

# 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

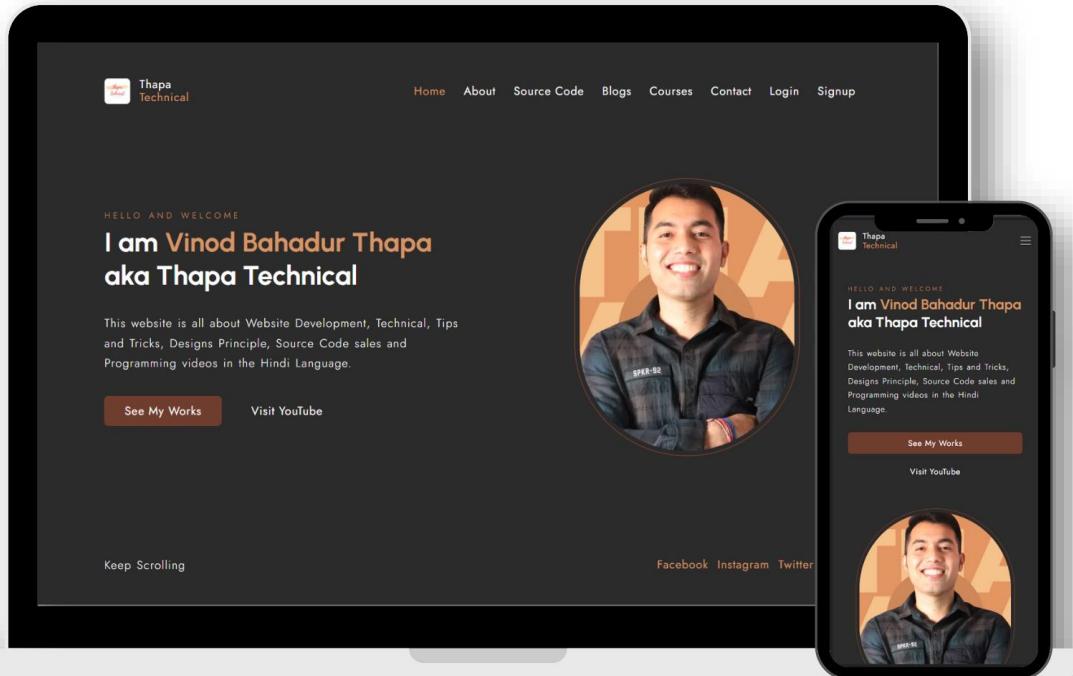
## PRO LEVEL

- 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 Style Sheets



# 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

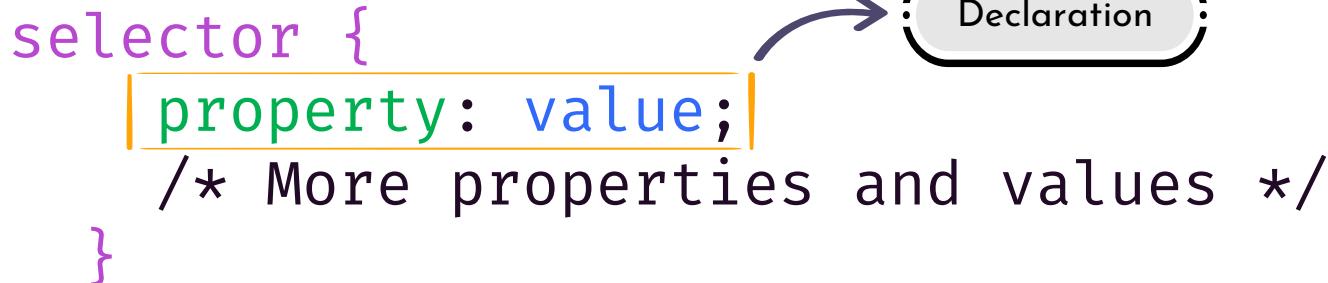
# CSS Rule Structure



# 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 */  
}
```

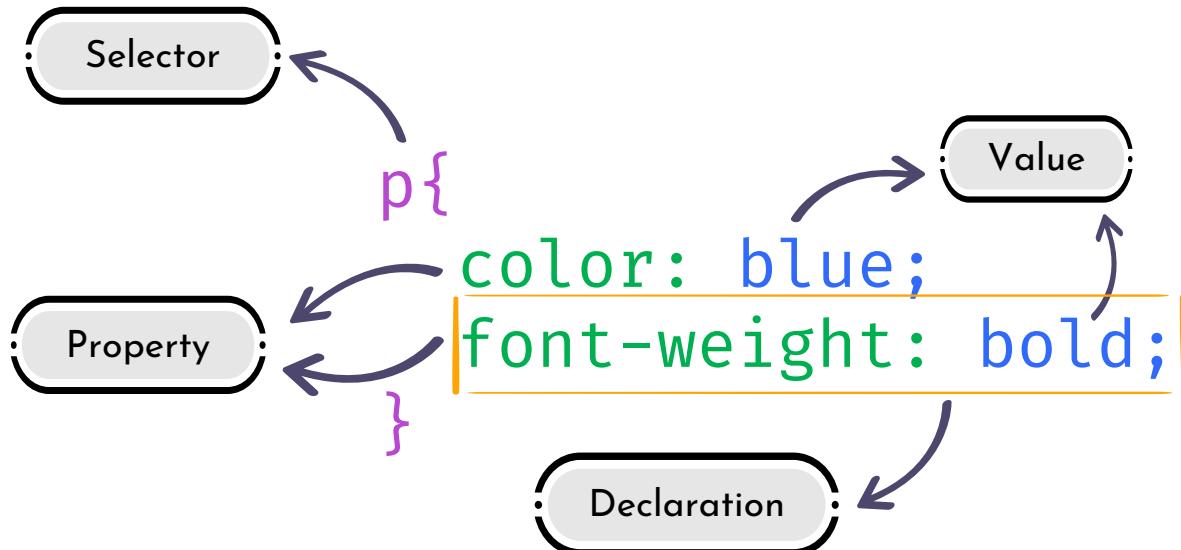


The diagram illustrates the structure of a CSS rule. It shows a code snippet with a purple 'selector {' followed by a yellow 'property: value;'. An arrow points from the yellow box to a rounded rectangle labeled 'Declaration'.

# CSS Rule Structure



# Syntax – CSS



03

# How to use css in HTML?



# 3 Ways

01

02

03

## Inline CSS

Style applied directly to an HTML element using the `style` attribute.

## Internal CSS

Styles defined within the `<style>` tag within the HTML document's `<head>`.

## 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

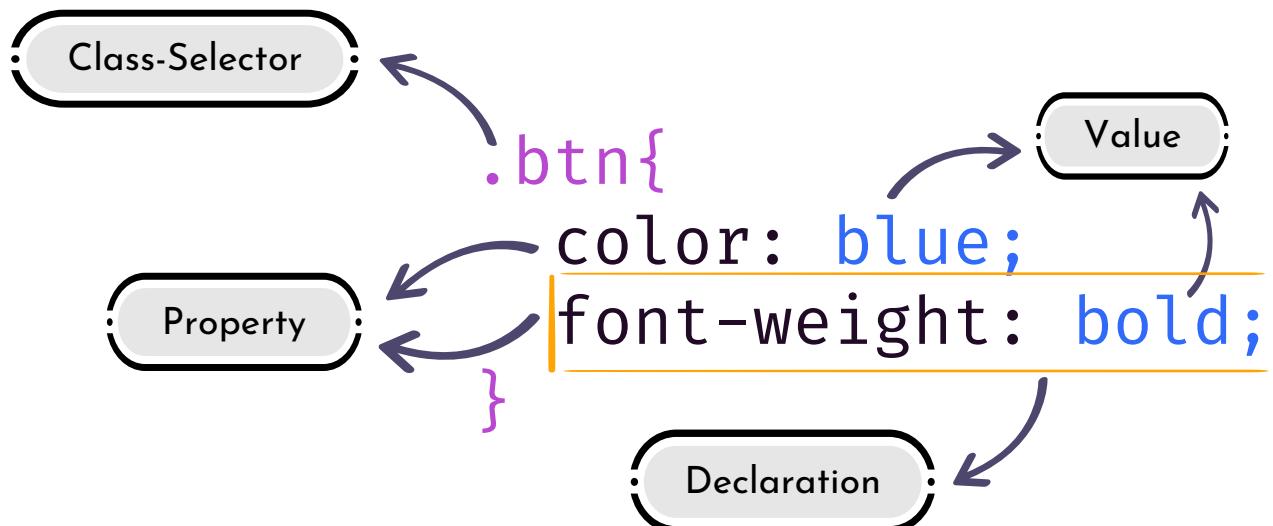


# Class Selector – HTML / CSS

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



# Class Selector - CSS

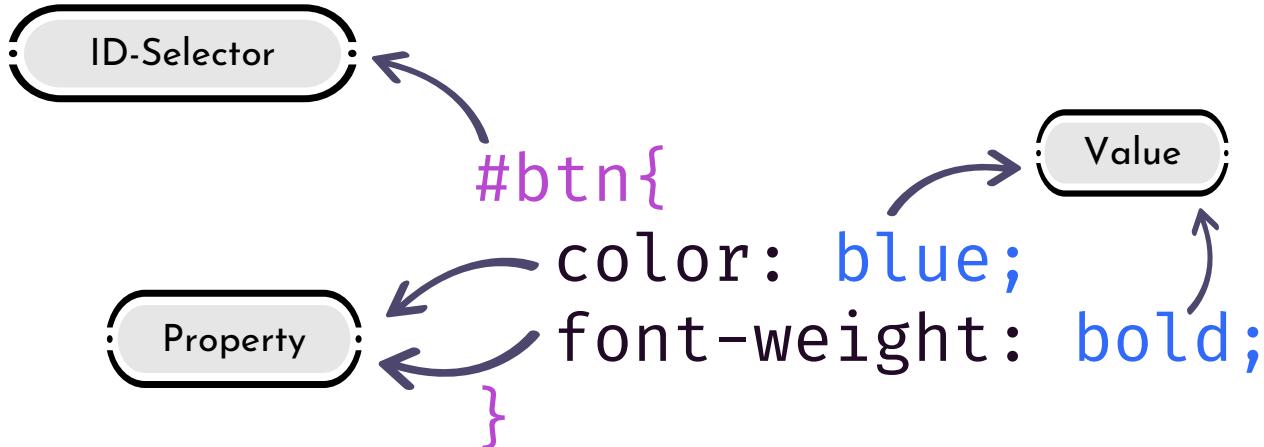


# ID Selector – HTML / CSS

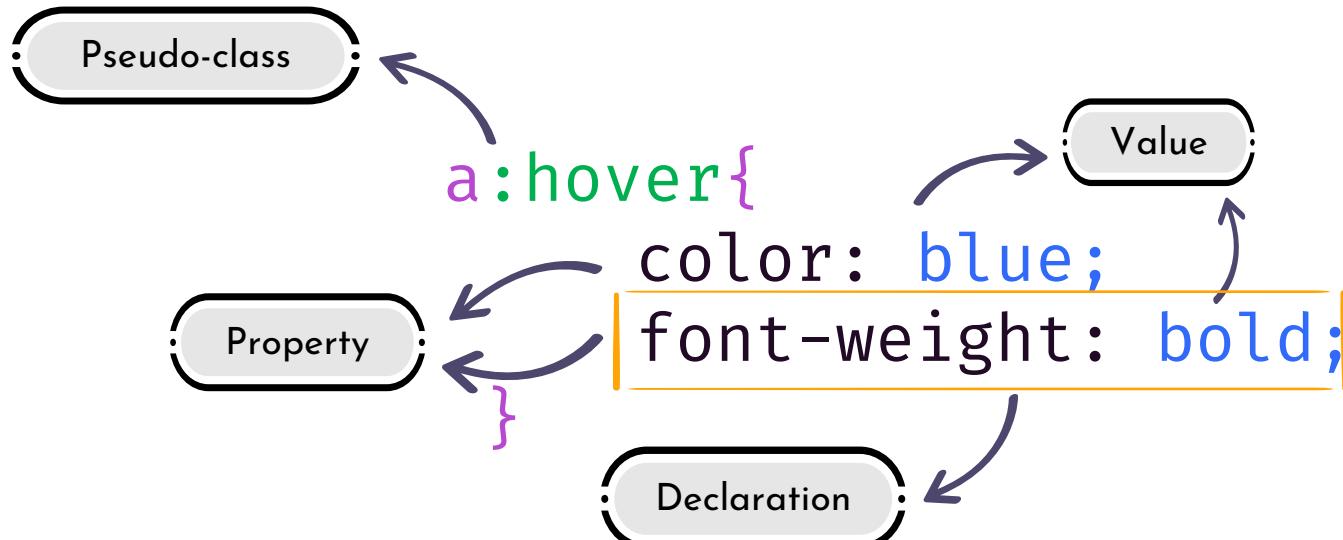
```
<section>
  <button id="btn">
    Subscribe Thapa Technical
  </button>
</section>
```

ID-Selector

# ID Selector – CSS



# Pseudo-Class – CSS





05

