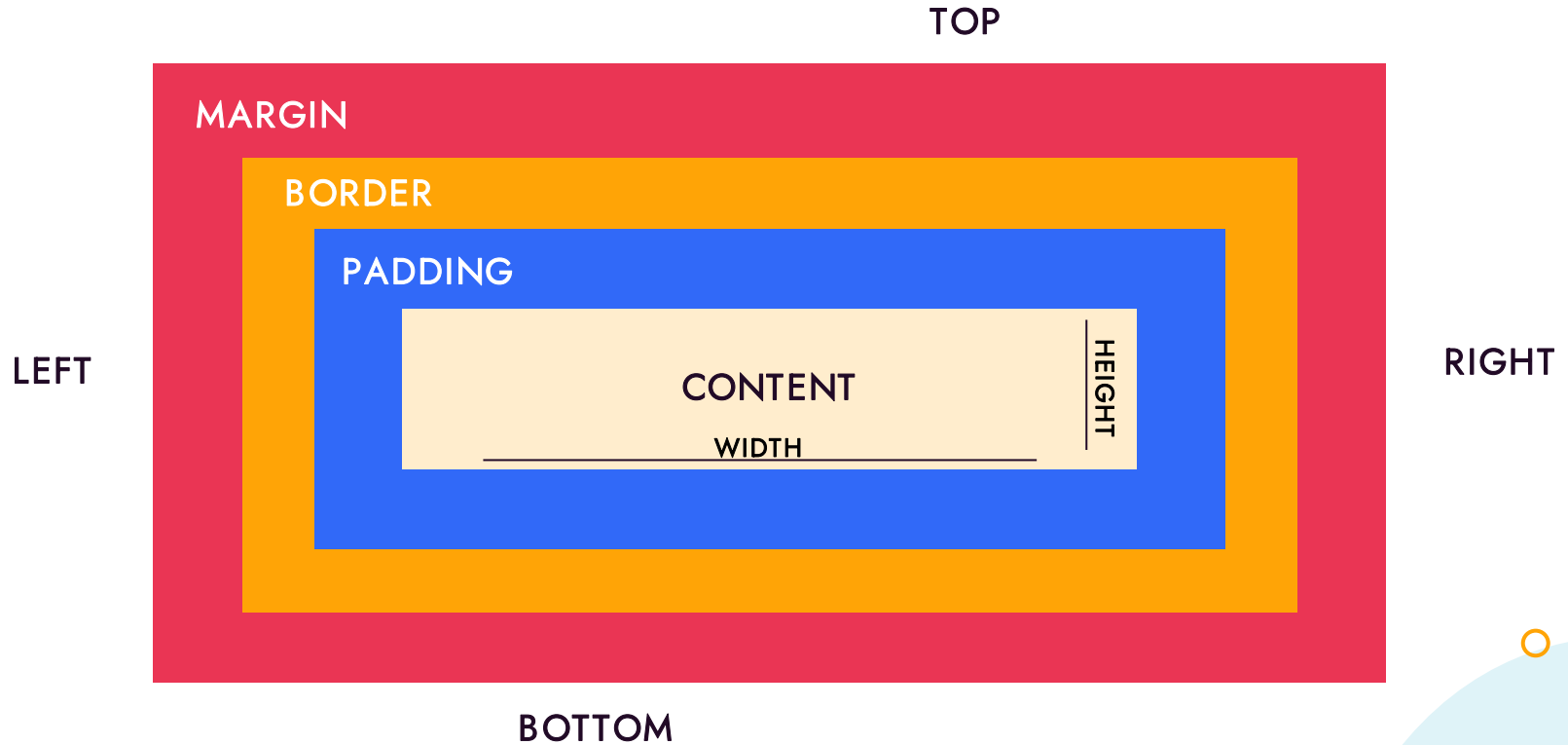
05

Text Shadow

TEXT SHADOW – CSS



BOX MODEL – CSS

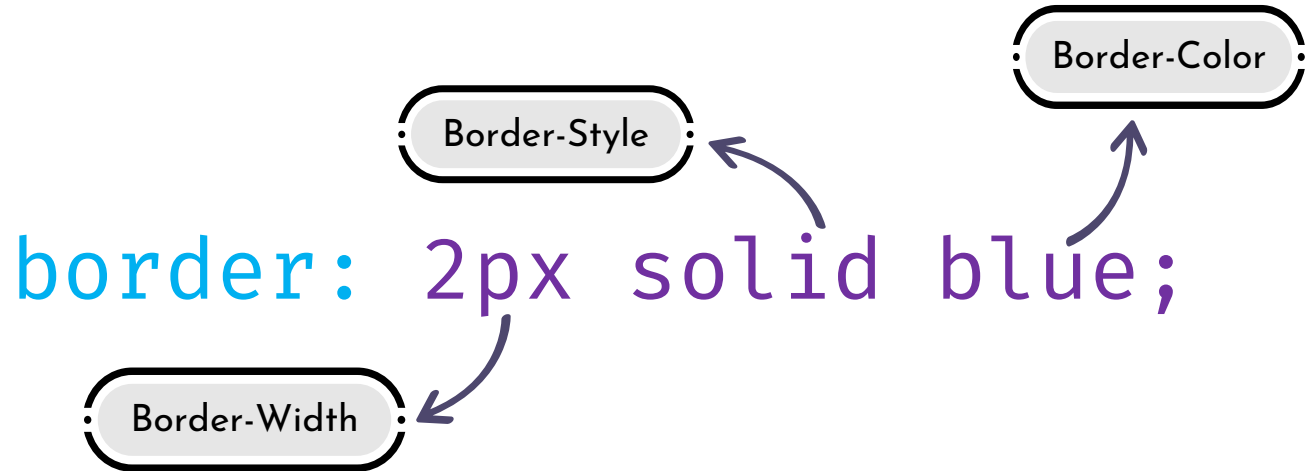


10

BORDER IN CSS



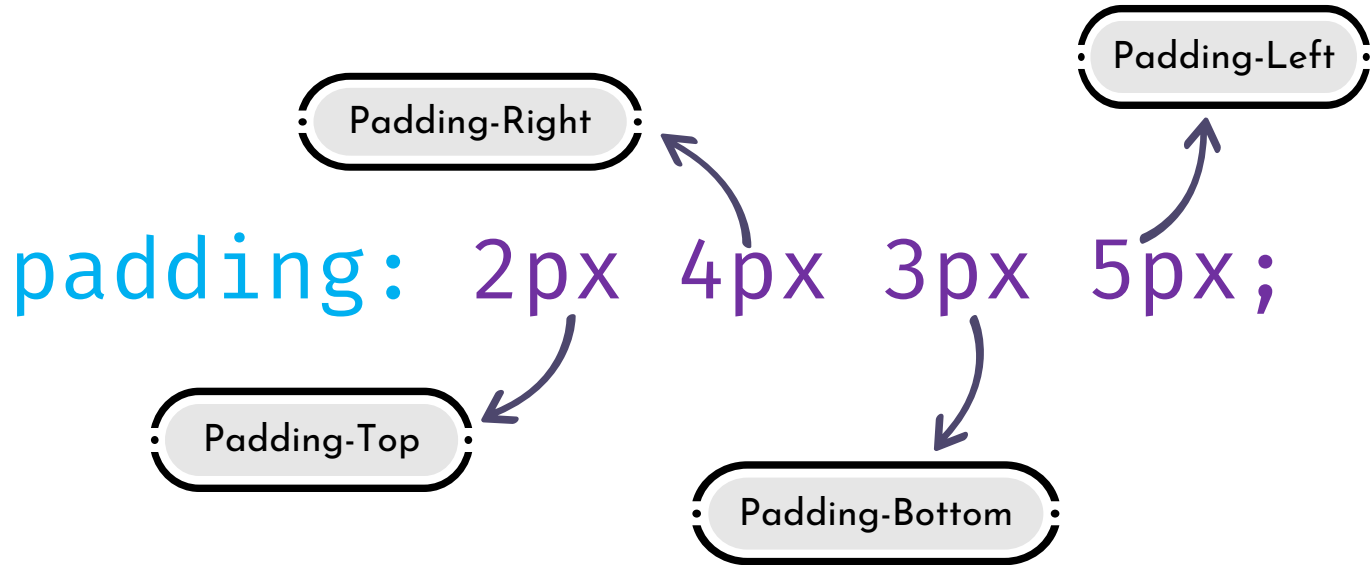
Border – CSS



PADDING IN CSS



Padding – CSS

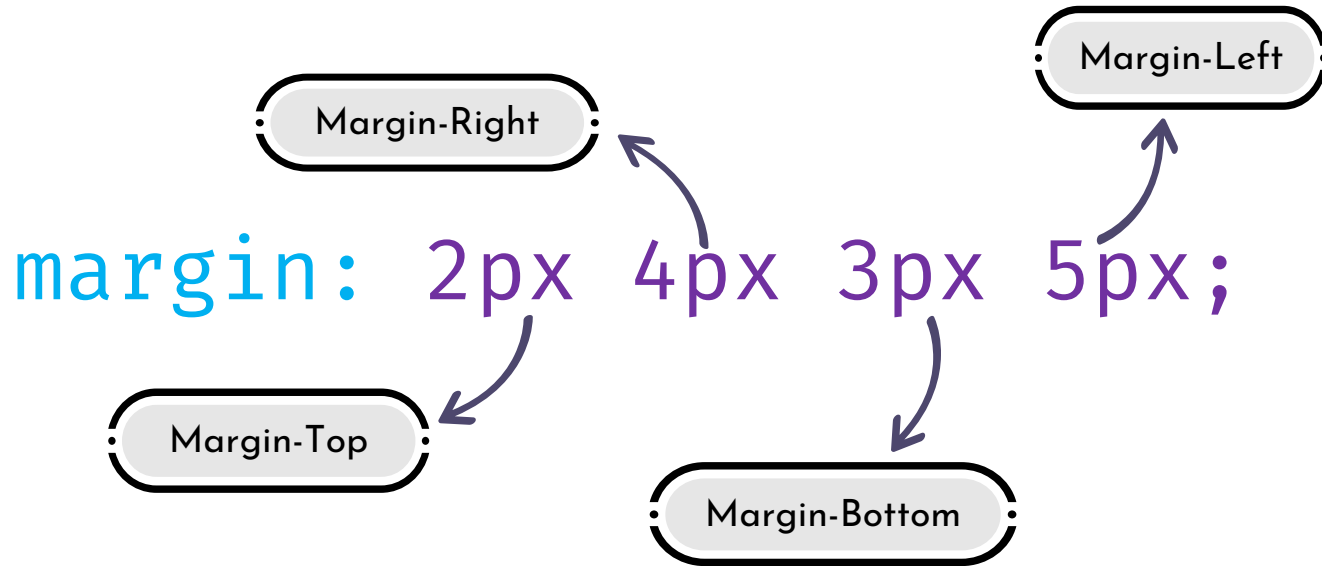


12

MARGIN IN CSS



Margin – CSS

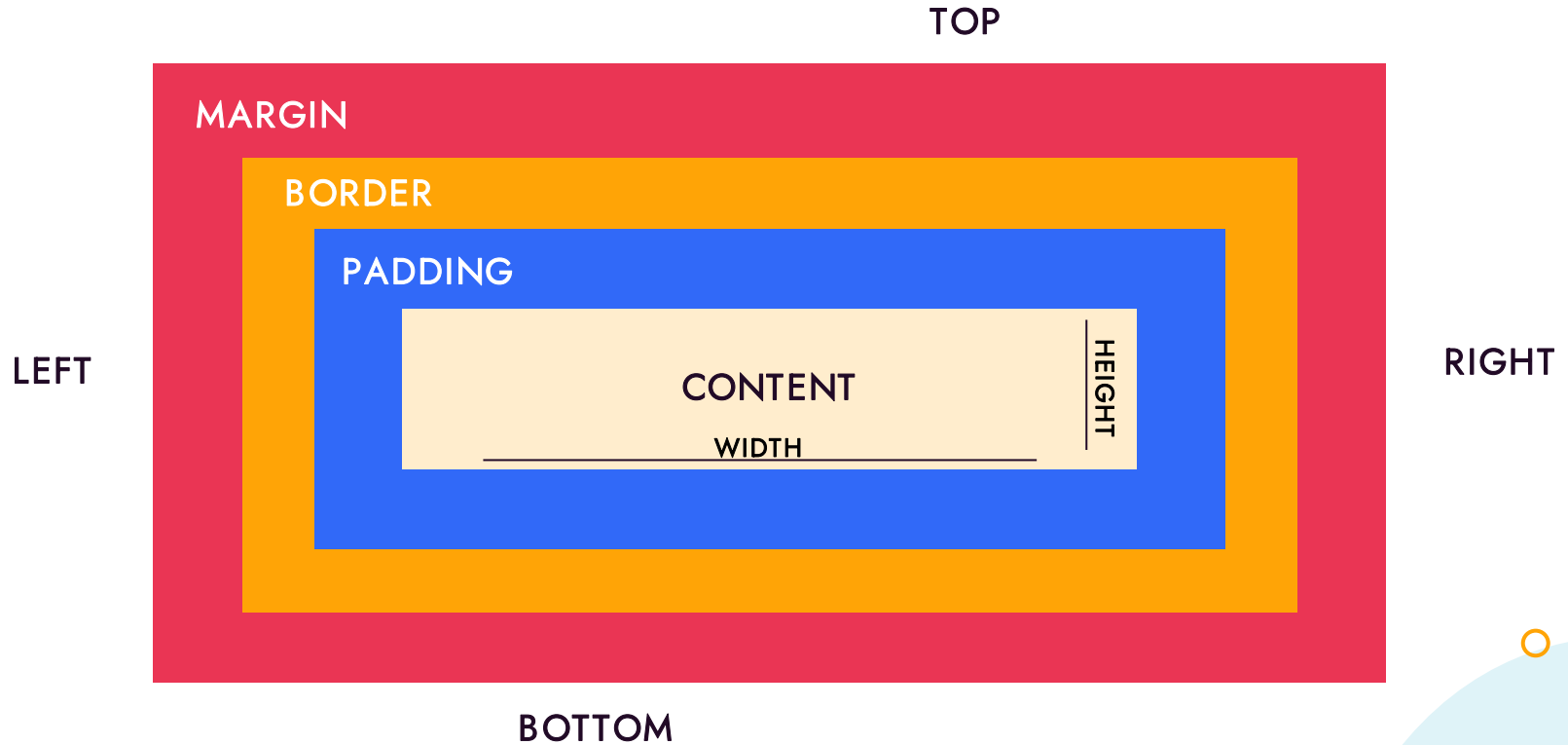


BOX-MODEL

IN CSS



BOX MODEL – CSS





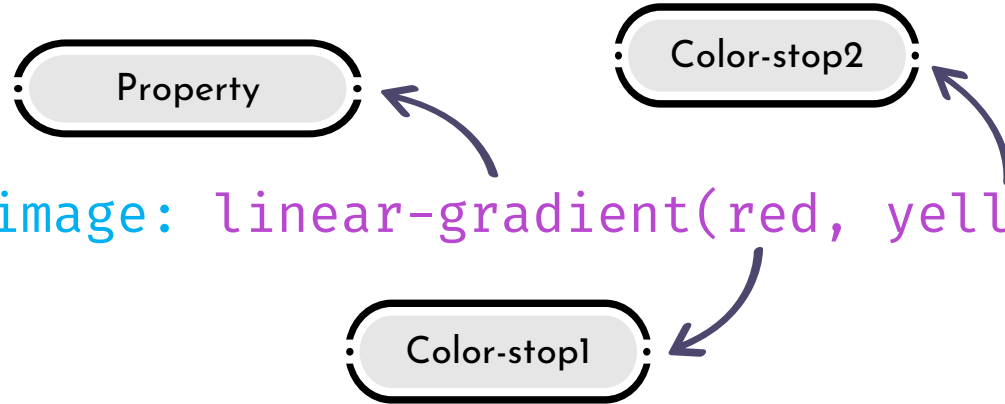
0

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CSS Gradients