# css Comments

# CSS Comment

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



06

# COLORS IN CSS



# RGB – CSS

01

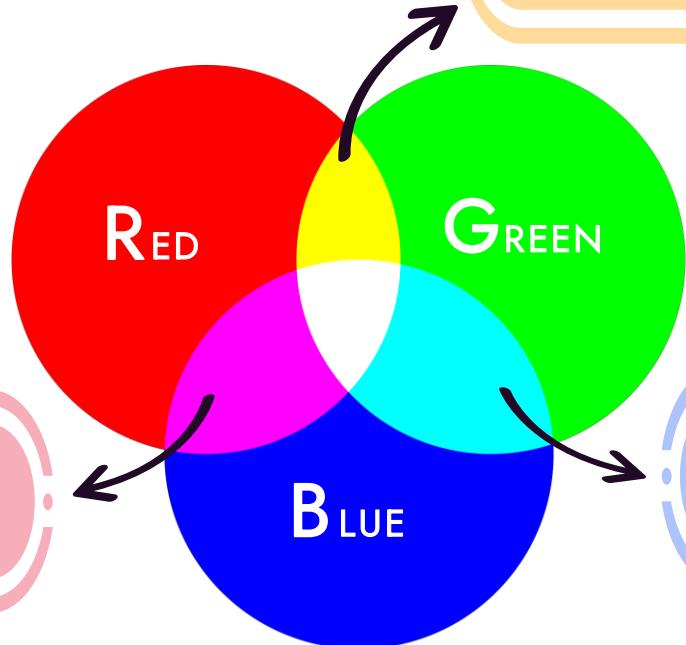
RED – #FF 00 00  
255, 0, 0

02

GREEN – #00 FF 00  
0, 255, 0

03

BLUE – #00 00 FF  
0, 0, 255



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

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

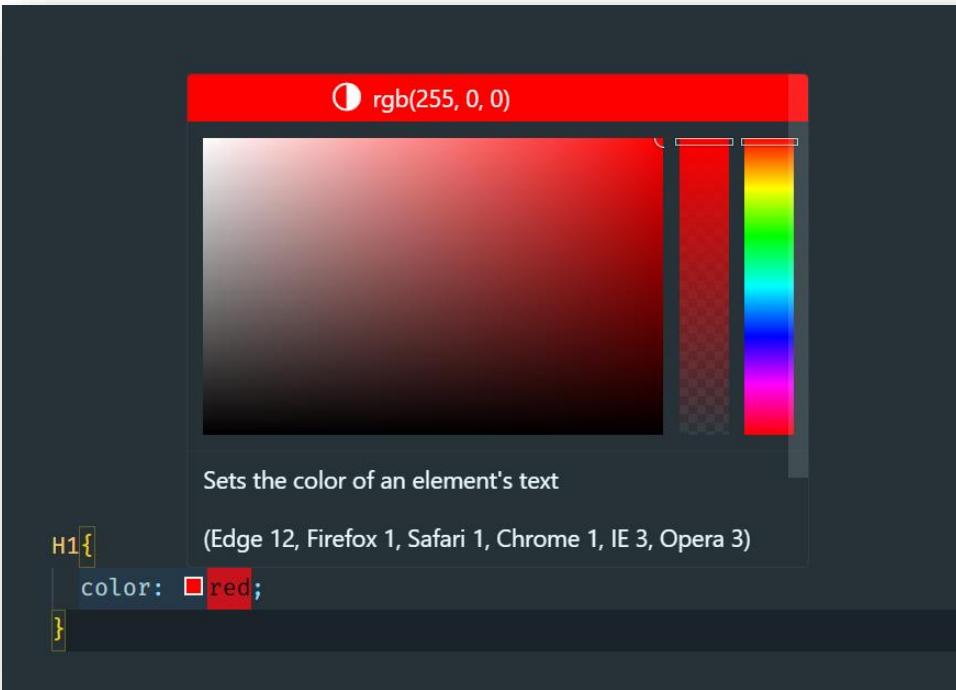
CYAN  
RGB = 0, 255, 255  
HEX = #00 FF FF



# COLORS (BONUS)



# GRAPHIC DESGINER – CSS



1

**Hue**: A pure color

2

**Tint**: A pure color with just white added

3

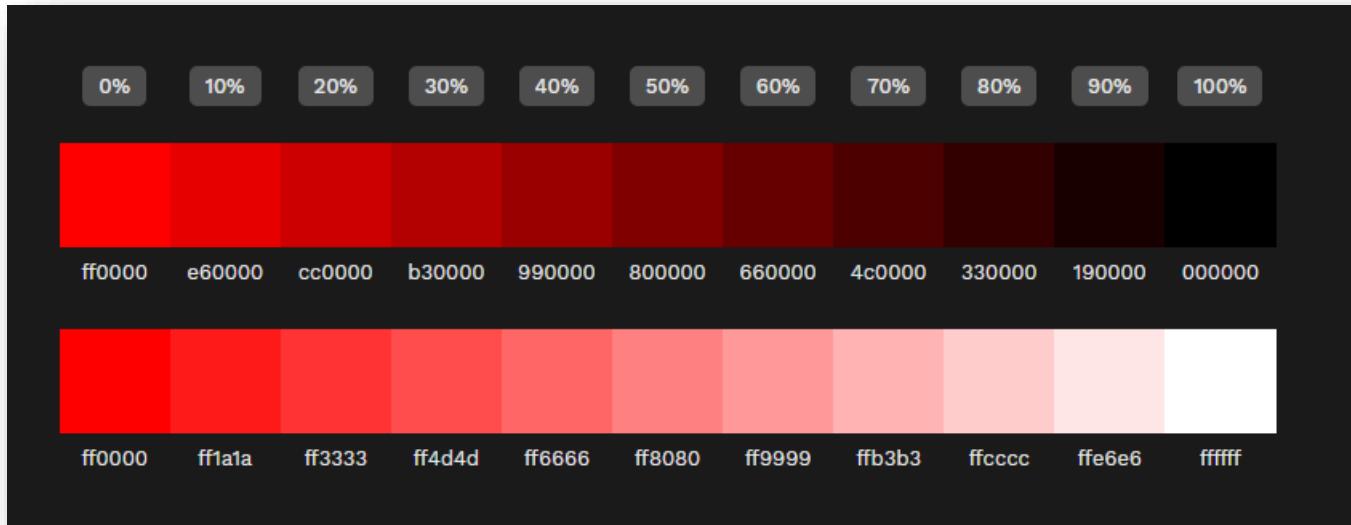
**Shade**: a pure color with just black added

4

**Tone**: A pure color with just grey added



# GRAPHIC DESGINER – 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 Pexels (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

09

# TEXTS IN CSS



# TEXT PROPERTIES – CSS

**01**

Text Alignment

**02**

Text Decoration

**03**

Text Transform

**04**

Text Spacing

**05**

Text Shadow

# TEXT SHADOW - CSS

text-shadow: 2px 2px 1px blue;

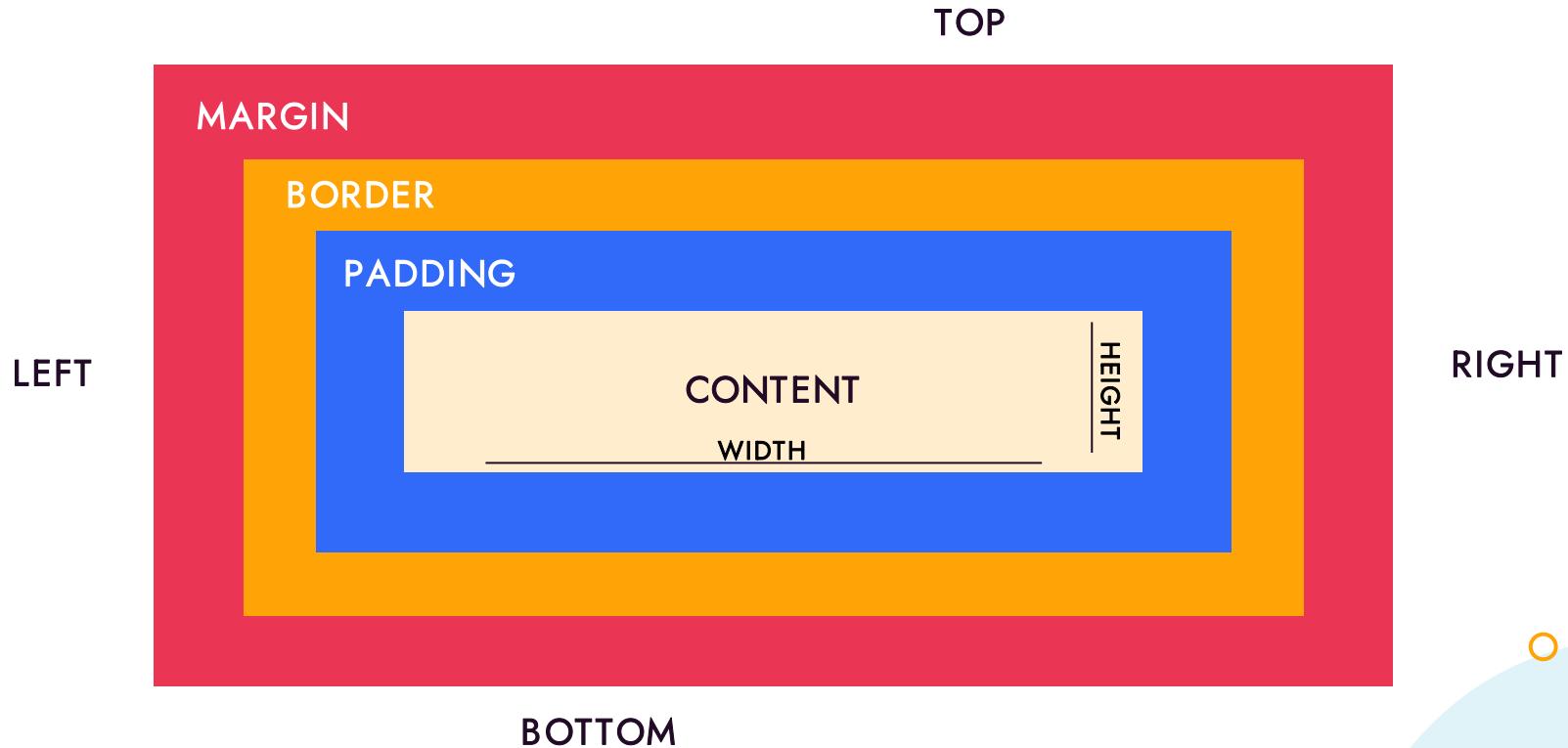
Offset-Y

Blur-radius

Offset-X

Color

# BOX MODEL – CSS



10

# BORDER IN CSS



# Border – CSS

```
border: 2px solid blue;
```

Border-Style

Border-Color

Border-Width

# PADDING IN CSS



# Padding – CSS

padding: 2px 4px 3px 5px;

Padding-Right

Padding-Left

Padding-Top

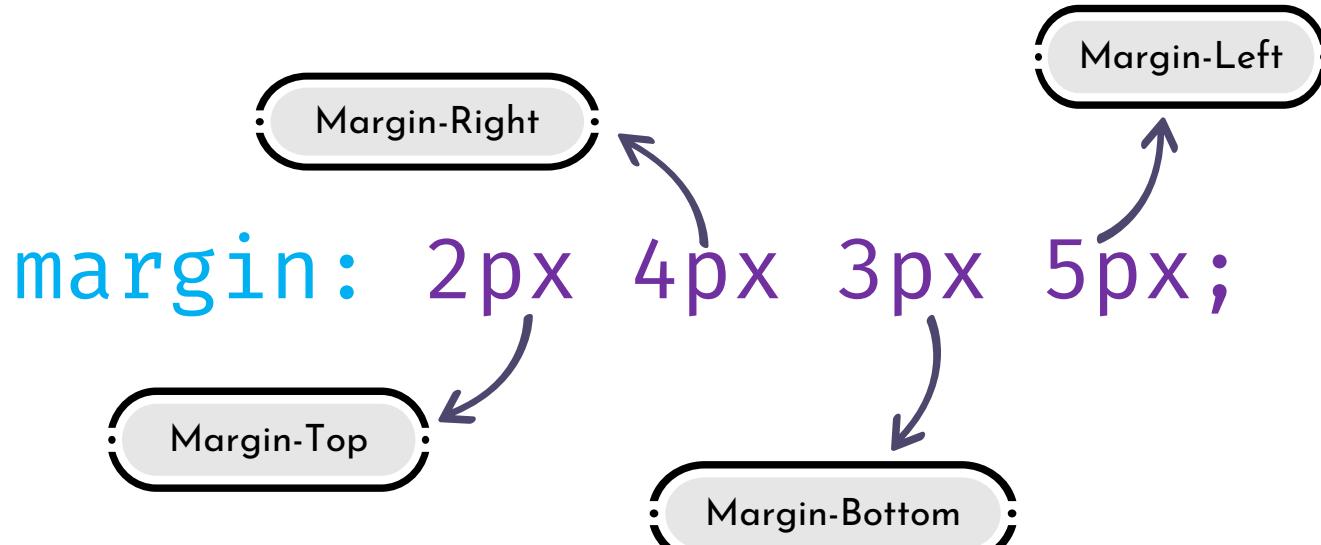
Padding-Bottom