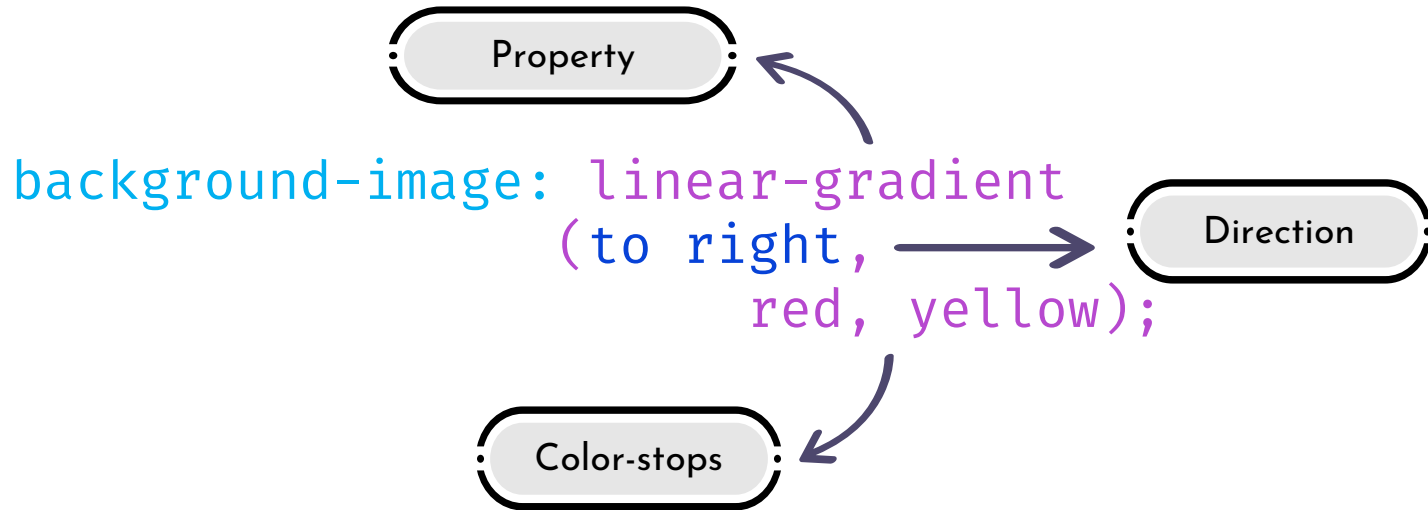
Gradient – CSS



```
background-image: linear-gradient(red, yellow);
```



Gradient with Direction – CSS



Gradient with Angles – CSS

```
background-image: linear-gradient  
(90deg,  
red, yellow);
```

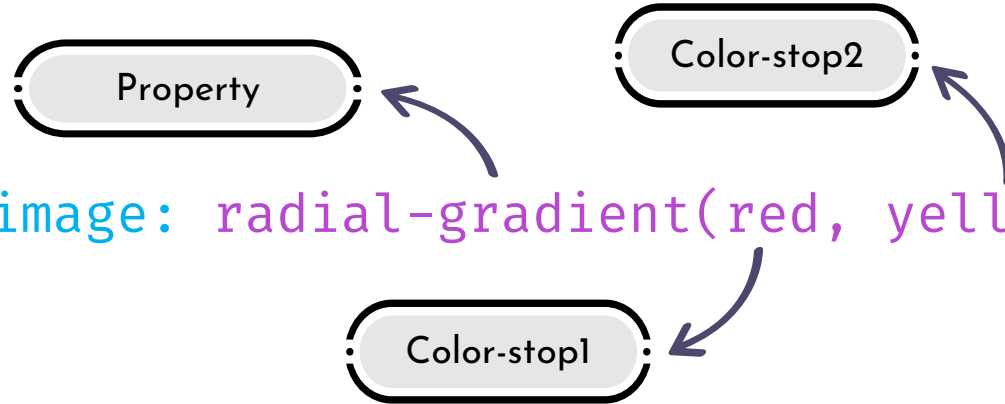
Property

Angle

Color-stops



Radial Gradient – CSS



```
background-image: radial-gradient(red, yellow);
```



Gradient with Shape – CSS

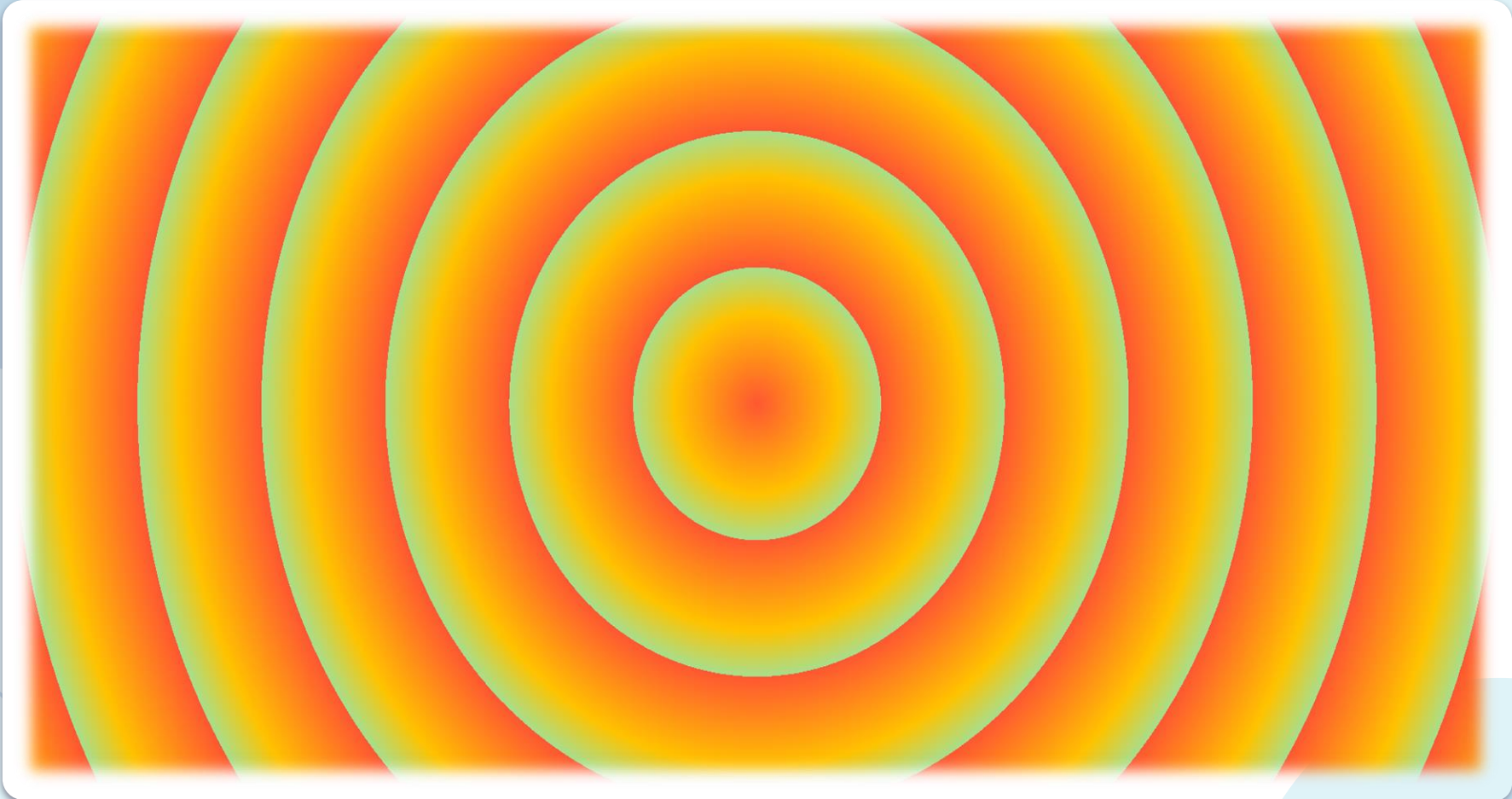
```
background-image: linear-gradient  
  (circle, red, yellow);
```

Property

Shape

Color-stops



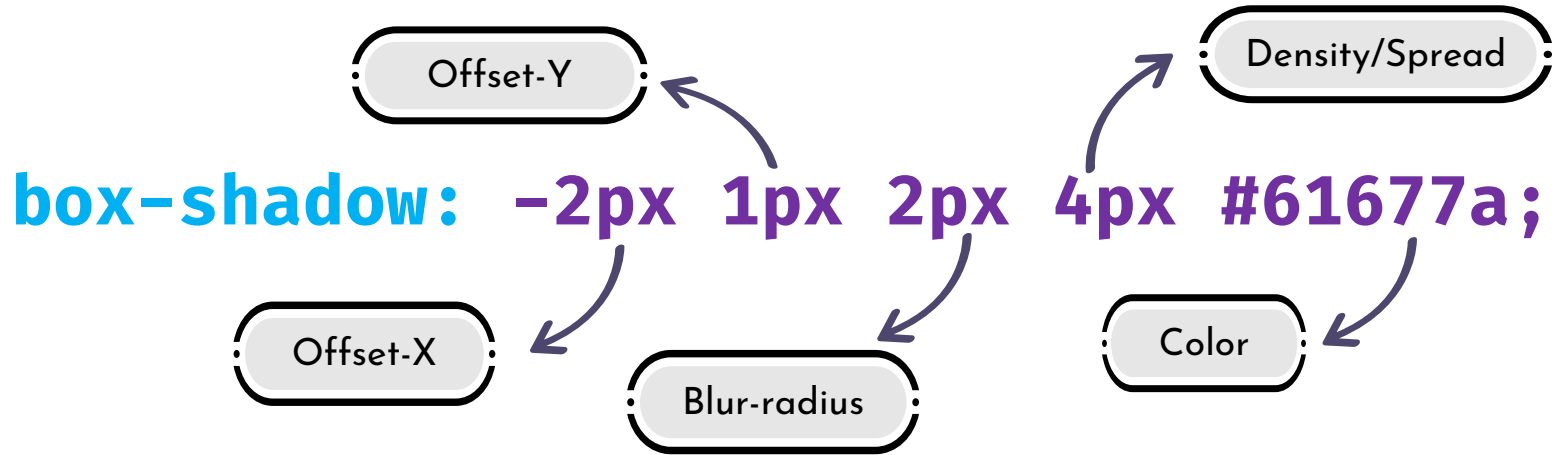


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BOX SHADOW IN CSS



BOX SHADOW – CSS

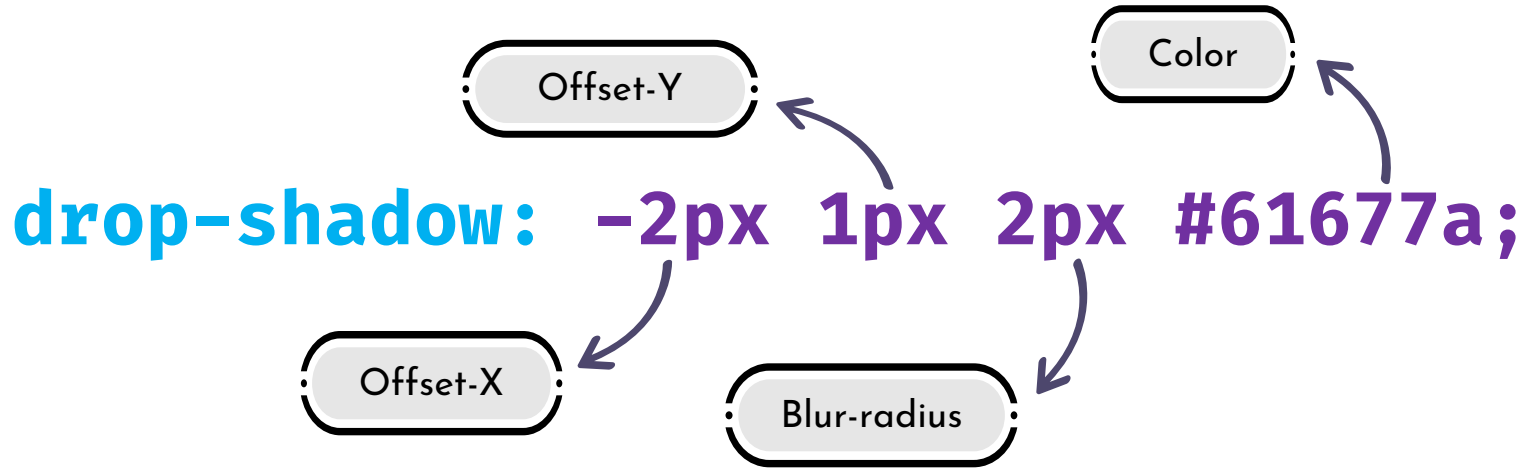


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DROP SHADOW IN CSS



DROP SHADOW – CSS



FILTERS IN CSS



FILTERS - CSS

01

grayscale()

03

blur()

05

brightness()

02

opacity()

04

contrast()

06

invert()

LISTS IN CSS



LIST PROPERTIES – CSS

01

List-style-type



02

List-style-image

03

List-style-position



04

List-style-property

19

ANCHOR IN CSS



ANCHOR STATES – CSS

01

Link (`a:link`)

02

Visited (`a:visited`)

03

Hover (`a:hover`)

04

Active (`a:active`)

20

COMBINATORS

IN CSS



COMBINATORS – CSS

01

Descendant Selector
(Space)

02

Child Selector (>)

03

Adjacent Sibling
Selector (+)

04

General Sibling Selector
(~)

05

Universal Selector (*)

21

DISPLAY IN CSS



DISPLAYS – CSS

01

Block-Level Elements

02

Inline Elements

03

Inline-Block Elements

POSITIONS IN CSS



POSITIONS – CSS

01

Relative

03

Static

05

Sticky

02

Absolute

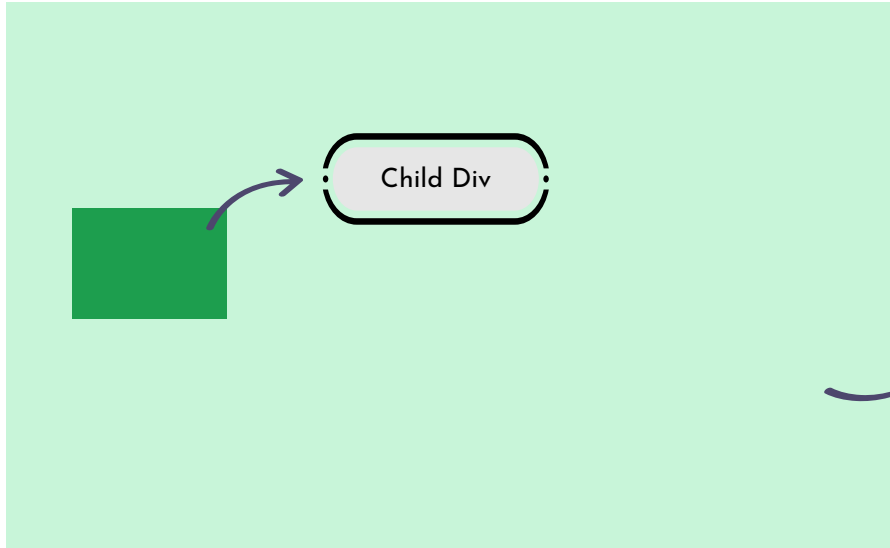
04

Fixed

POSITIONS – Absolute

Top:0, left:0

Top:0, right:0

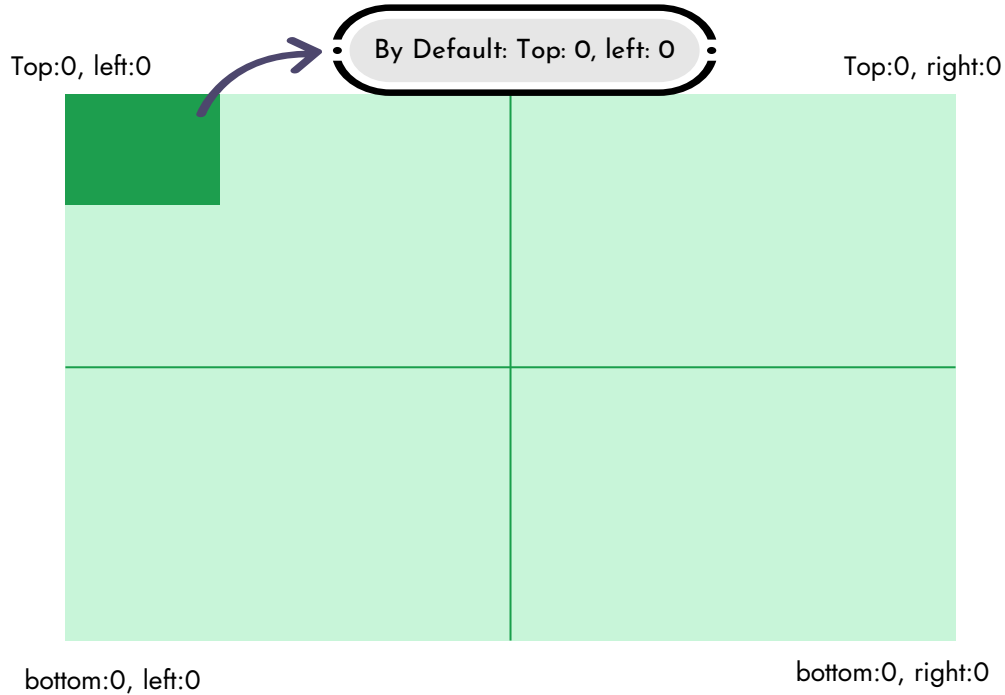


```
.child {  
  position: absolute;  
}
```

bottom:0, left:0

bottom:0, right:0

POSITIONS – Absolute

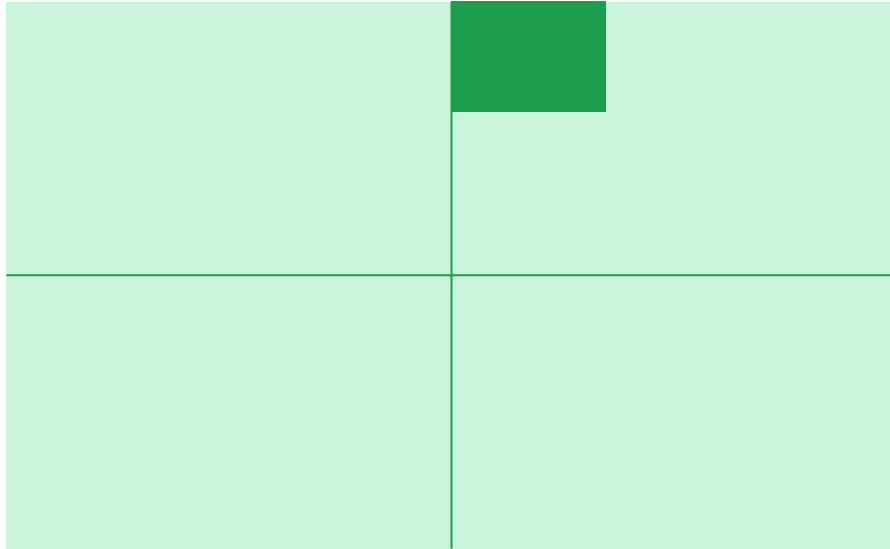


```
.child {  
  position: absolute;  
  left: 50%  
}
```

POSITIONS – Absolute

Top:0, left:0

Top:0, right:0



```
.child {  
  position: absolute;  
  left: 50%;  
  top:50%;  
}
```

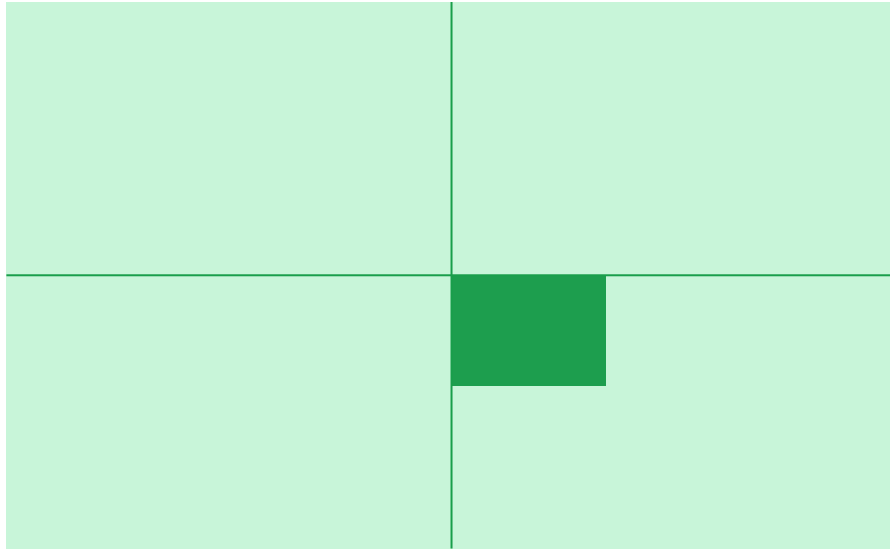
bottom:0, left:0

bottom:0, right:0

POSITIONS – Absolute

Top:0, left:0

Top:0, right:0



bottom:0, left:0

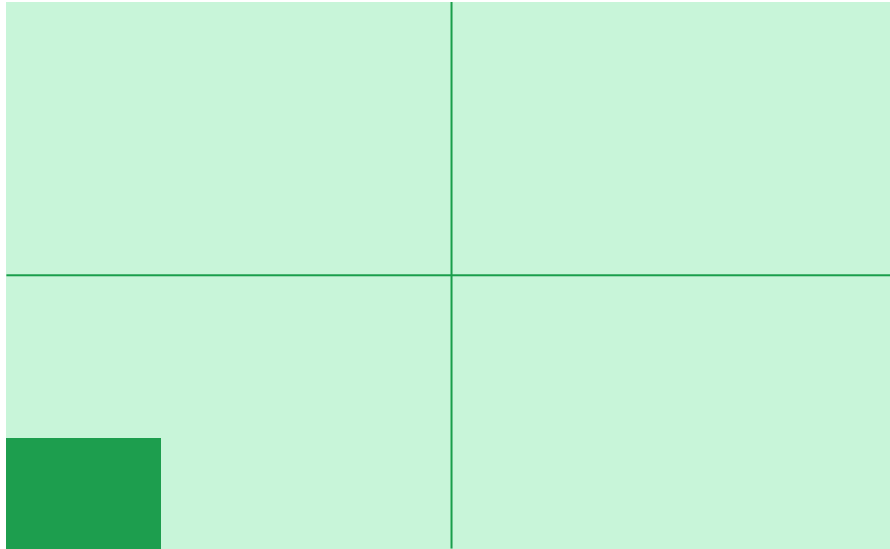
bottom:0, right:0

```
.child {  
  position: absolute;  
  left: 0;  
  bottom:0;  
}
```