12

# MARGIN IN CSS



# Margin – CSS

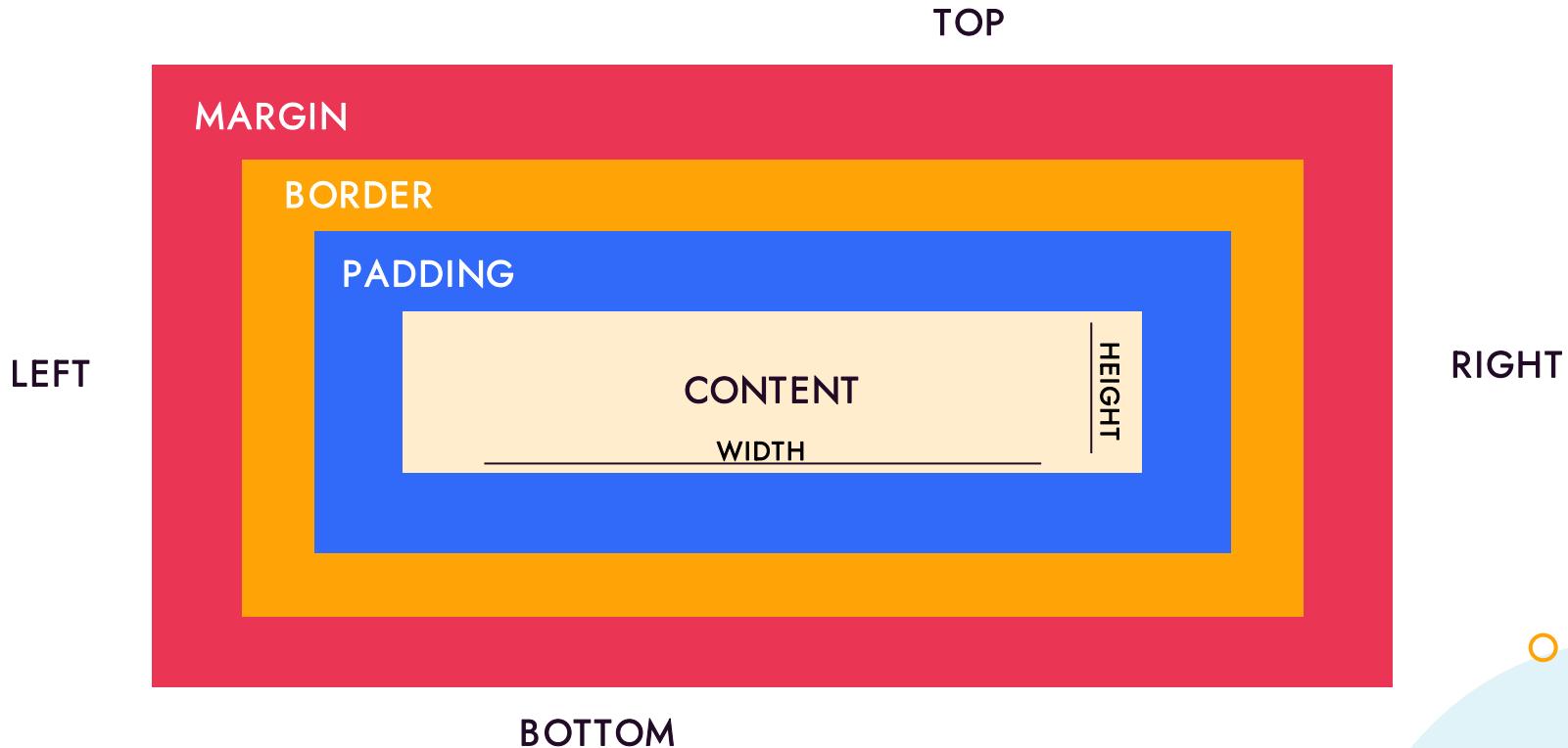


13

# BOX-MODEL IN CSS



# BOX MODEL – CSS

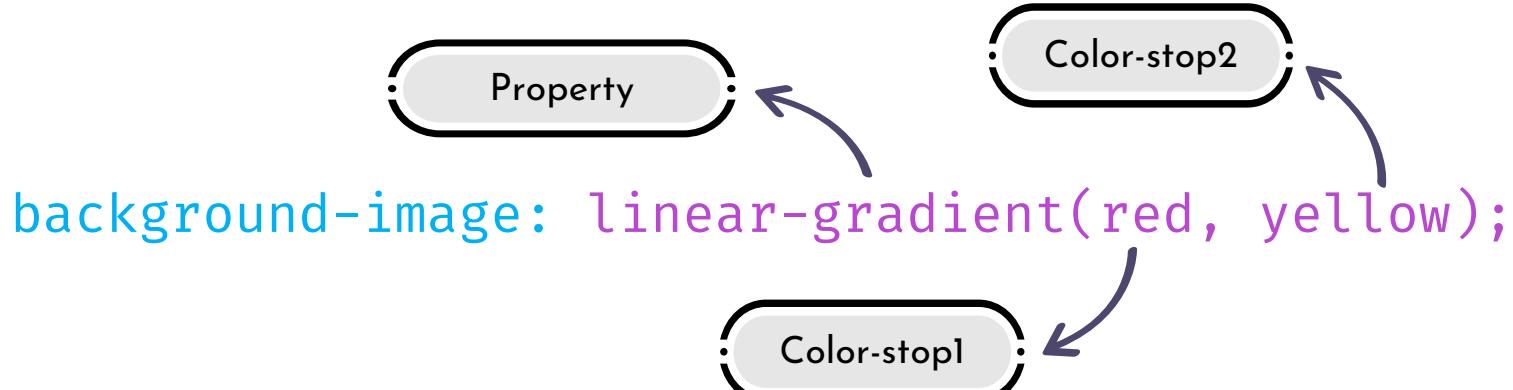




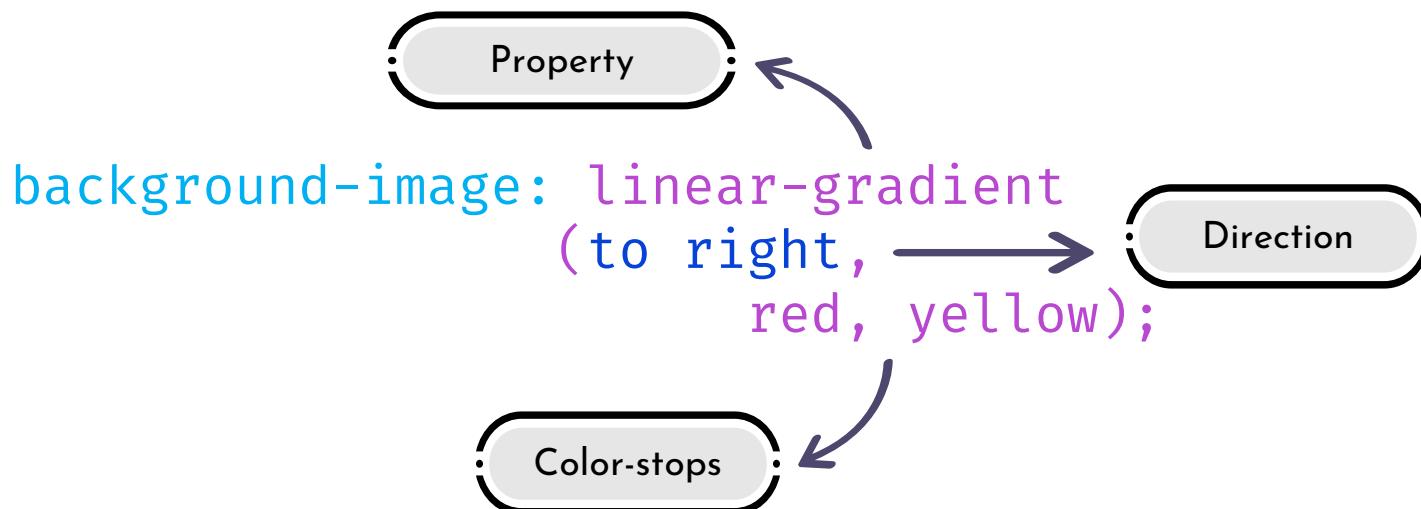
14

# css Gradients

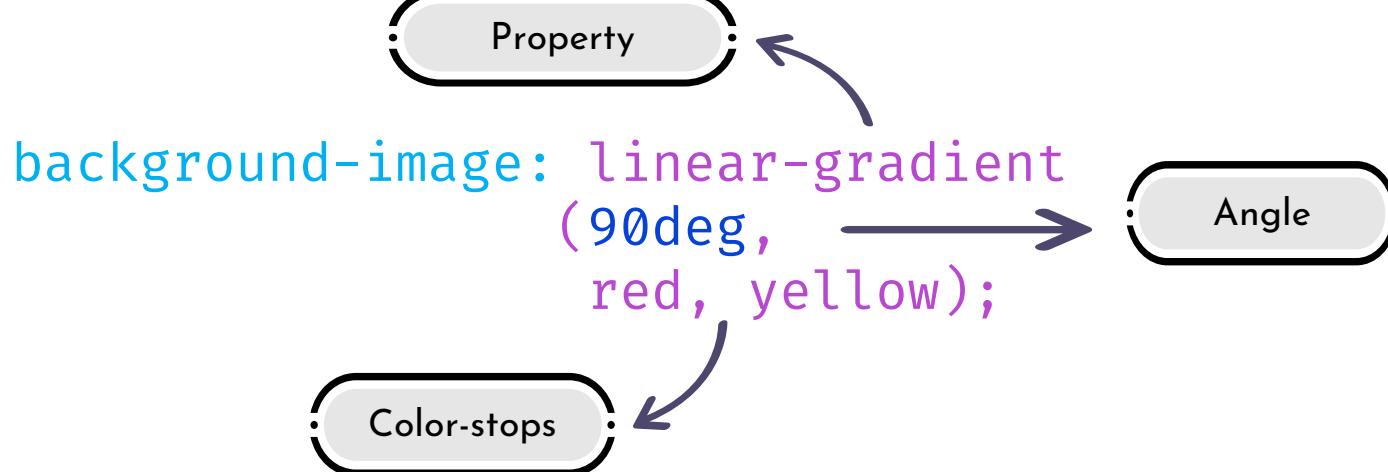
# Gradient – CSS



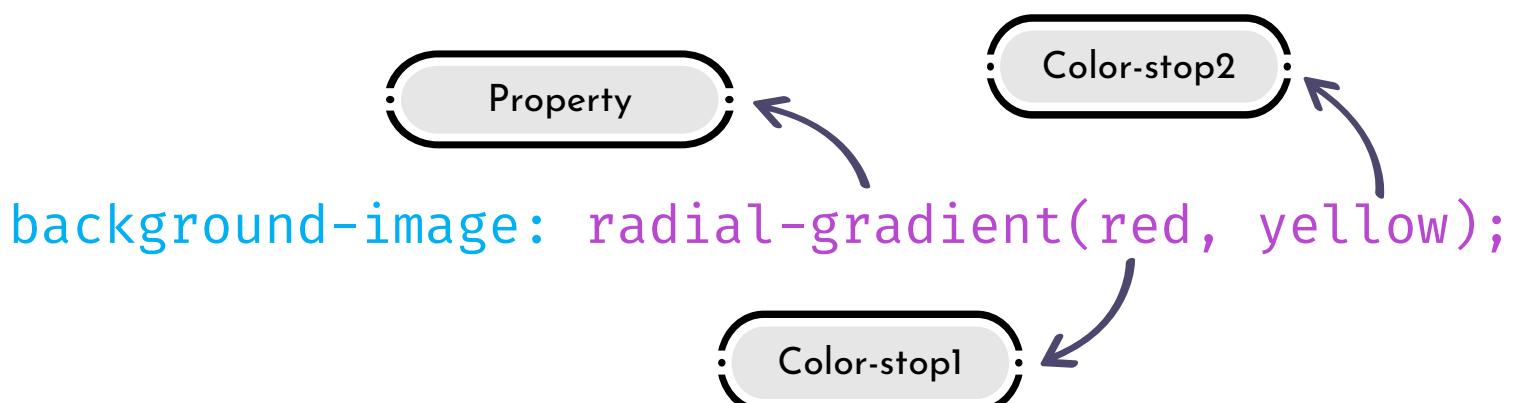
# Gradient with Direction – CSS



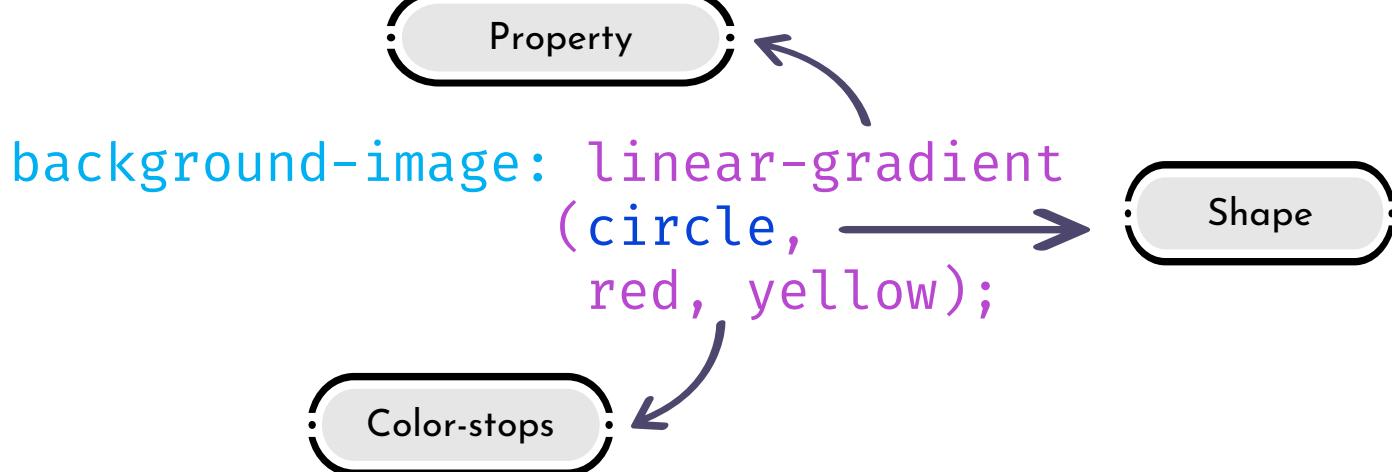
# Gradient with Angles – CSS

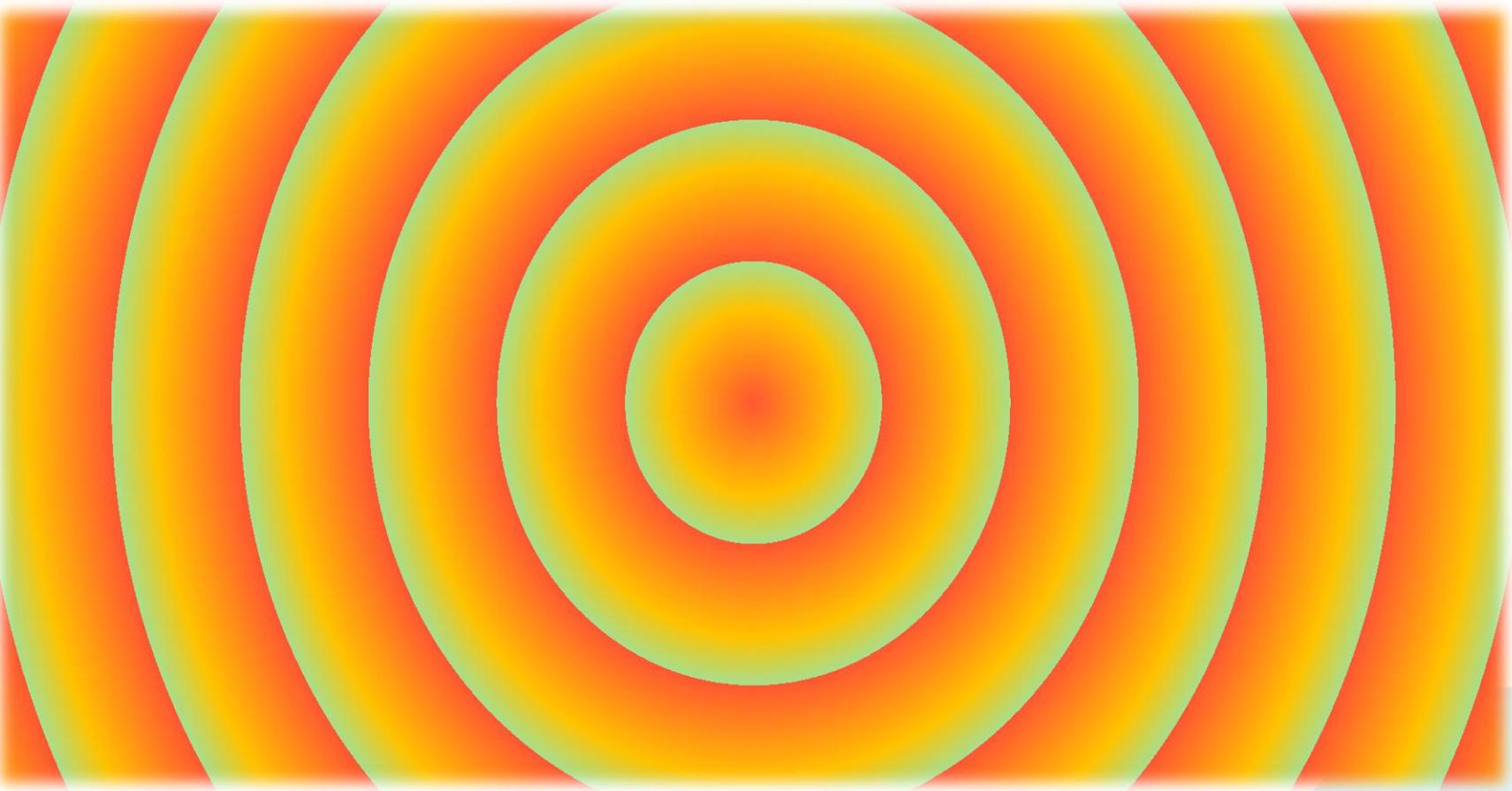


# Radial Gradient – CSS



# Gradient with Shape – CSS





15

# BOX SHADOW IN CSS



# BOX SHADOW – CSS

**box-shadow: -2px 1px 2px 4px #61677a;**

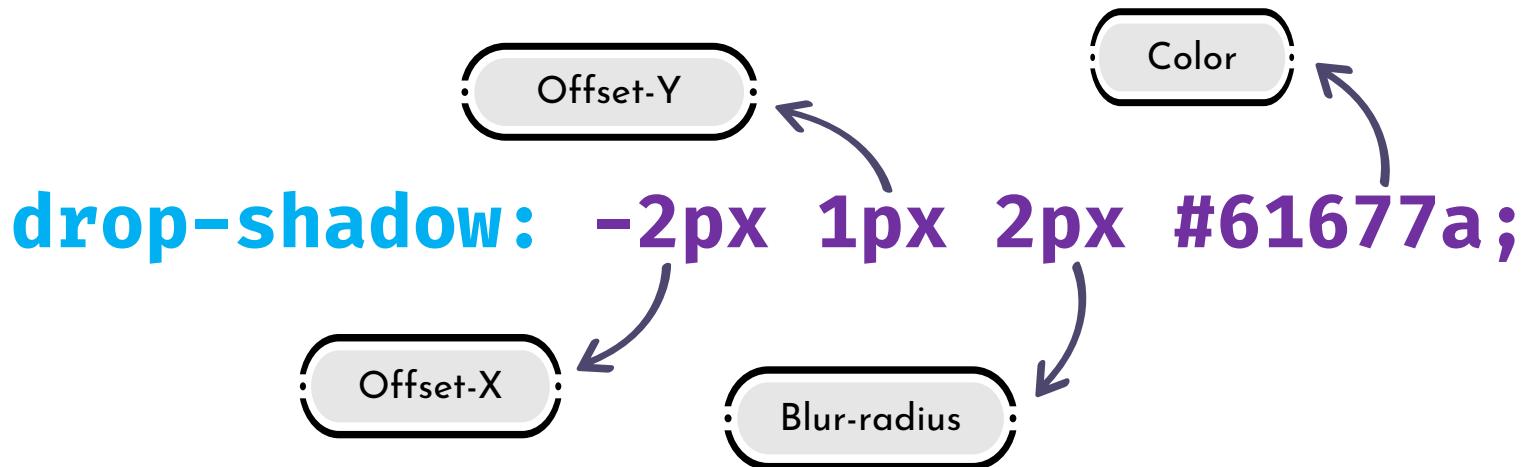
The diagram illustrates the components of a CSS box-shadow declaration. It features five rounded rectangular boxes arranged in a grid-like pattern. The first row contains 'Offset-Y' at the top left and 'Density/Spread' at the top right. The second row contains 'Offset-X' at the bottom left and 'Color' at the bottom right. The third row contains 'Blur-radius' at the center. Arrows point from each component to its corresponding value in the CSS code: 'Offset-Y' points to '-2px', 'Offset-X' points to '1px', 'Blur-radius' points to '2px', 'Color' points to '4px', and 'Density/Spread' points to '#61677a'.

16

# DROP SHADOW IN CSS



# DROP SHADOW – CSS



# FILTERS IN CSS



# FILTERS - CSS

01

grayscale()

03

blur()

05

brightness()

02

opacity()

04

contrast()

06

invert()



18

# 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)

03

Adjacent Sibling  
Selector (+)

05

Universal Selector (\*)

02

Child Selector (>)

04

General Sibling Selector  
(~)

21

# DISPLAY IN CSS



# DISPLAYS - CSS

**01**

Block-Level Elements

**02**

Inline Elements

**03**

Inline-Block Elements



22

# POSITIONS IN CSS



# POSITIONS - CSS



Relative



Static



Sticky



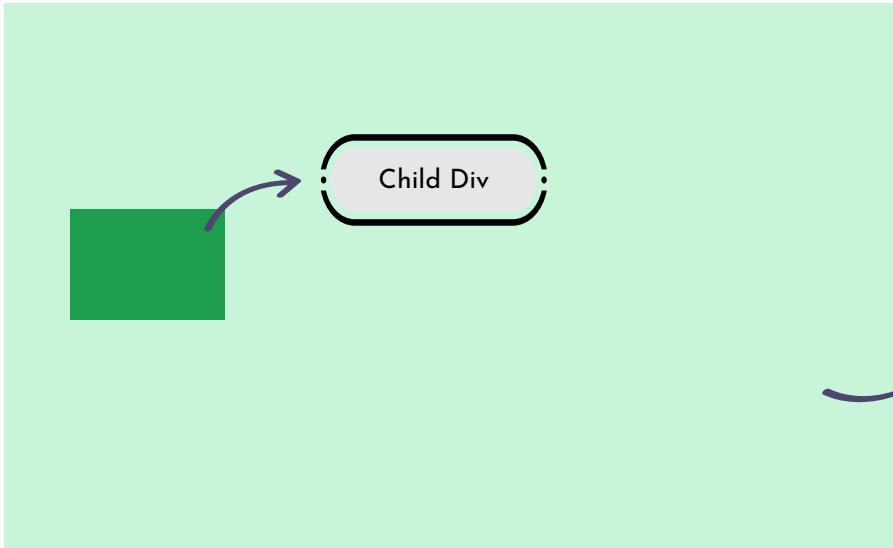
Absolute



Fixed

# POSITIONS – Absolute

Top:0, left:0



Top:0, right:0

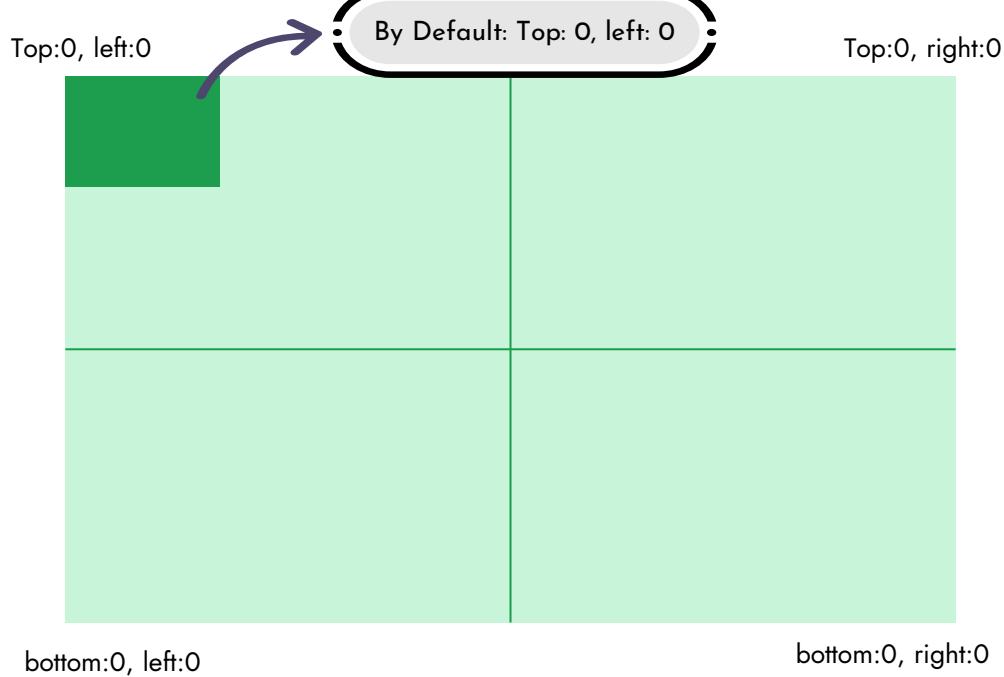
```
.child {  
  position: absolute;  
}
```

Parent Div

bottom:0, left:0

bottom:0, right:0

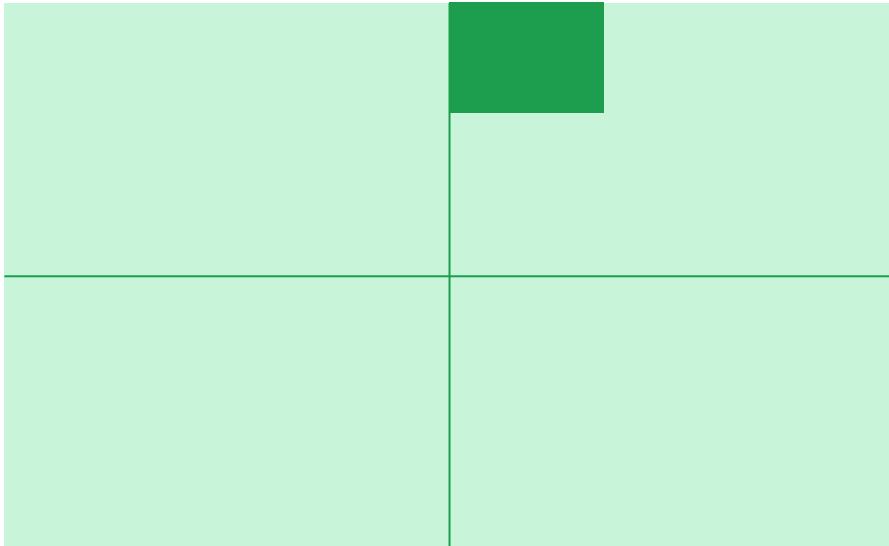
# POSITIONS – Absolute



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

# POSITIONS – Absolute

Top:0, left:0



bottom:0, left:0

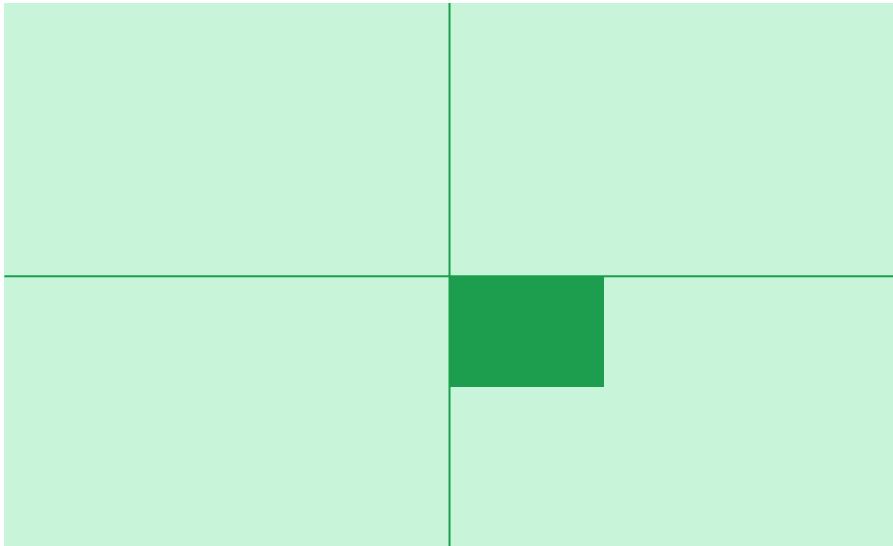
Top:0, right:0

bottom:0, right:0

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

# POSITIONS – Absolute

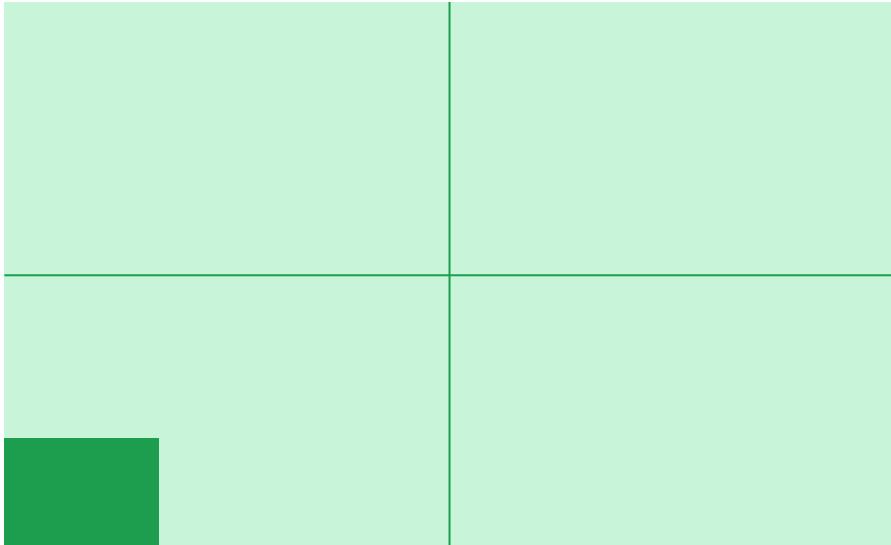
Top:0, left:0



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

# POSITIONS – Absolute

Top:0, left:0



Top:0, right:0

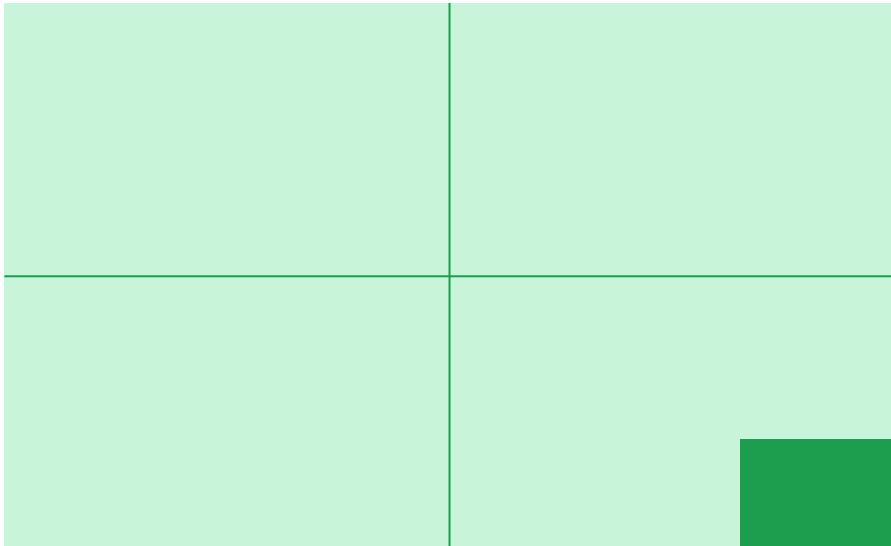
```
.child {  
  position: absolute;  
  right: 0;  
  bottom:0;  
}
```

bottom:0, left:0

bottom:0, right:0

# POSITIONS – Absolute

Top:0, left:0



bottom:0, left:0

bottom:0, right:0