POSITIONS – Absolute

Top:0, left:0

Top:0, right:0



bottom:0, left:0

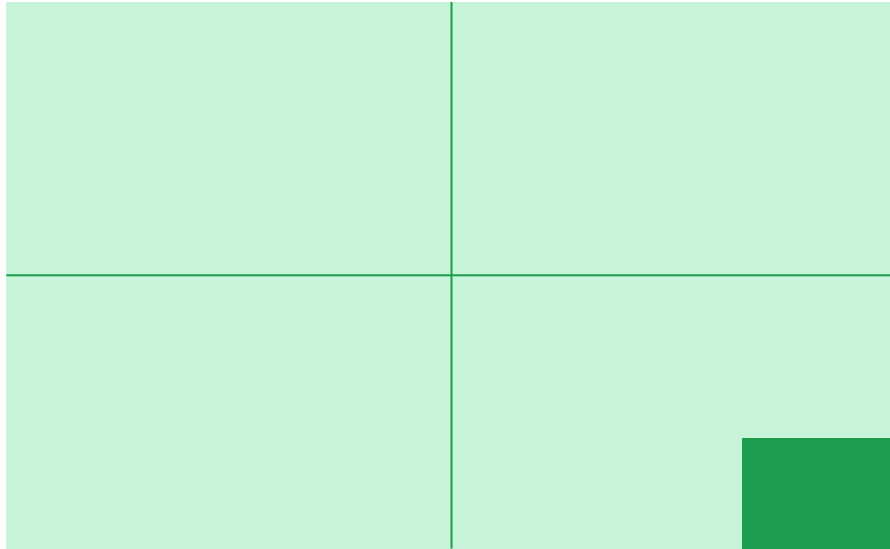
bottom:0, right:0

```
.child {  
  position: absolute;  
  right: 0;  
  bottom:0;  
}
```


POSITIONS – Absolute

Top:0, left:0

Top:0, right:0



```
.child {  
  position: absolute;  
  top: 0;  
  left:0;  
}
```

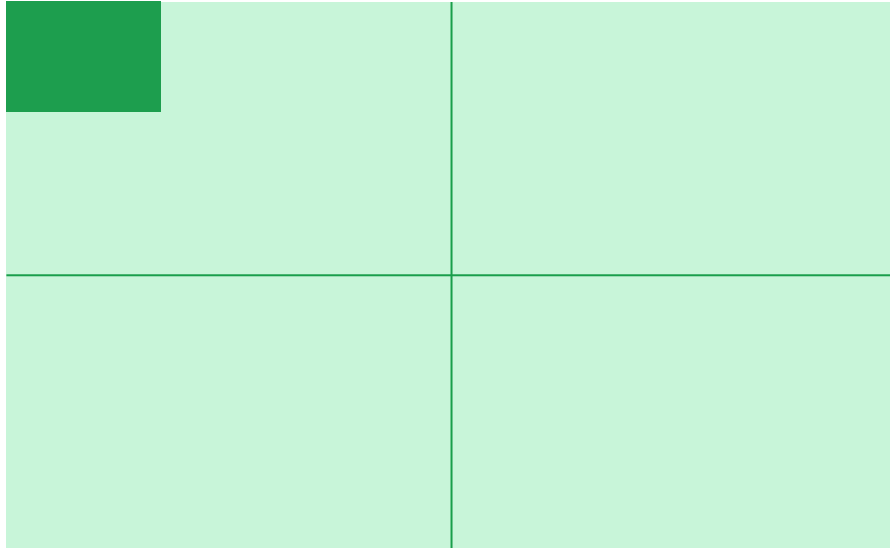
bottom:0, left:0

bottom:0, right:0

POSITIONS – Absolute

Top:0, left:0

Top:0, right:0



bottom:0, left:0

bottom:0, right:0

You can use **px** and any **values**. Also, if you love the animation, **Pls subscribe and our Target – 1 Million**



Z-INDEX IN CSS



OVERFLOW

IN CSS



OVERFLOW – CSS

01

Overflow: Visible
(Default)

02

Overflow: Hidden

03

Overflow: Scroll

04

Overflow: Auto

26

PSEUDO ELEMENTS IN CSS



Pseudo Elements - CSS

01

::before

02

::after

03

::first-letter

04

::first-line

05

::selection

06

::placeholder

27

PSEUDO CLASS IN CSS



Pseudo Class - CSS

01

:hover

02

:first-child

03

:last-child

04

:nth-child(n)

05

:first-of-type

06

:last-of-type

COLUMN LAYOUT IN CSS



COLUMN LAYOUT - CSS

01

Column-count

02

Column-gap

03

Column-rule

04

Column-fill

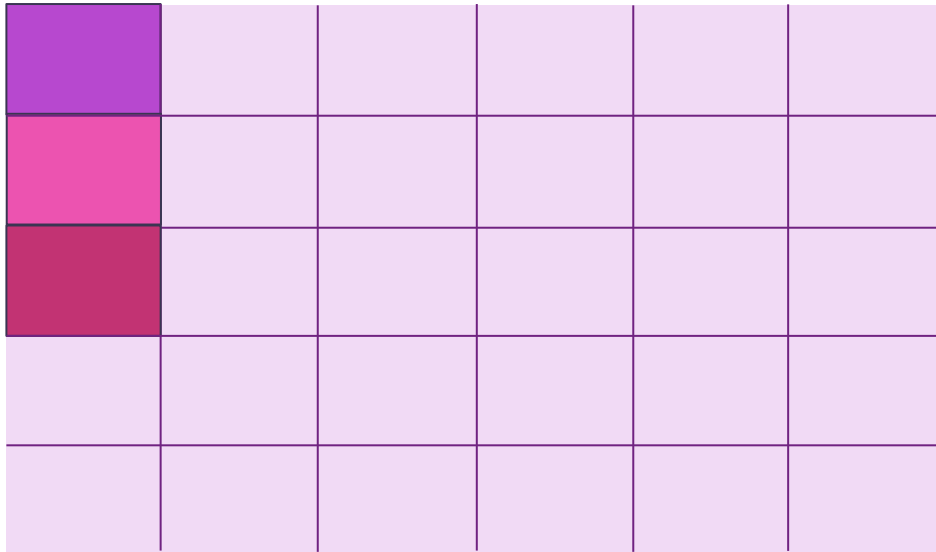
28

FLEXBOX

IN CSS

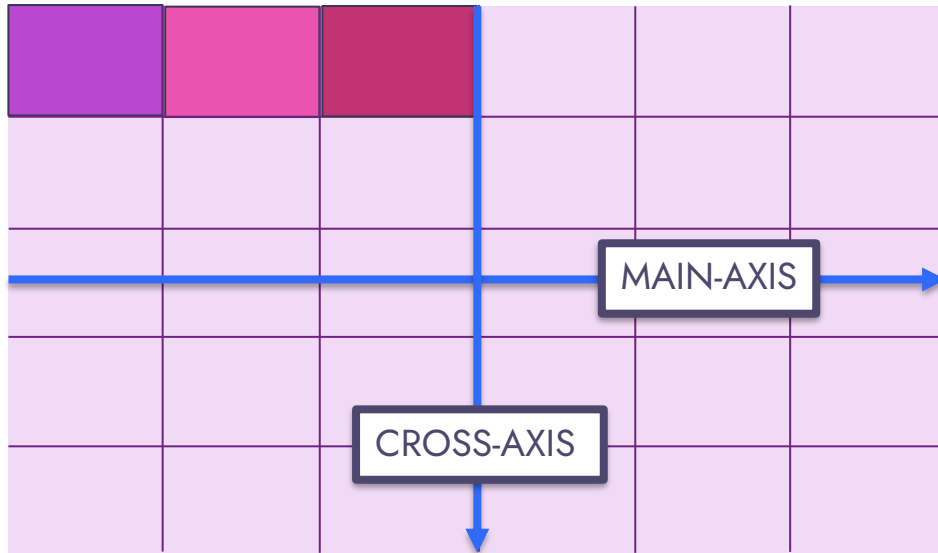


FLEXBOX – CONTAINER



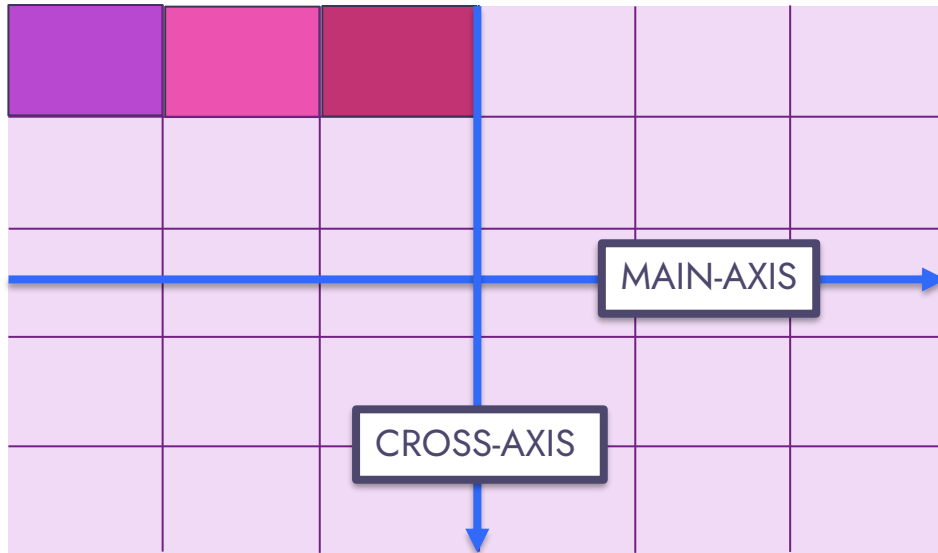
```
.flex-container {  
  display: flex;  
}
```

FLEXBOX – ROW



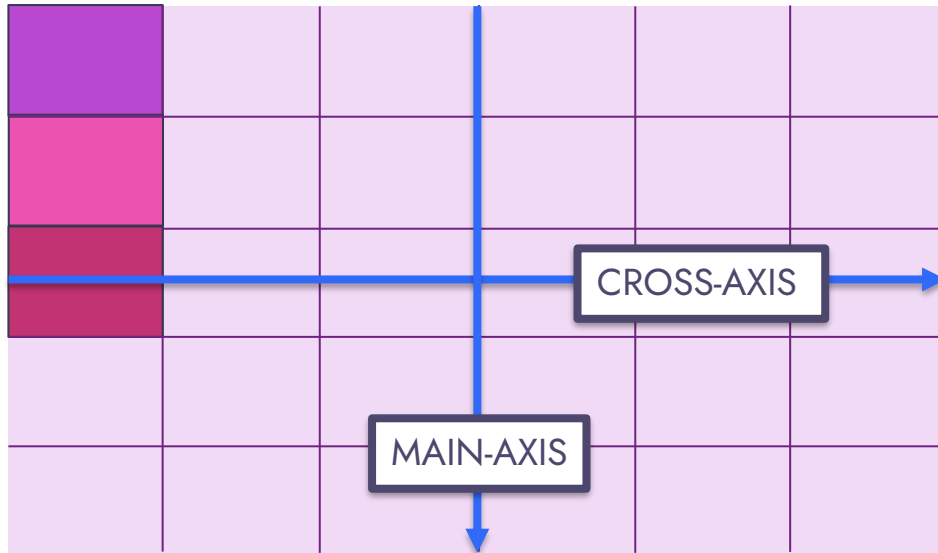
```
.flex-container {  
  display: flex;  
  flex-direction: row;  
}
```

FLEXBOX – COLUMN



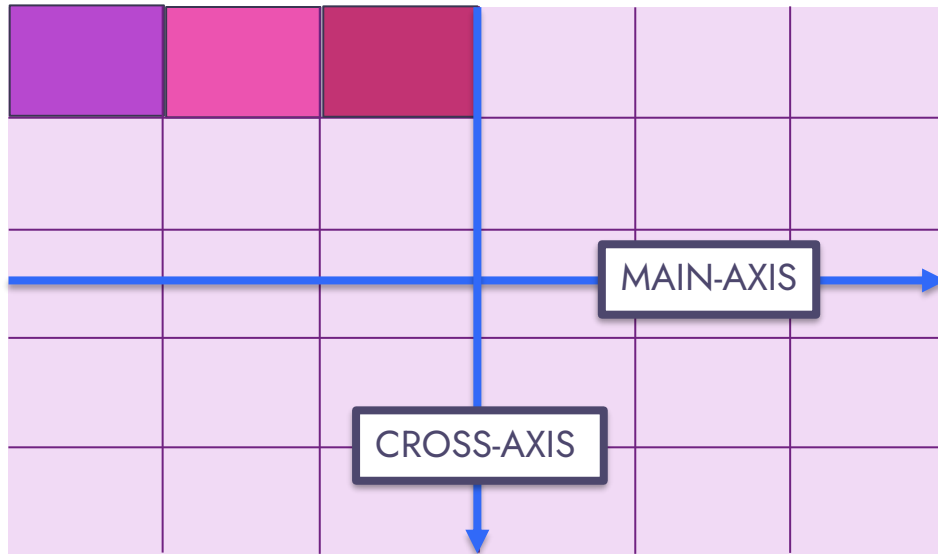
```
.flex-container {  
  display: flex;  
  flex-direction: row;  
  flex-direction: Column;  
}
```

FLEXBOX – CONTAINER



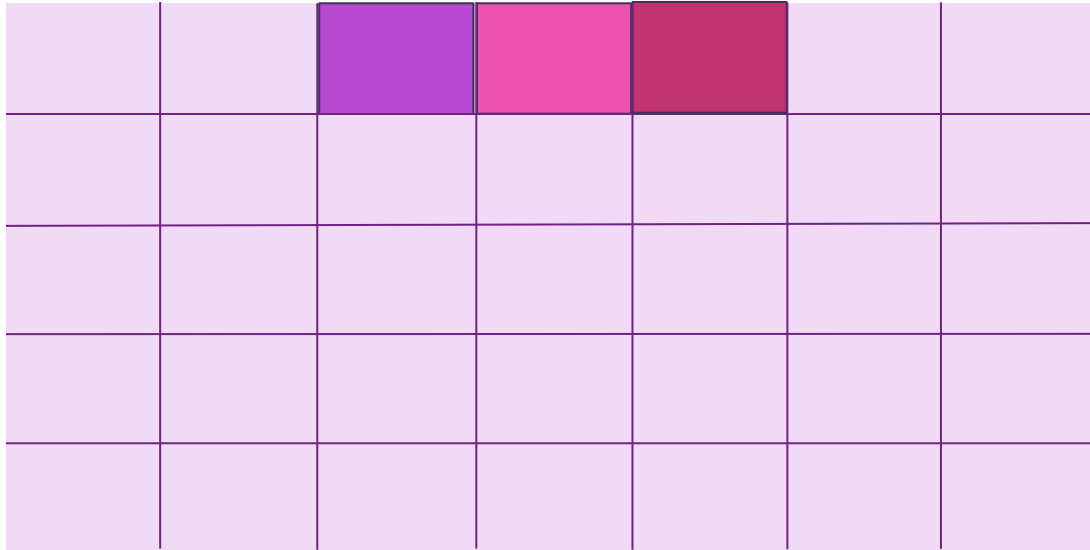
```
.flex-container {  
  display: flex;  
  flex-direction: Column;  
  flex-direction: row;  
  justify-content: start  
}
```


FLEXBOX – CSS



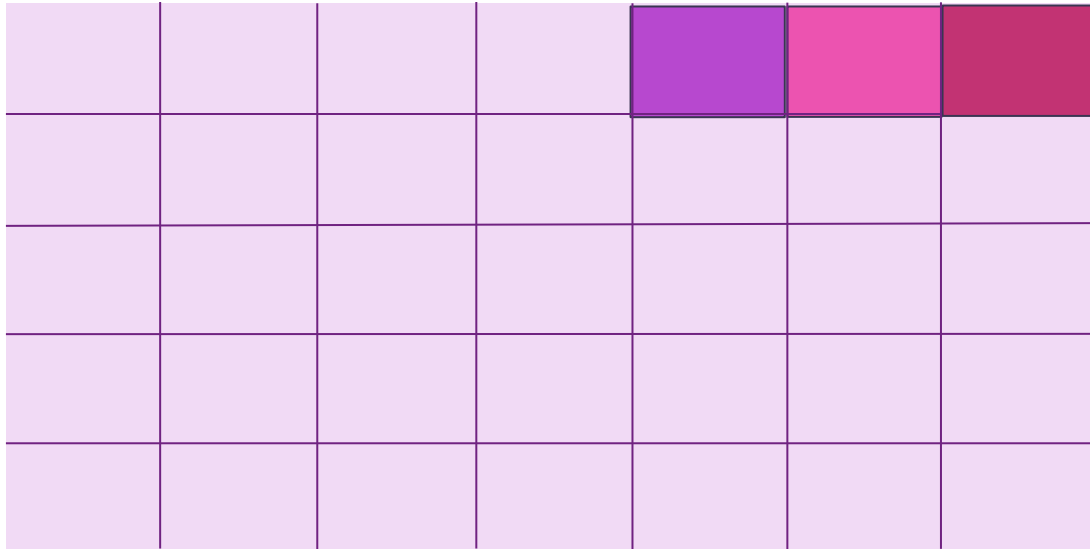
```
.flex-container {  
  display: flex;  
  flex-direction: row;  
  justify-content:center  
}
```

FLEXBOX – CSS



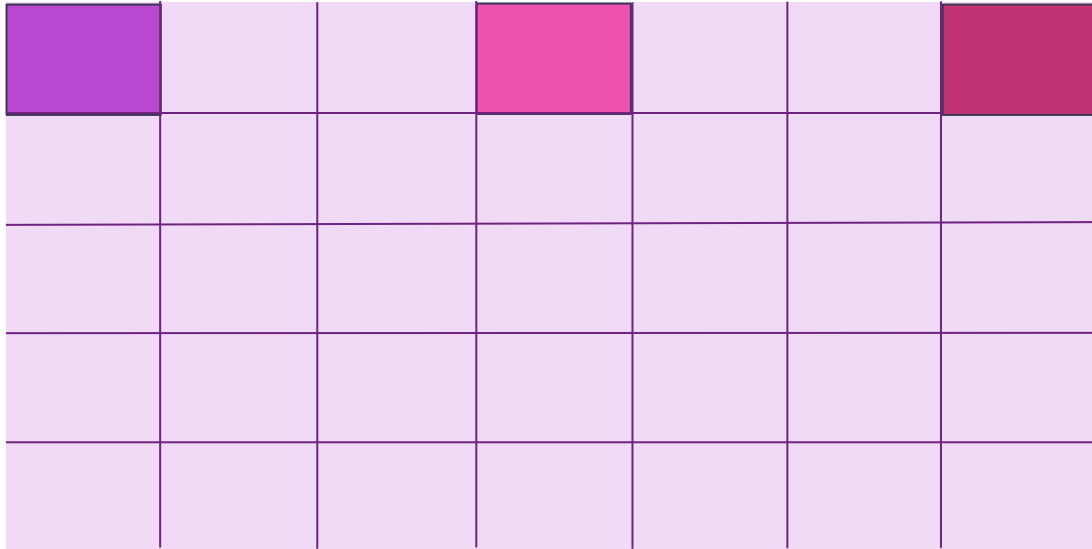
```
.flex-container {  
  display: flex;  
  flex-direction: row;  
  justify-content: flex-end;  
}
```

FLEXBOX – CSS



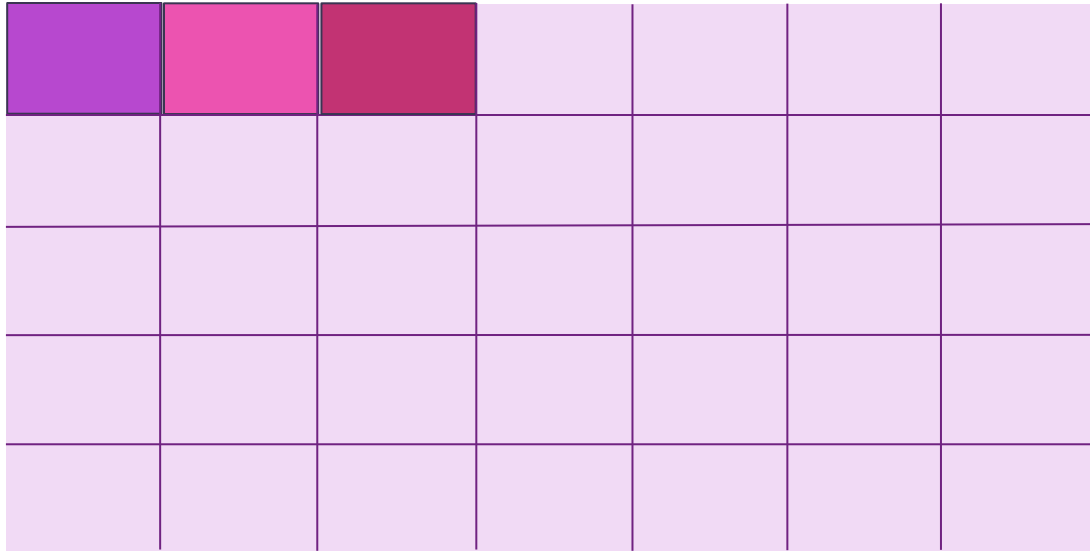
```
.flex-container {  
  display: flex;  
  flex-direction: row;  
  justify-content: space-between  
}
```

FLEXBOX – CSS



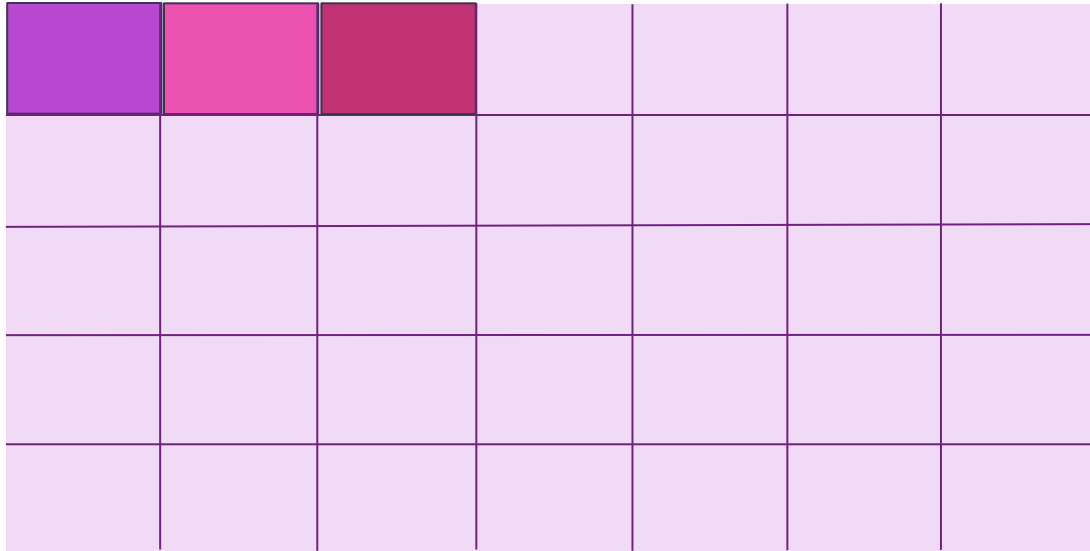
```
.flex-container {  
  display: flex;  
  flex-direction: row;  
  justify-content: start;  
}
```

FLEXBOX – CSS



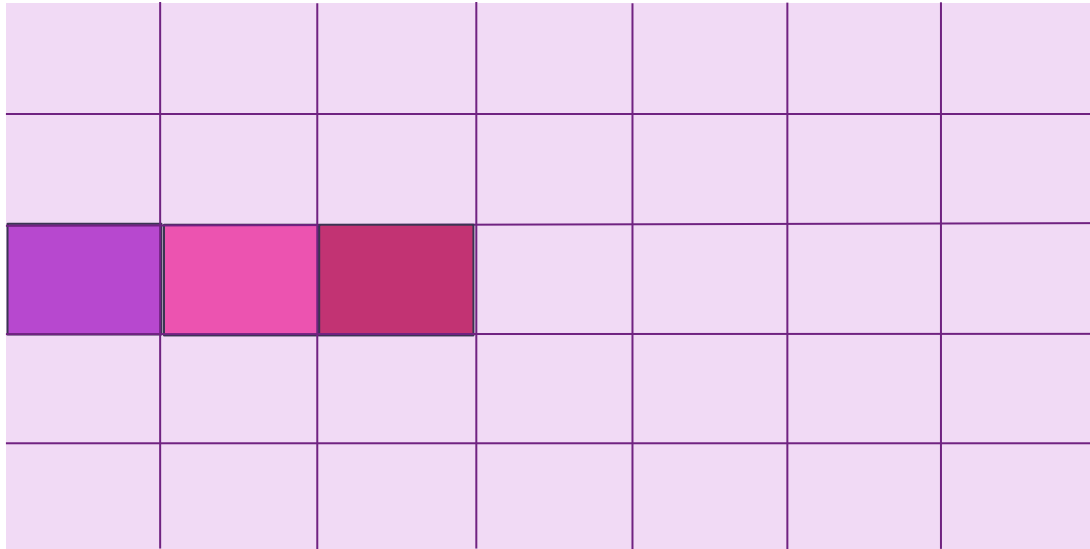
```
.flex-container {  
  display: flex;  
  flex-direction: row;  
  justify-content: start;  
  align-items: start;  
}
```