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

# POSITIONS – Absolute

Top:0, left:0



Top:0, right:0

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

bottom:0, left:0

bottom:0, right:0

# **Z-INDEX IN CSS**



25

# 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

**03**

::first-letter

**05**

::selection

**02**

::after

**04**

::first-line

**06**

::placeholder

27

# PSEUDO CLASS IN CSS



# Pseudo Class – CSS

01

:hover

03

:last-child

05

:first-of-type

02

:first-child

04

:nth-child(n)

06

:last-of-type

28

# COLUMN LAYOUT IN CSS



# COLUMN LAYOUT - CSS

01

Column-count

03

Column-rule

02

Column-gap

04

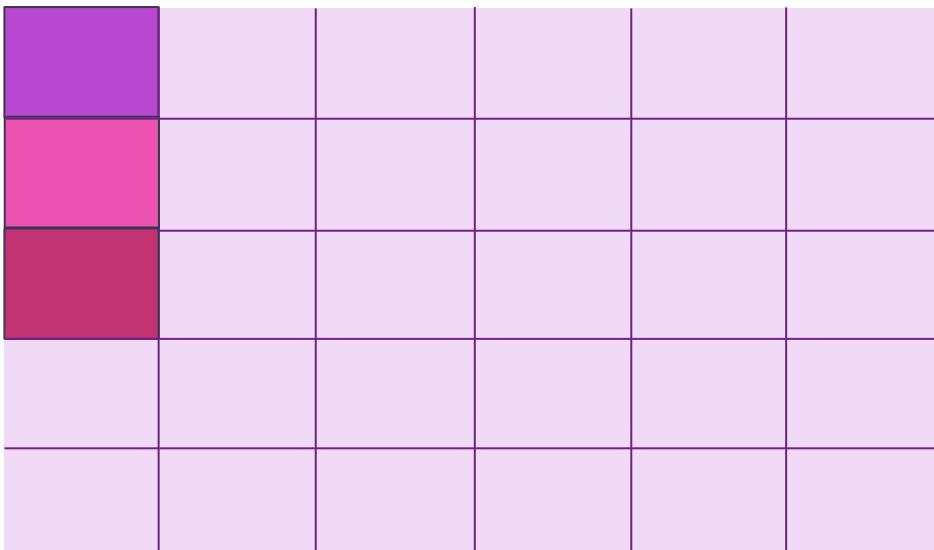
Column-fill

28

# FLEXBOX IN CSS

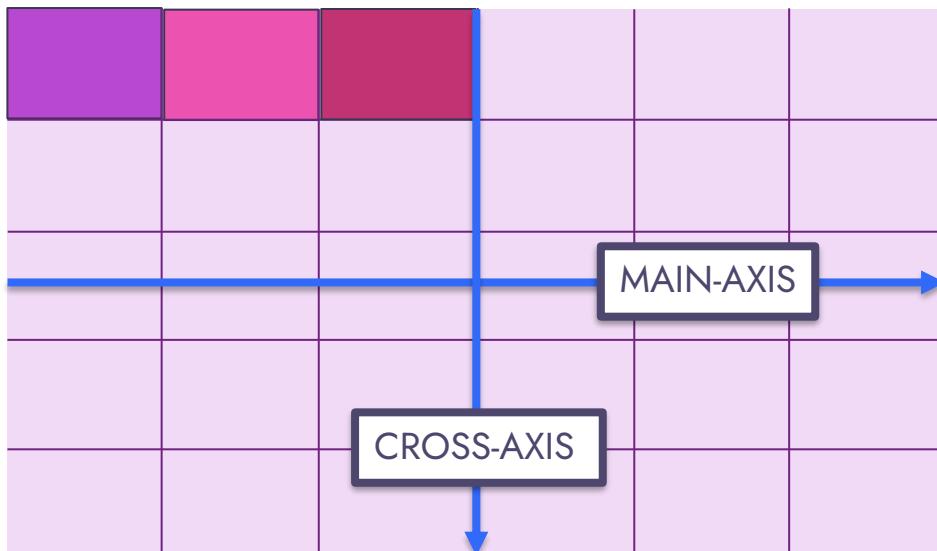


# FLEXBOX – CONTAINER



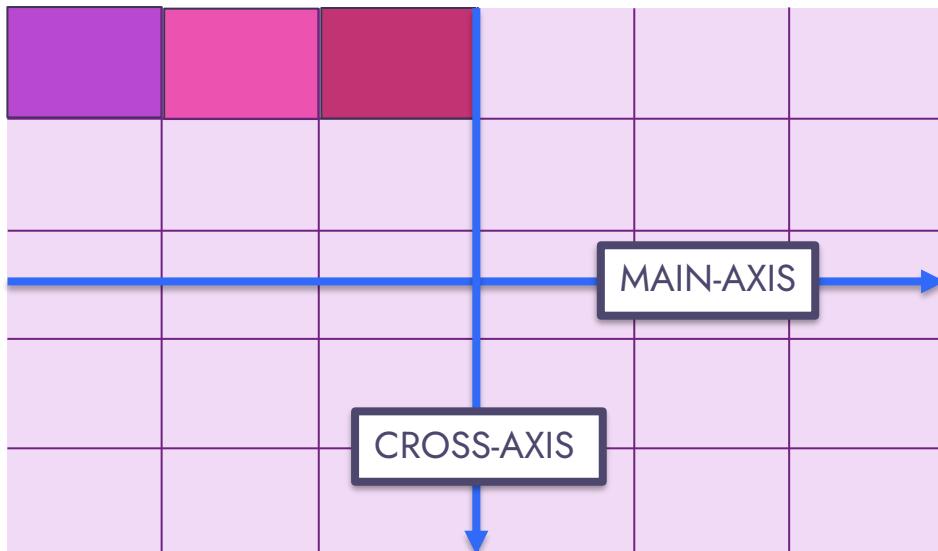
```
.flex-container {  
    display: flex;  
}
```

# FLEXBOX – ROW



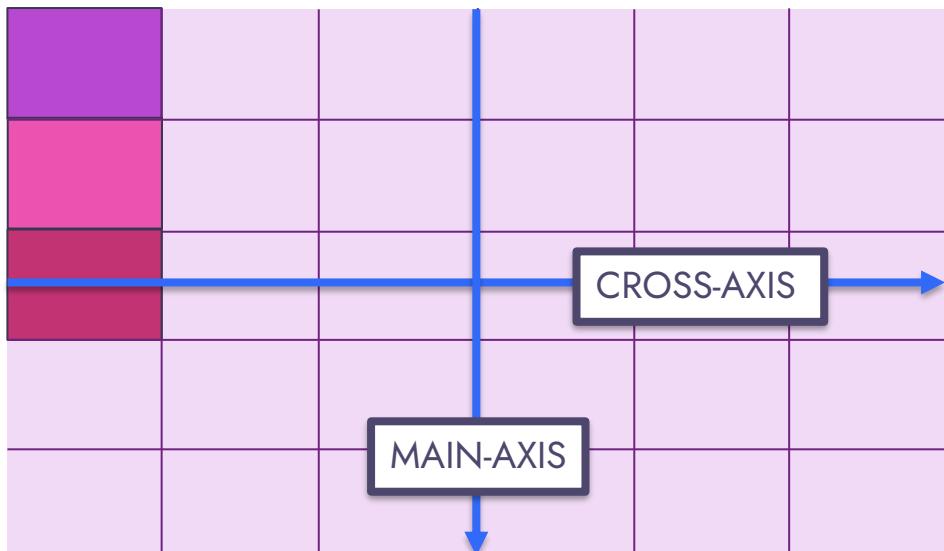
```
.flex-container {  
  display: flex;  
  flex-direction: row;  
}
```

# FLEXBOX – COLUMN



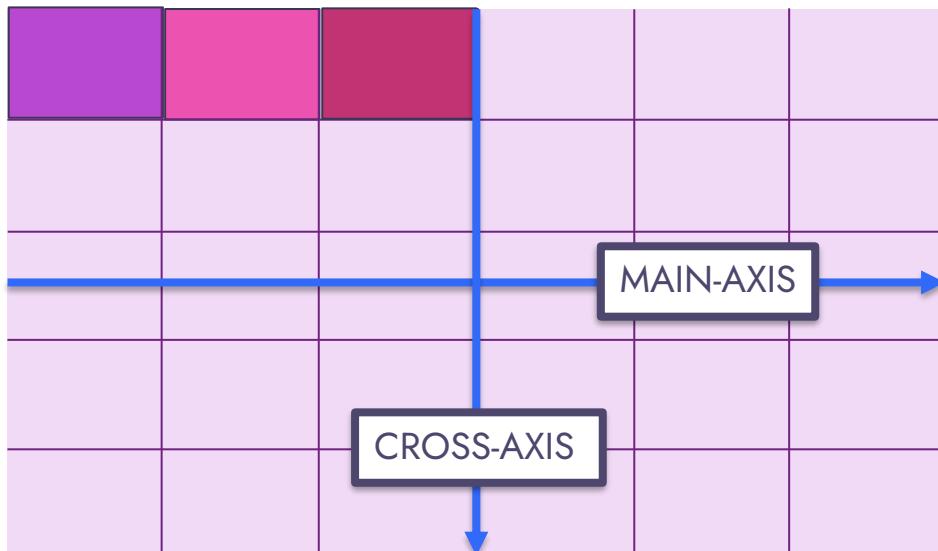
```
.flex-container {  
    display: flex;  
    flex-direction: row;  
    flex-direction: Column;  
}
```

# FLEXBOX – CONTAINER



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

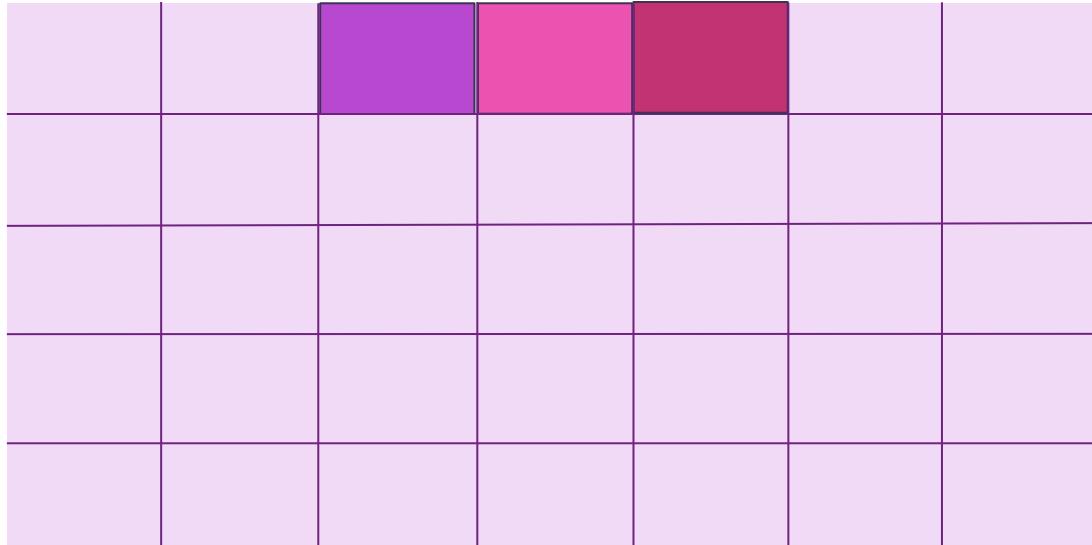
# FLEXBOX - CSS



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

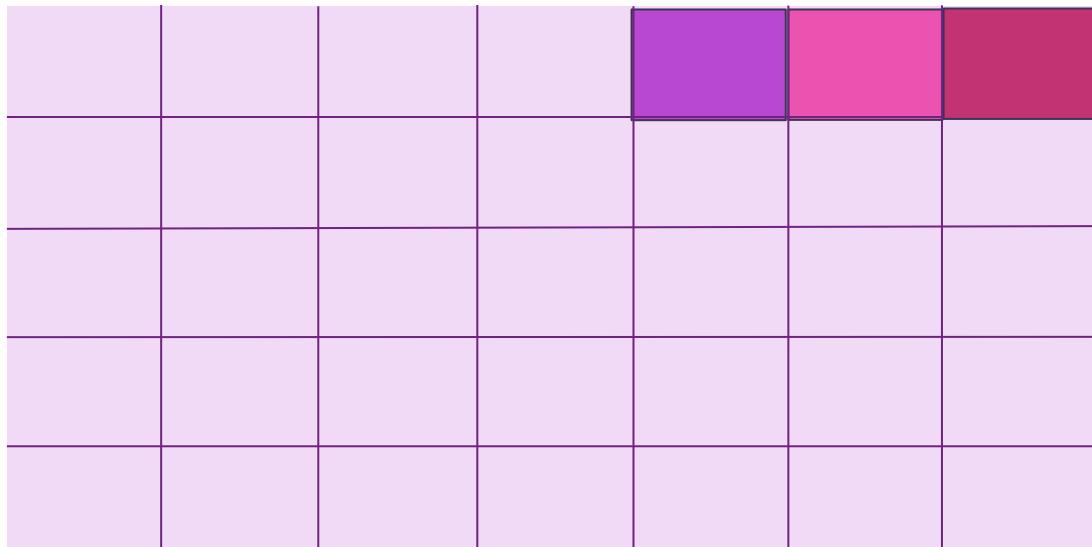


# FLEXBOX – CSS



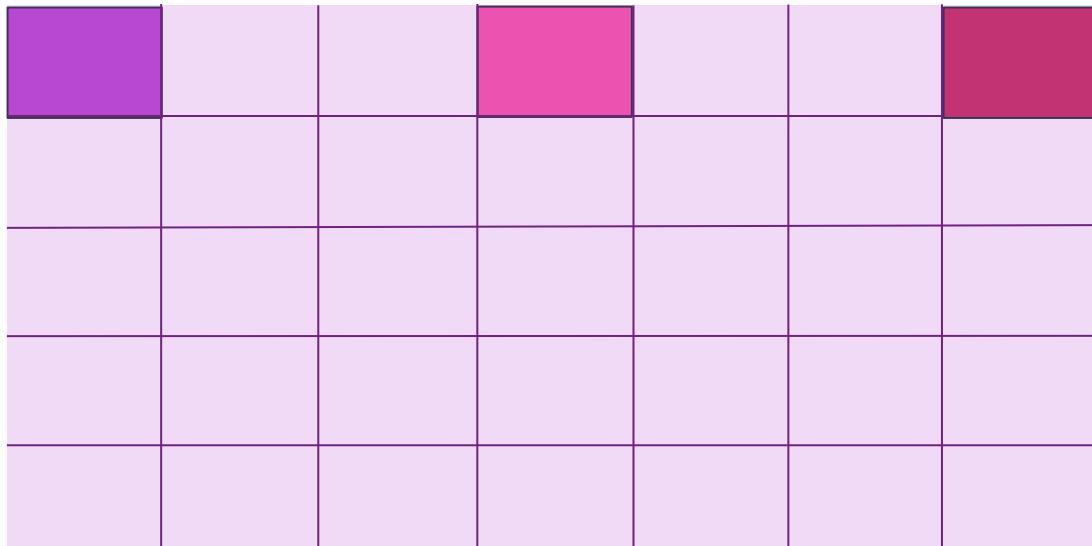
```
.flex-container {  
    display: flex;  
    flex-direction: row;  
    justify-content:flex-end  
}
```

# FLEXBOX – CSS



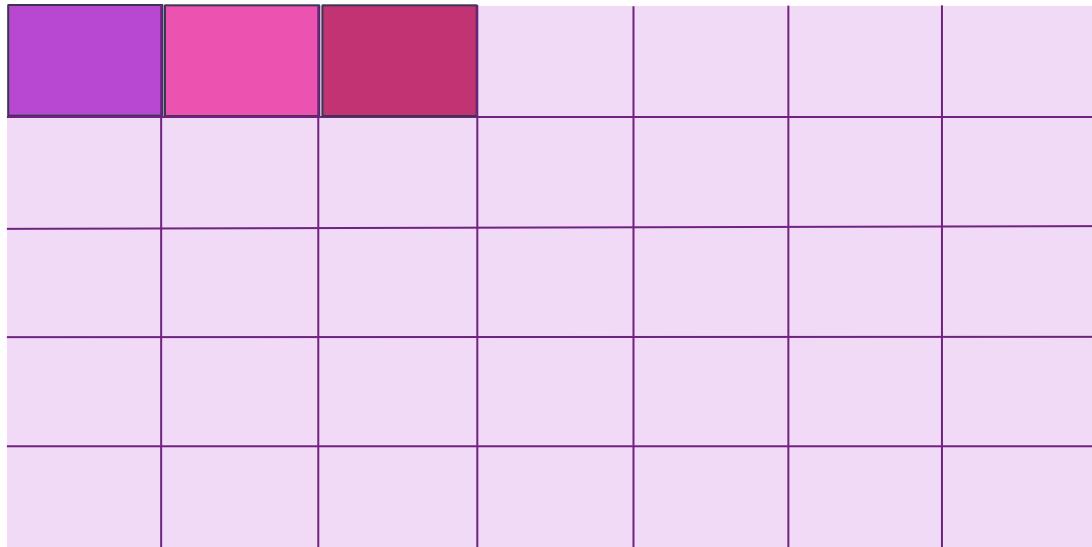
```
.flex-container {  
    display: flex;  
    flex-direction: row;  
    justify-content: space-between  
}
```

# FLEXBOX – CSS



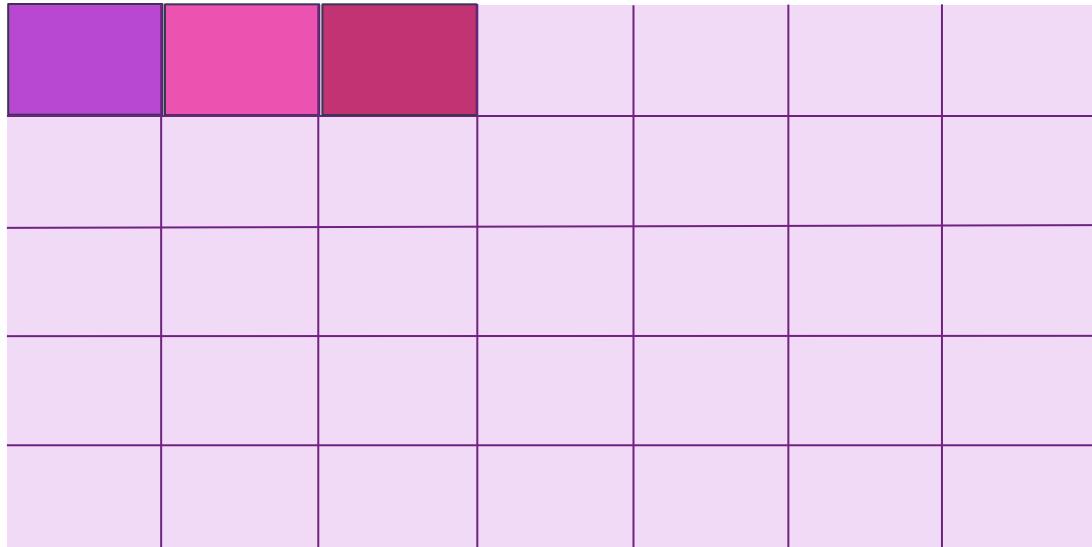
```
.flex-container {  
    display: flex;  
    flex-direction: row;  
    justify-content: start;  
}
```

# FLEXBOX – CSS



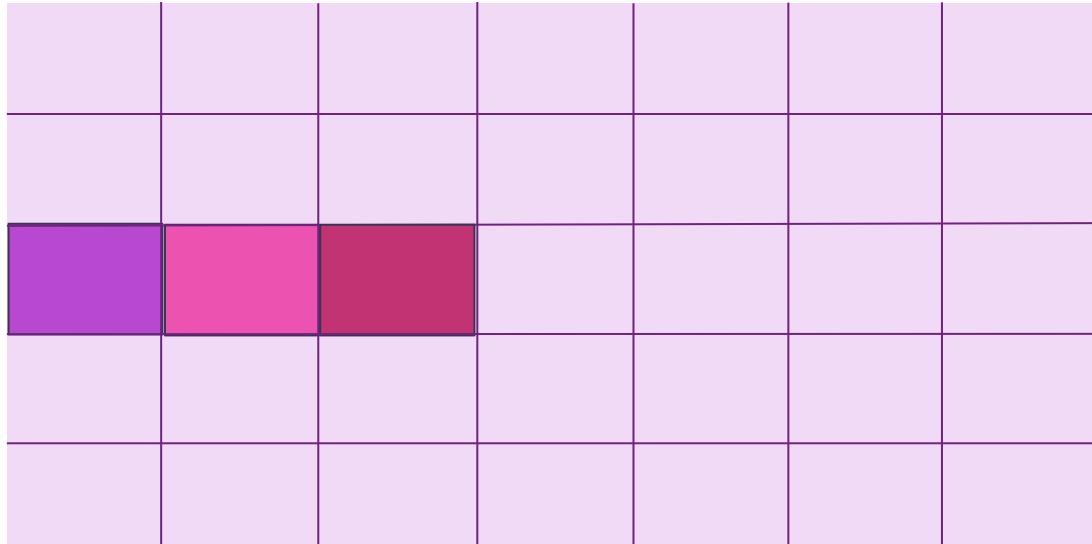
```
.flex-container {  
    display: flex;  
    flex-direction: row;  
    justify-content: start;  
    align-items: start;  
}
```

# FLEXBOX – CSS



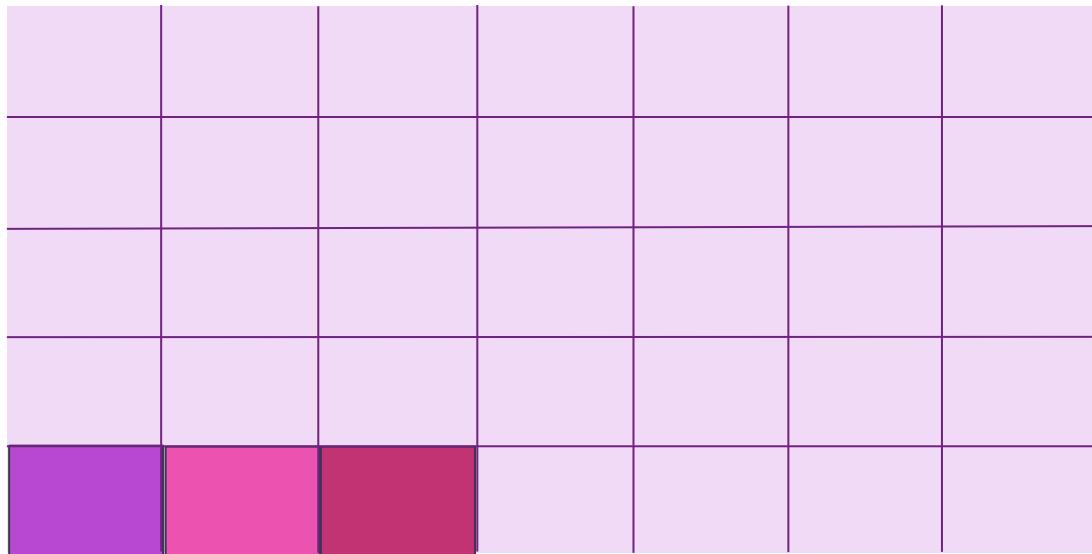
```
.flex-container {  
    display: flex;  
    flex-direction: row;  
    justify-content: start;  
    align-items: center;  
}
```

# FLEXBOX – COLUMN



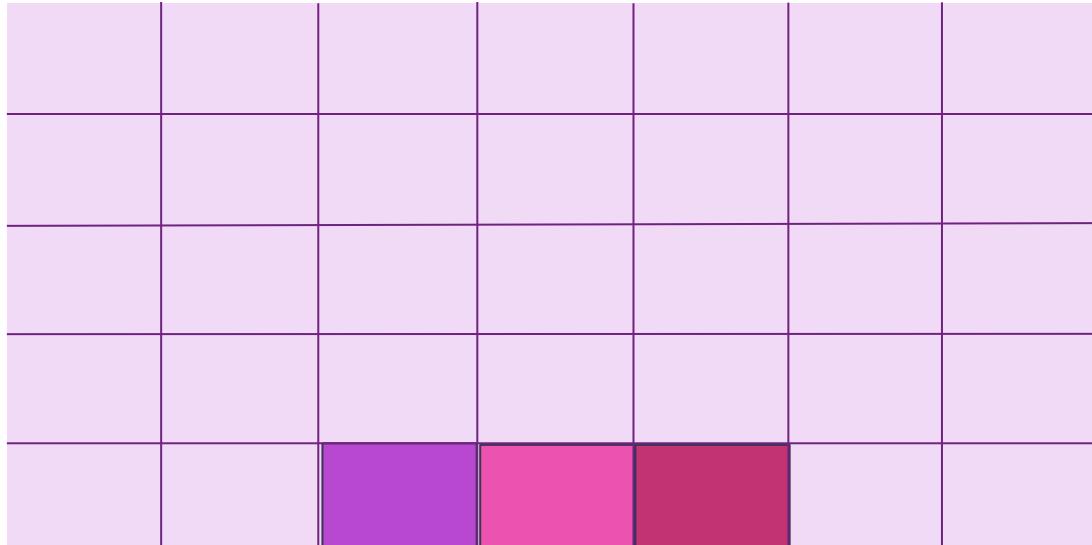
```
.flex-container {  
    display: flex;  
    flex-direction: row;  
    justify-content: start;  
    align-items: end  
}
```

# FLEXBOX – COLUMN



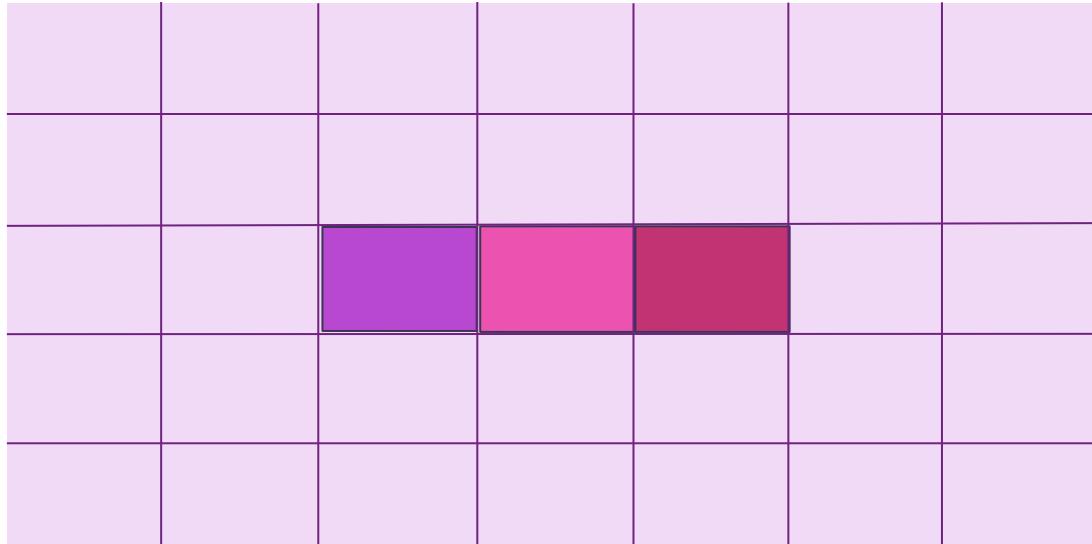
```
.flex-container {  
  display: flex;  
  flex-direction: column;  
  justify-content:center  
  align-items:end;  
}
```

# FLEXBOX – COLUMN



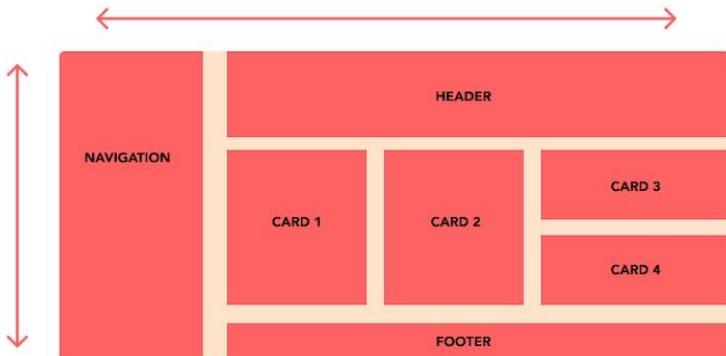
```
.flex-container {  
    display: flex;  
    flex-direction: row;  