FLEXBOX – CSS



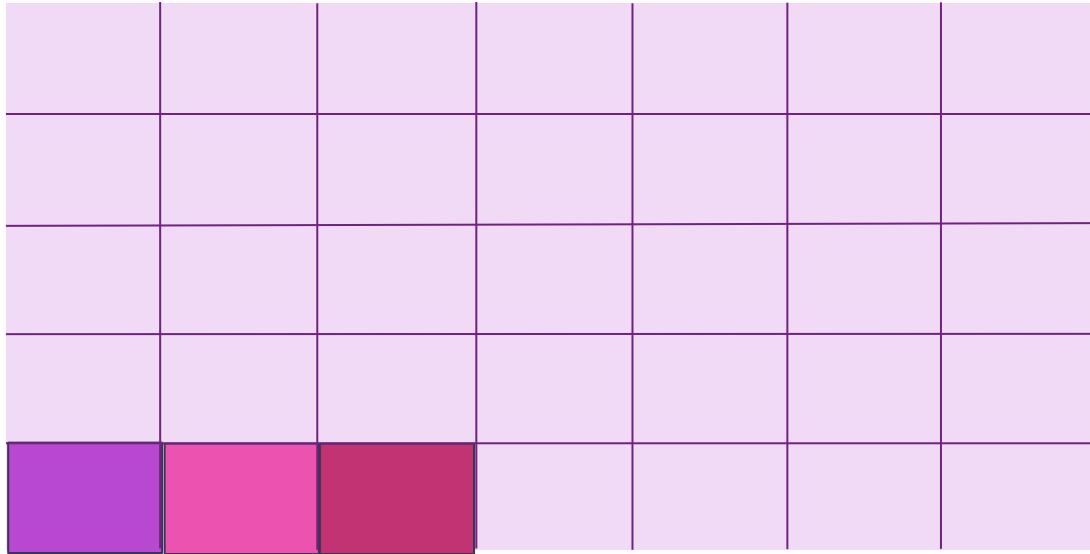
```
.flex-container {  
  display: flex;  
  flex-direction: row;  
  justify-content: start;  
  align-items: center;  
}
```

FLEXBOX – COLUMN



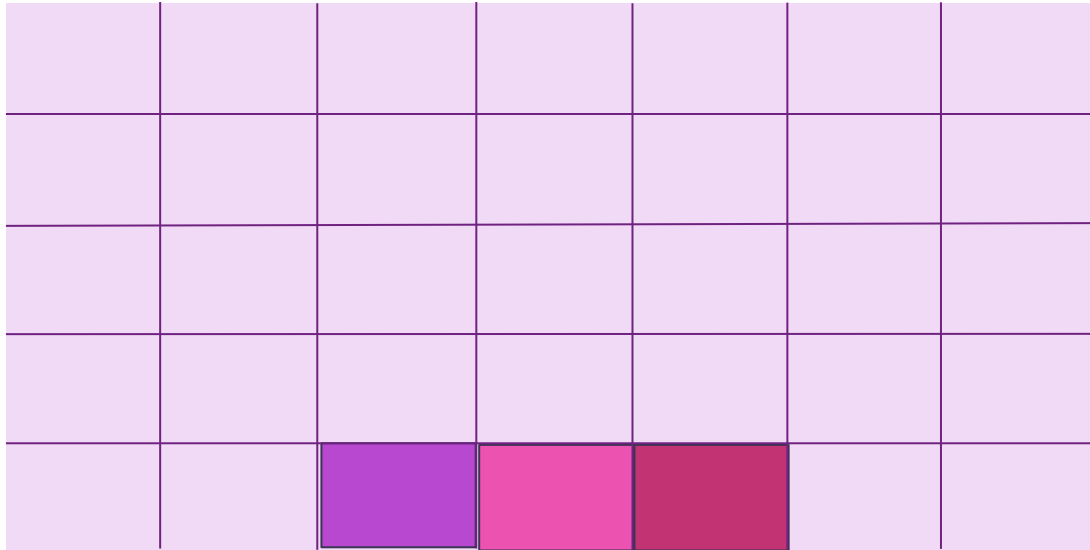
```
.flex-container {  
  display: flex;  
  flex-direction: row;  
  justify-content: start;  
  align-items: end  
}
```

FLEXBOX – COLUMN



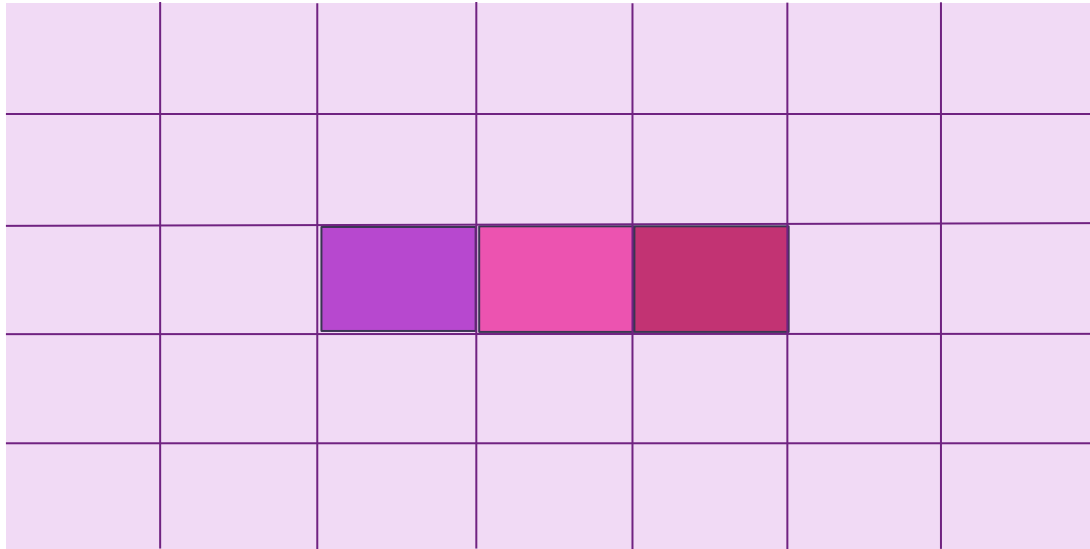
```
.flex-container {  
  display: flex;  
  flex-direction: row;  
  justify-content:center  
  align-items:end;  
}
```


FLEXBOX – COLUMN



```
.flex-container {  
  display: flex;  
  flex-direction: row;  
  justify-content:center  
  align-items:center  
}
```

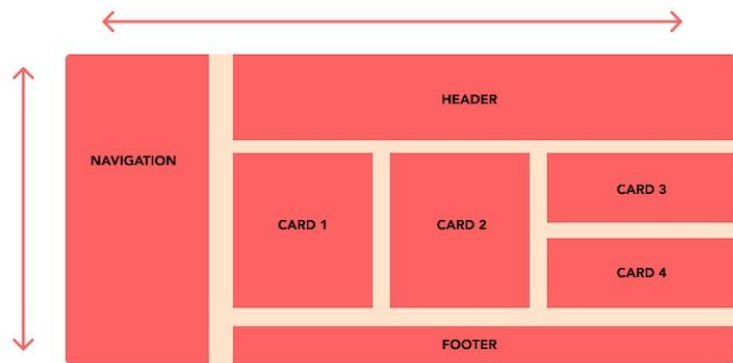
FLEXBOX – COLUMN



```
.flex-container {  
  display: flex;  
  flex-direction: row;  
  justify-content:center  
  align-items:center  
}
```



GRID IN CSS



29

TRANSITIONS

IN CSS



TRANSITIONS - CSS

01

transition-property



02

transition-duration

03

transition-timing-function



04

transition-delay

30

TRANSFORM IN CSS



TRANSFORM – CSS

01

transform: translate()

02

transform: scale()

03

transform: rotate()

04

transform: skew()

ANIMATION

IN CSS



ANIMATION – CSS

01

animation-name

02

animation-duration

03

animation-timing-function

04

animation-delay

05

animation-iteration-count

06

animation-direction

CSS VARIABLES

IN CSS



SPECIFICITY

IN CSS



SELECTORS IN CSS

01

* (universal selector)

02

Element / pseudo-element

03

Class or pseudo-class

04

id

05

Inline style

06

!important

The **Level of SPECIFICITY** – CSS

0.0.0.0.0

* (Universal Selector)



The universal selector has **0 specificity** (No priority)



The **Level of SPECIFICITY** – Element

0.0.0.0.1

Element / pseudo-elements

Includes only element selectors, such as **h1**, **img**, **p::before**. For each ID in a matching selector, add **0-0-0-0-1** to the weight value.



The **Level of SPECIFICITY** – Class

0.0.0.1.0

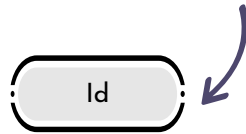
class / pseudo-classes / data-attribute

Includes class selectors, such as **.myClass**, **[type="radio"]**, **:hover**. For each class, attribute selector, or pseudo-class in a matching selector, add **0-0-0-1-0** to the weight value.



The Level of SPECIFICITY – ID

0.0.1.0.0



Includes only ID selectors, such as **#btn**. For each ID in a matching selector, add **0-0-1-0-0** to the weight value.



The Level of SPECIFICITY – Inline

0.1.0.0.0

Inline

For each inline style ex

```
<div class="container" style="background: #000;">
```


add 0-1-0-0-0 to the weight value.



The **Level of SPECIFICITY** - **!Important**

1.0.0.0.0

!important

For each important keyword ex `h1 {color: red!important}` 
add **1-0-0-0-0** to the weight value.



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NEW CSS FEATURES



New Features - CSS



01

:is, :has, :not, :where

02

Media query range
syntax

03

Container queries

04

Accent-color

05

Aspect ratio

06

Scroll snap





New Features - CSS



07

Individual Transform Properties

08

CSS Nesting

09

Gap Property for Flexbox

10

CSS Logical Properties (inline and block)

11

CSS Writing Mode

12

:focus-visible



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BONUS IN CSS





BONUS – CSS



01

FLOATS

02

CSS CLIP PATH

03

CSS AOS PLUGIN

04

CSS SHAPE DIVIDER

05

SCROLL BAR STYLING

06

WEBSITE REFERENCES



CLIP PATH – CSS



```
img{  
  clip-path: polygon(50% 0%, 0% 100%, 100% 100%);  
}
```

Left: 0%
Top: 100%

Left: 50%
Top: 0%

Left: 100%
Top: 100%

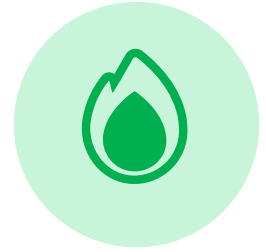
36

MINI PROJECTS IN CSS



HOW TO CENTER A DIV INSIDE A DIV





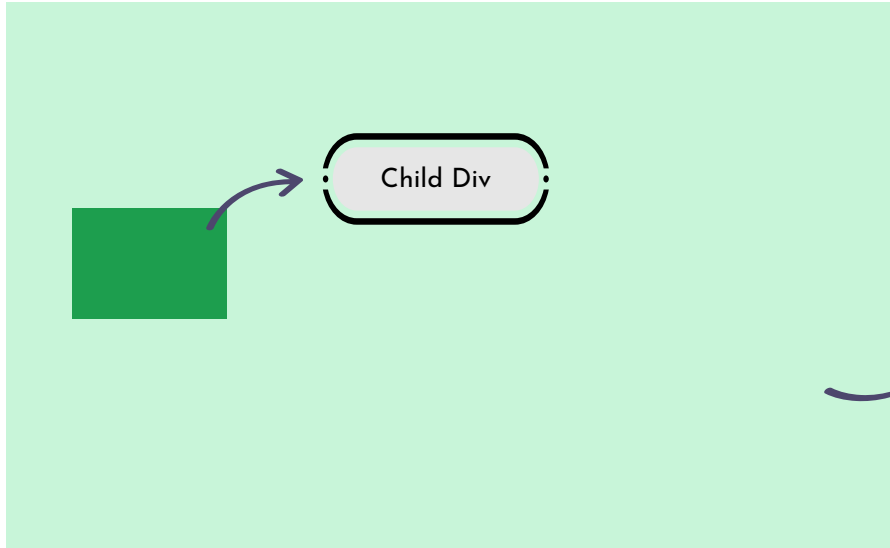
HOW TO CENTER A DIV INSIDE DIV IN CSS



POSITIONS – Absolute

Top:0, left:0

Top:0, right:0

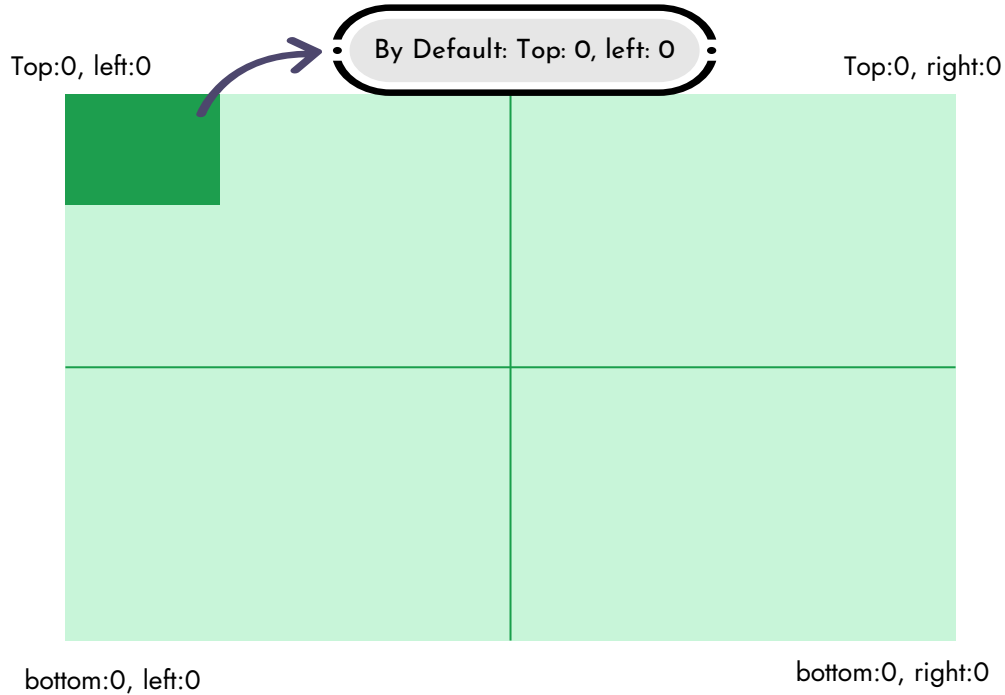


```
.child {  
  position: absolute;  
}
```