    justify-content:center  
    align-items:center  
}
```

# 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()

03

transform: rotate()

02

transform: scale()

04

transform: skew()



# ANIMATION IN CSS



# ANIMATION – CSS

**01**

animation-name

**03**

animation-timing-function

**05**

animation-iteration-count

**02**

animation-duration

**04**

animation-delay

**06**

animation-direction

32

# CSS VARIABLES IN CSS



33

# SPECIFICITY IN CSS



# SELECTORS IN CSS

**01**

\* (universal selector)

**03**

Class or pseudo-class

**05**

Inline style

**02**

Element / pseudo-element

**04**

id

**06**

!important

# The Level of **SPECIFICITY** – CSS

0.0.0.0.0



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

# The Level of SPECIFICITY - Element

0.0.0.0.1

Element / pseudo-elements

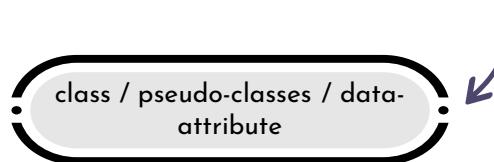
Includes only element selectors, such as **h1, img, p::before**. For each ID in a matching selector, add **0-0-0-0-1** to the weight value.



# The Level of SPECIFICITY - Class

0.0.0.1.0

class / pseudo-classes / data-attribute

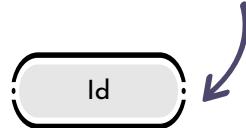


Includes class selectors, such as `.myClass`, `[type="radio"]`, `:hover`. For each class, attribute selector, or pseudo-class in a matching selector, add **0-0-0-1-0** to the weight value.



# 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



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.