bottom:0, left:0

bottom:0, right:0

POSITIONS – Absolute

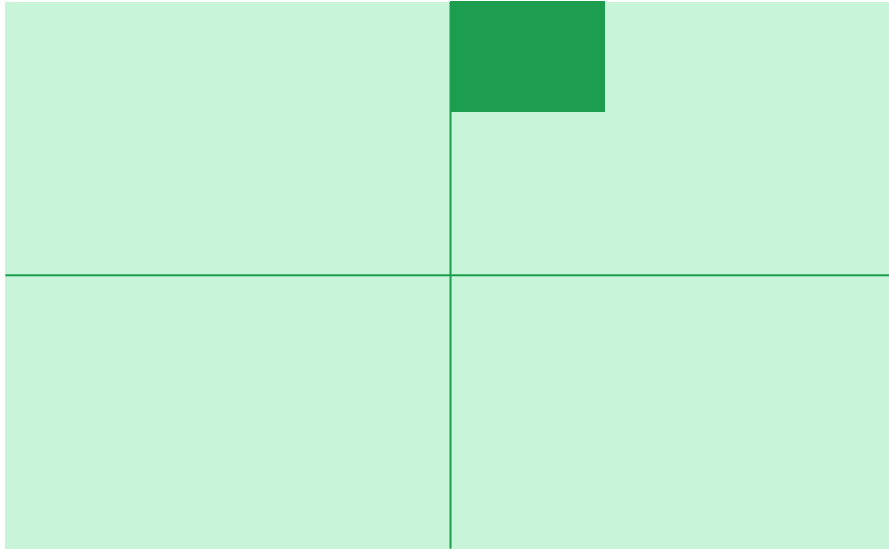


```
.child {  
  position: absolute;  
  left: 50%  
}
```

POSITIONS – Absolute

Top:0, left:0

Top:0, right:0



bottom:0, left:0

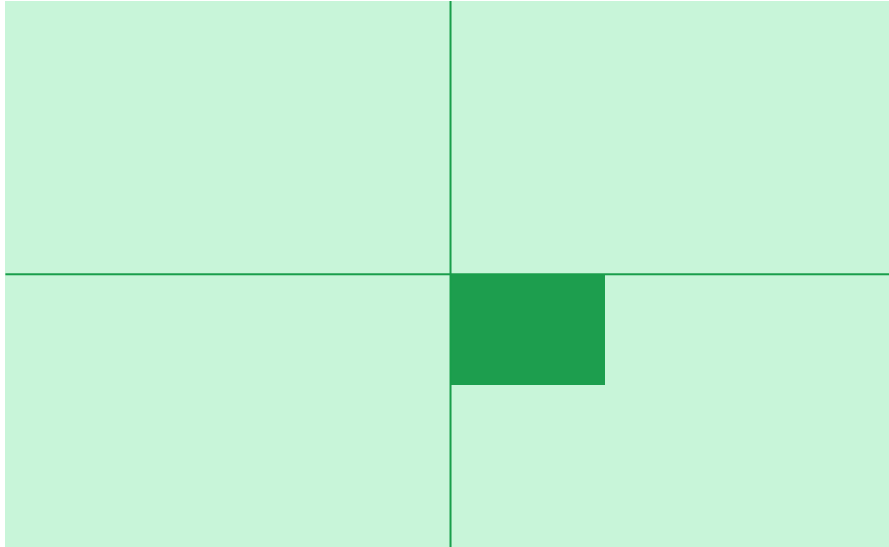
bottom:0, right:0

```
.child {  
  position: absolute;  
  left: 50%;  
  top:50%;  
}
```

POSITIONS – Absolute

Top:0, left:0

Top:0, right:0



bottom:0, left:0

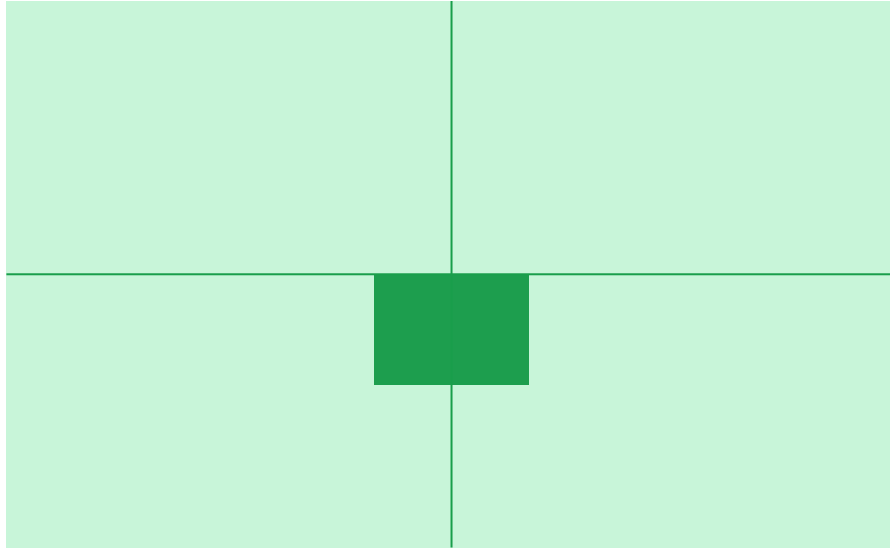
bottom:0, right:0

```
.child {  
  position: absolute;  
  left: 50%;  
  top:50%;  
  transform:translate(-50%)  
}
```

POSITIONS – Absolute

Top:0, left:0

Top:0, right:0



bottom:0, left:0

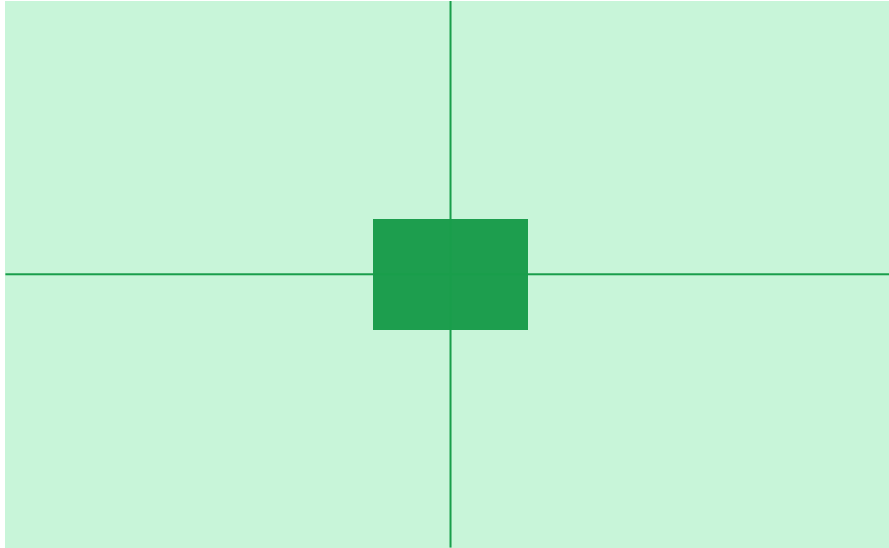
bottom:0, right:0

```
.child {  
  position: absolute;  
  left: 50%;  
  top:50%;  
  transform:translate(-50%,-50%)  
}
```


POSITIONS – Absolute

Top:0, left:0

Top:0, right:0

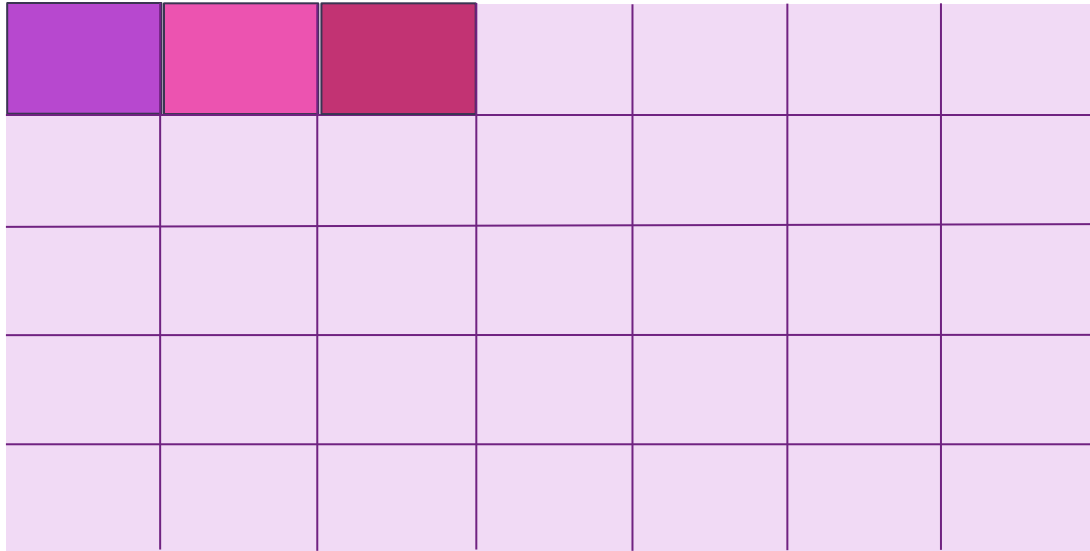


bottom:0, left:0

bottom:0, right:0

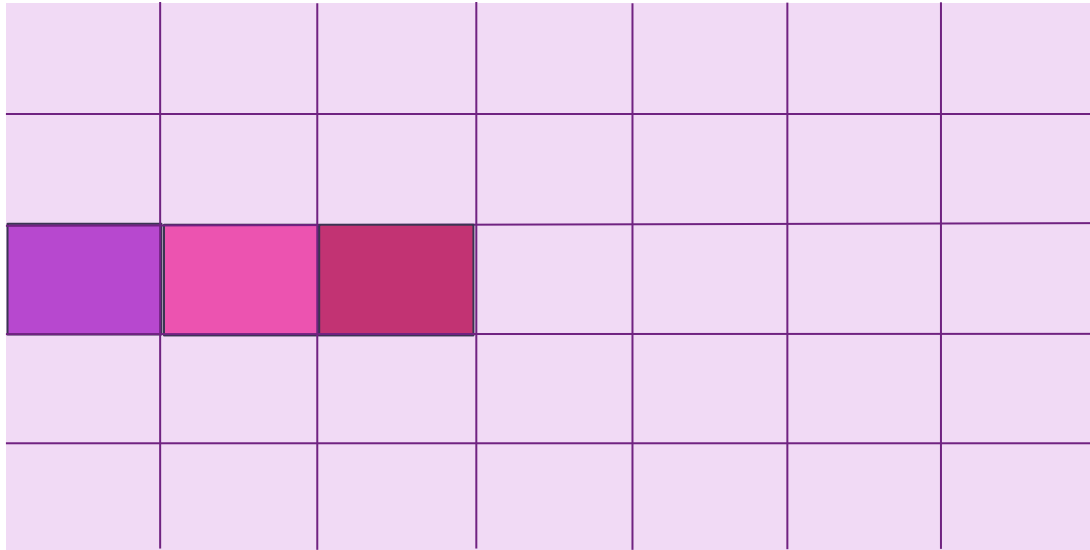
```
.child {  
  position: absolute;  
  left: 50%;  
  bottom:50%;  
  transform:translate(-50%,-50%)  
}
```

FLEXBOX – CSS



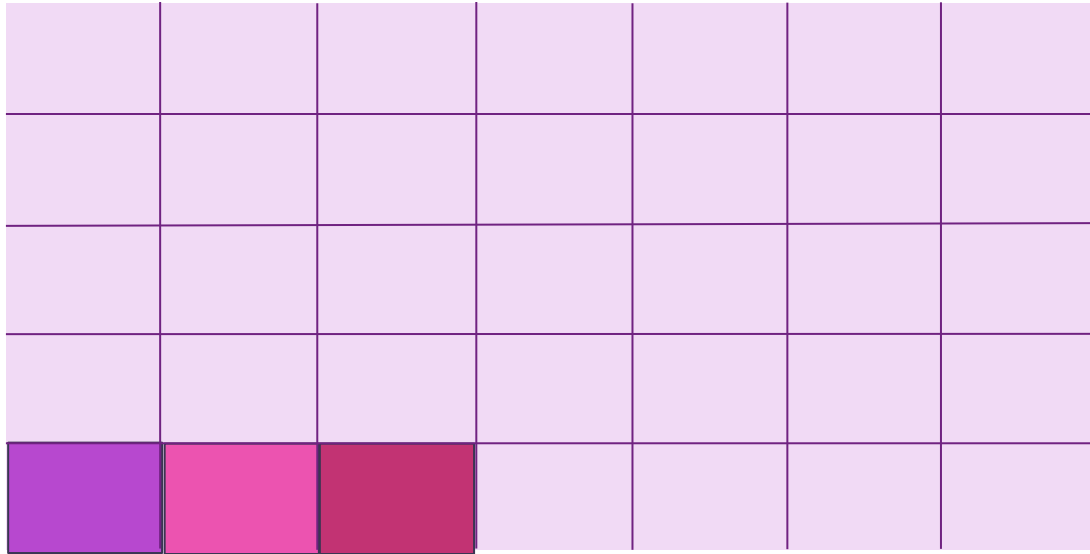
```
.flex-container {  
  display: flex;  
  flex-direction: row;  
  justify-content: start;  
  align-items: center;  
}
```

FLEXBOX – COLUMN



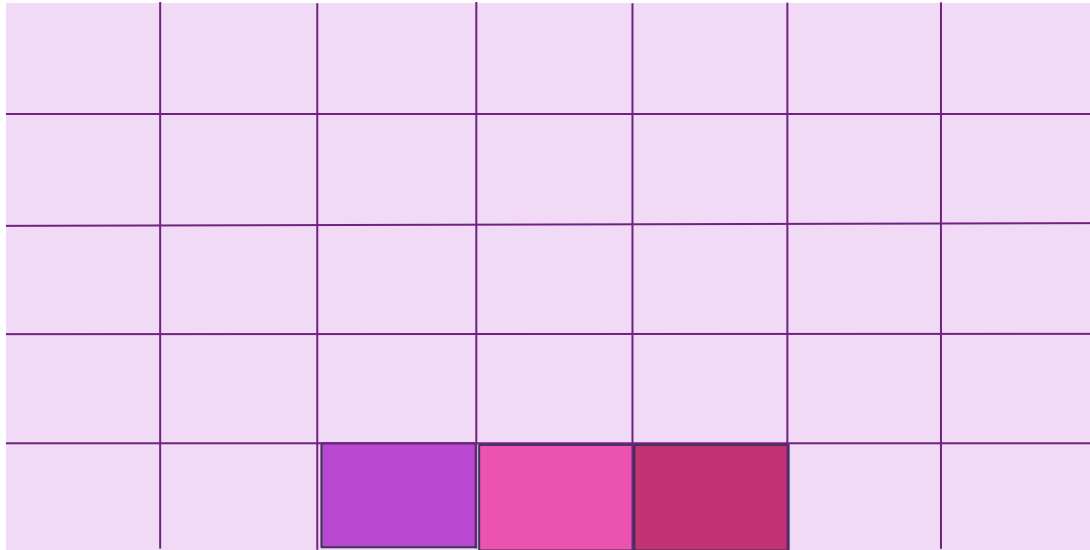
```
.flex-container {  
  display: flex;  
  flex-direction: row;  
  justify-content: start;  
  align-items: end  
}
```

FLEXBOX – COLUMN



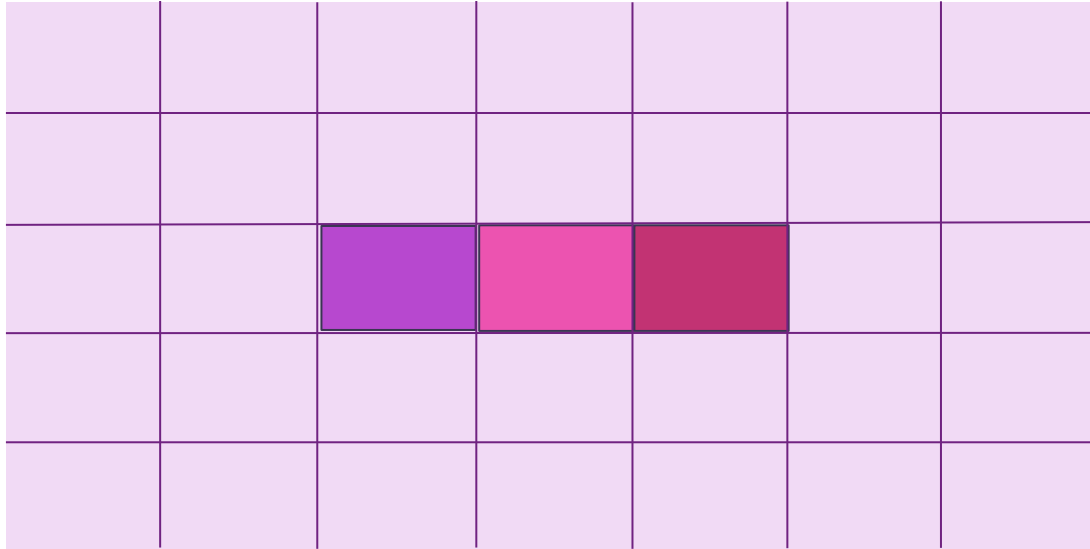
```
.flex-container {  
  display: flex;  
  flex-direction: row;  
  justify-content:center  
  align-items:end;  
}
```

FLEXBOX – COLUMN



```
.flex-container {  
  display: flex;  
  flex-direction: row;  
  justify-content:center  
  align-items:center  
}
```

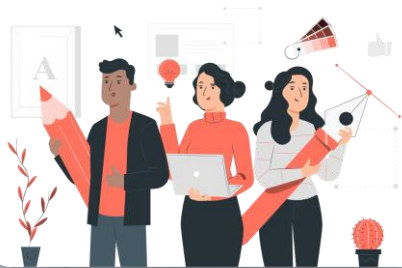
FLEXBOX – COLUMN



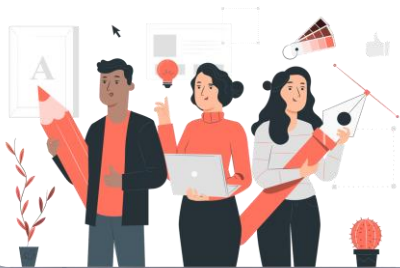
```
.flex-container {  
  display: flex;  
  flex-direction: row;  
  justify-content:center;  
  align-items:center;  
}
```

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Container Queries



CSS Architecture & Best Practices





VENDOR PREFIXES

Browser Compatibility in CSS



VENDOR PREFIXES – CSS



01

The **-webkit-** prefixed property will work in WebKit-based browsers such as **Chrome and Safari**

02

The **-moz-** prefixed property will work in **Firefox**

03

The **-ms-** prefixed property will work in **Internet Explorer**

04

The **-o-** prefixed property will work in **Opera**



Browser Compatibility in CSS



Vendor prefixes

Returning to the gradient example we saw earlier, you may have noticed that something wasn't quite right there. To get the gradient rendering across all modern browsers, you need to include multiple versions of the declaration, like this:

```
nav {
  background-color: red;
  background-image: url(gradient-slice.png);
  background-image: -webkit-linear-gradient(top right, #A60000, #FFFFFF);
  background-image: -moz-linear-gradient(top right, #A60000, #FFFFFF);
  background-image: -ms-linear-gradient(top right, #A60000, #FFFFFF);
  background-image: -o-linear-gradient(top right, #A60000, #FFFFFF);
  background-image: linear-gradient(top right, #A60000, #FFFFFF);
}
```

This is because the [CSS Image Values and Replaced Content Module Level 3](#) — the spec that CSS gradients are specified in, is not finalised. Unfinished CSS features are implemented in browsers in an experimental capacity, with a vendor-specific prefix so that different browser's implementations can be tested without impacting on other browser's implementations. In the above example:

- The `-webkit-` prefixed property will work in WebKit-based browsers such as Chrome and Safari
- The `-moz-` prefixed property will work in Firefox
- The `-ms-` prefixed property will work in Internet Explorer
- The `-o-` prefixed property will work in Opera

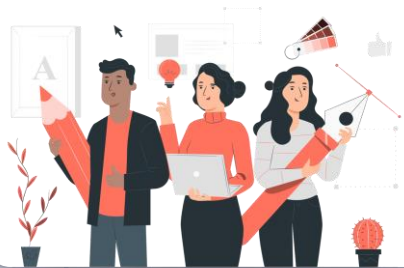
Official W3C policy states that you shouldn't really use experimental properties in production code, but people do, as they want to make sites look cool and keep on the cutting edge. I don't see a problem with this, but if you want to use vendor prefixed properties in your code, you really should use include all the different prefixes so that as many browsers as possible can use all the features you are implementing.

Notice that an unprefixed version of the property has also been included, at the bottom of the list: this is so that when the CSS feature is finalised, and the prefixes are removed, the code will still work — this is good future proofing practice.

https://www.w3.org/community/webed/wiki/Optimizing_content_for_different_browsers:_the_RIGHT_way



BEM





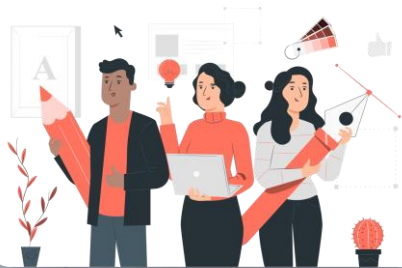
BEM (Block, Element, Modifier) Methodology

<https://getbem.com/>

<https://css-tricks.com/bem-101/>



SMA CSS





SMACSS

(Scalable and Modular Architecture for CSS)

[Home - Scalable and Modular Architecture for CSS \(smacss.com\)](https://smacss.com)



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FINAL PROJECTS IN CSS



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SEO IN CSS



SEO – CSS



01

Include a descriptive and keyword-rich <title> tag within the <head> section of your HTML document.

02

Meta Description Tag

03

Proper Heading Tags

04

Image Optimization



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TESTING IN CSS



CSS Performance and Optimization

01

Minification and Compression

02

Critical CSS: "Above-the-fold" content

03

Reducing Render Blocking



Website Testing - CSS

01

Lighthouse testing

02

<https://pagespeed.web.dev/>

03

<https://gtmetrix.com/>



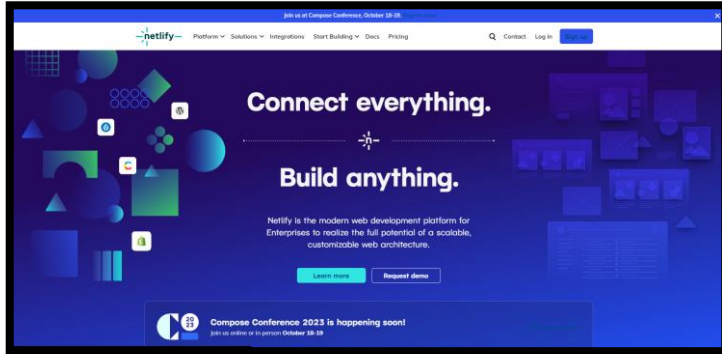
41

HOSTING WEBSITE LIVE



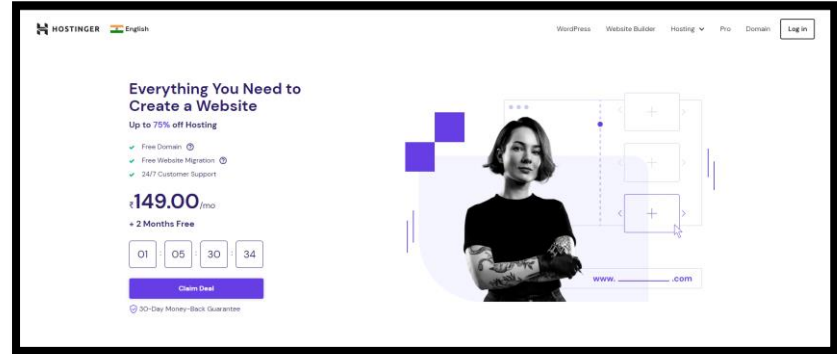
HOSTING WEBSITE LIVE

NETLIFY



<https://www.netlify.com/>

HOSTINGER



<http://www.hostinger.com/>



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