34



# NEW CSS FEATURES



# New Features - CSS



01

:is, :has, :not, :where

03

Container queries

05

Aspect ratio

02

Media query range  
syntax

04

Accent-color

06

Scroll snap





# New Features - CSS



Individual Transform Properties



Gap Property for Flexbox



CSS Writing Mode



CSS Nesting



CSS Logical Properties  
(inline and block)



:focus-visible



35

# BONUS IN CSS





# BONUS - CSS

01

FLOATS

03

CSS AOS PLUGIN

05

SCROLL BAR STYLING

02

CSS CLIP PATH

04

CSS SHAPE DIVIDER

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



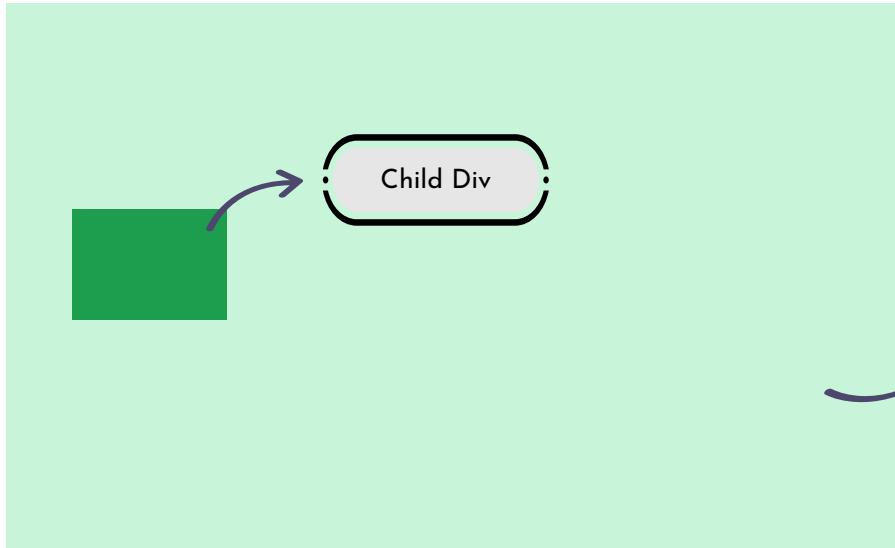
# HOW TO CENTER A DIV INSIDE A DIV



# HOW TO CENTER A DIV INSIDE DIV IN CSS

# POSITIONS – Absolute

Top:0, left:0



Top:0, right:0

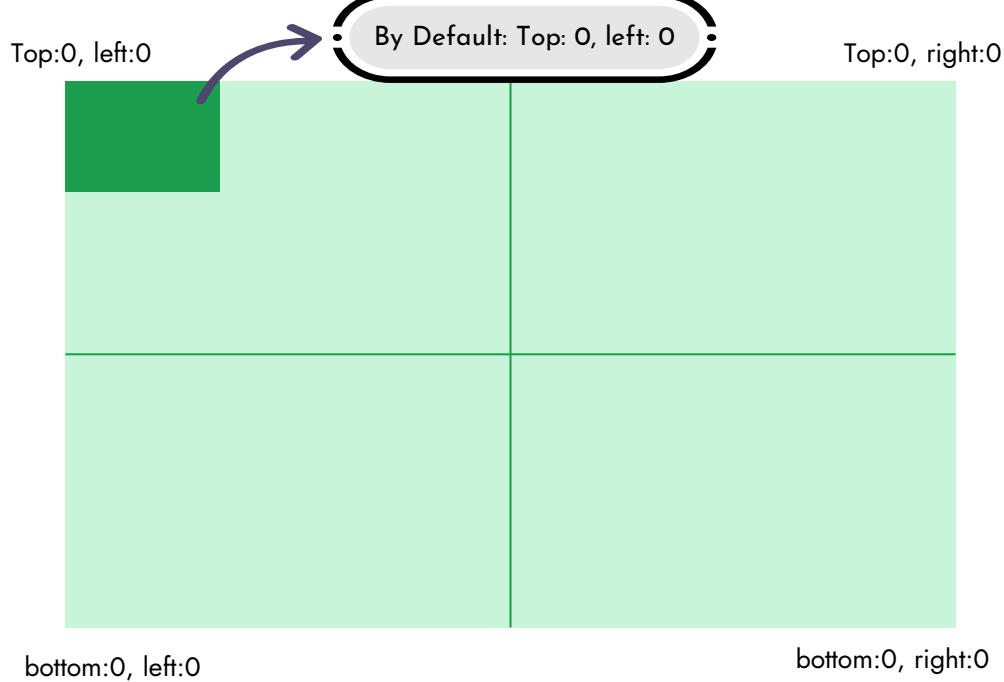
```
.child {  
  position: absolute;  
}
```

Parent Div

bottom:0, left:0

bottom:0, right:0

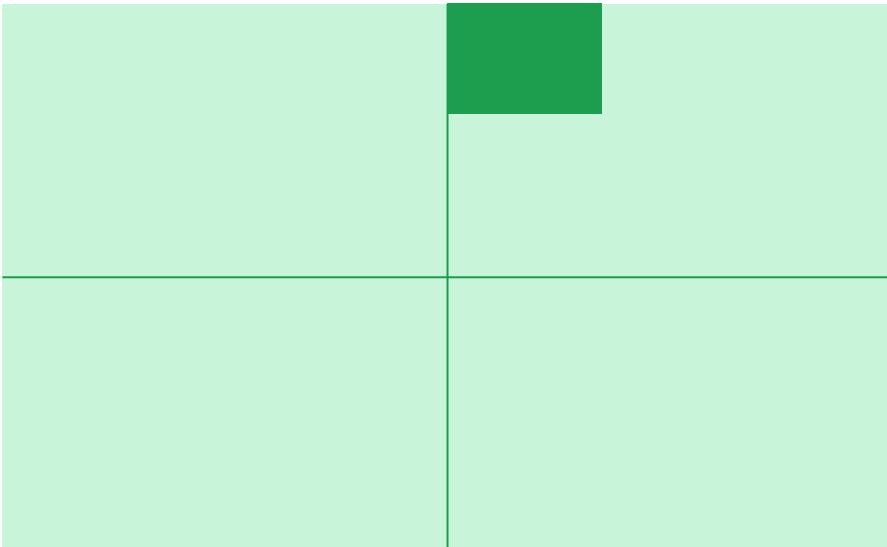
# POSITIONS – Absolute



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

# POSITIONS – Absolute

Top:0, left:0



bottom:0, left:0

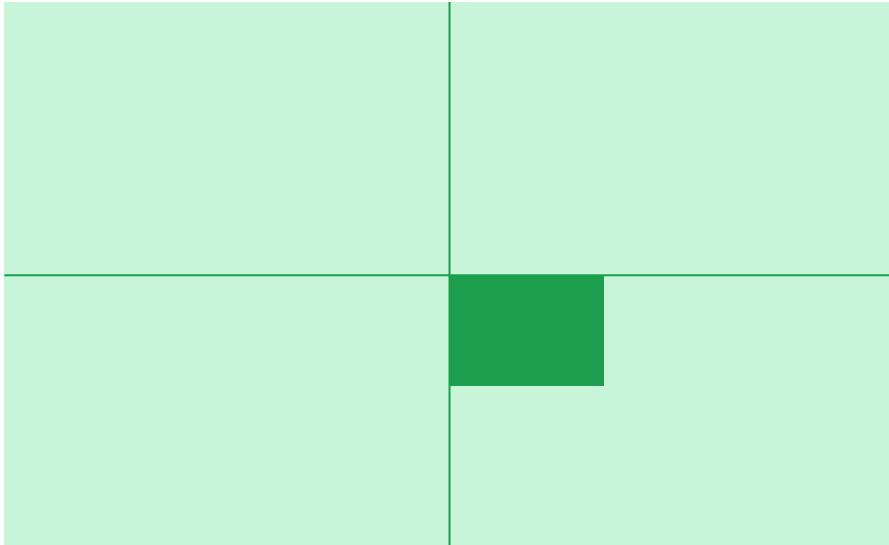
Top:0, right:0

bottom:0, right:0

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

# POSITIONS – Absolute

Top:0, left:0



bottom:0, left:0

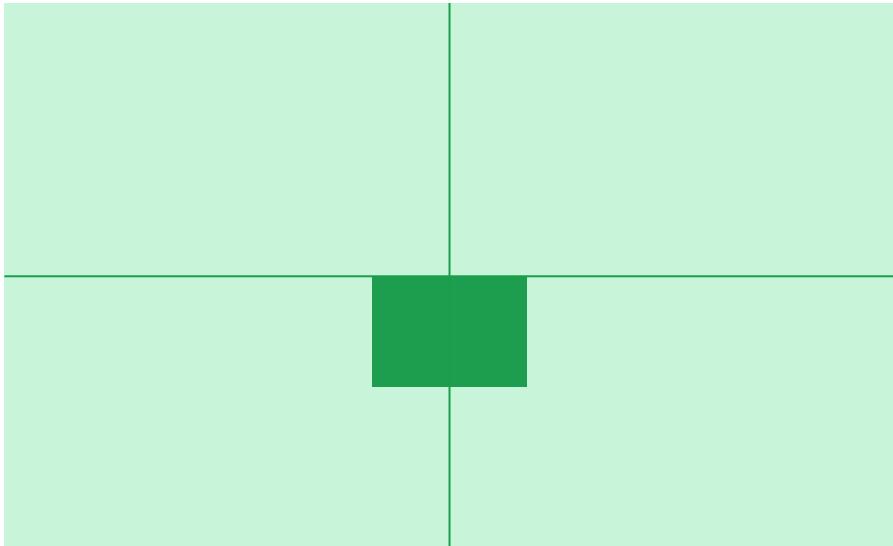
Top:0, right:0

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

bottom:0, right:0

# POSITIONS – Absolute

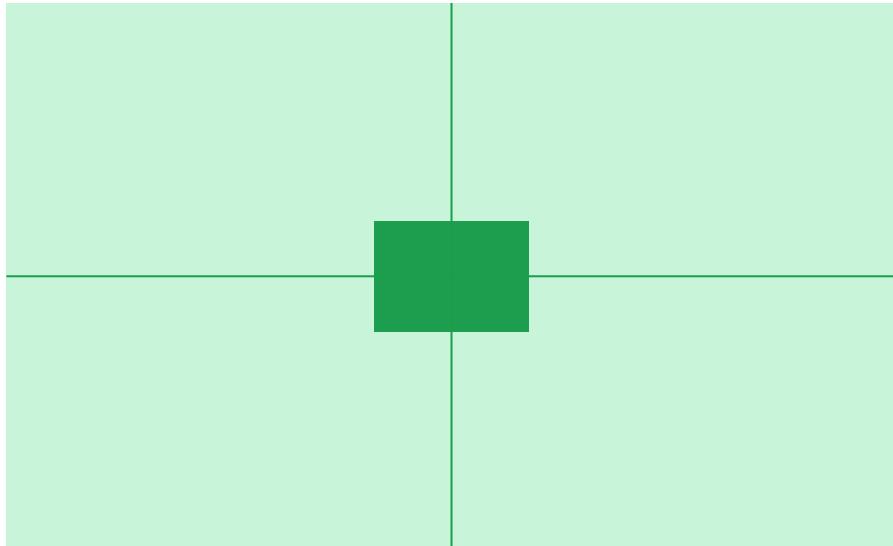
Top:0, left:0



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

# POSITIONS – Absolute

Top:0, left:0



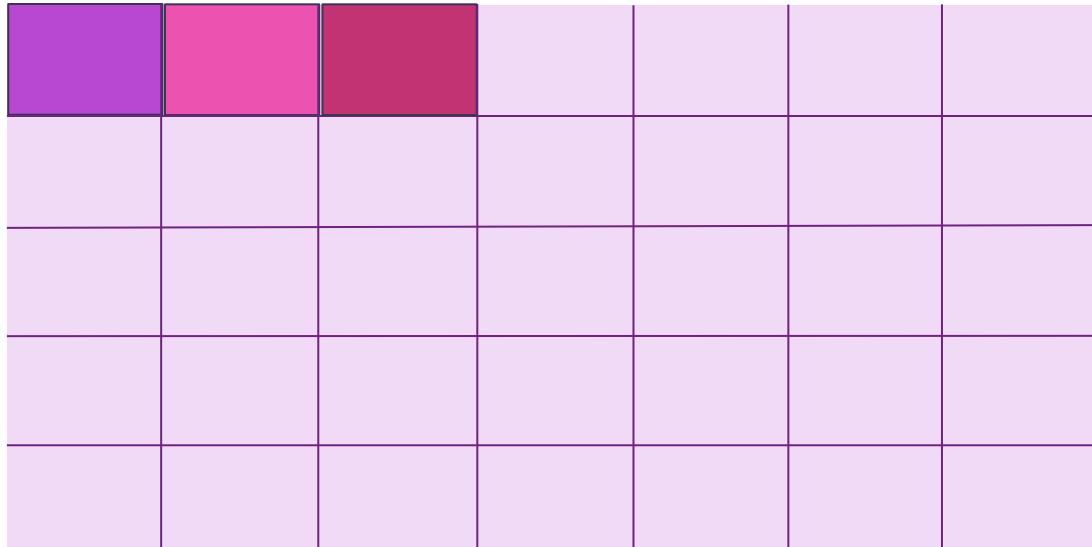
Top:0, right:0

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

bottom:0, left:0

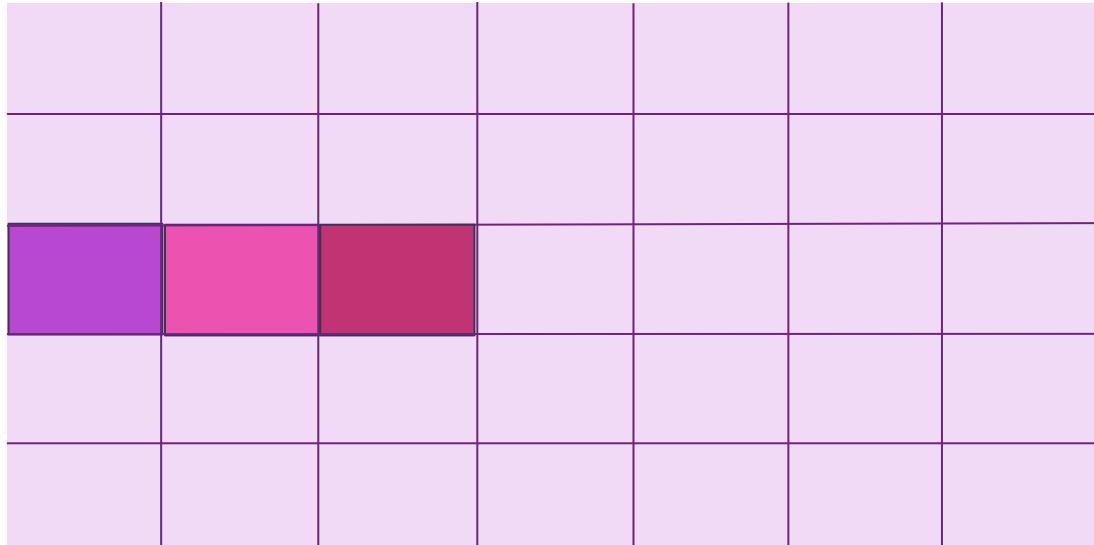
bottom:0, right:0

# FLEXBOX – CSS



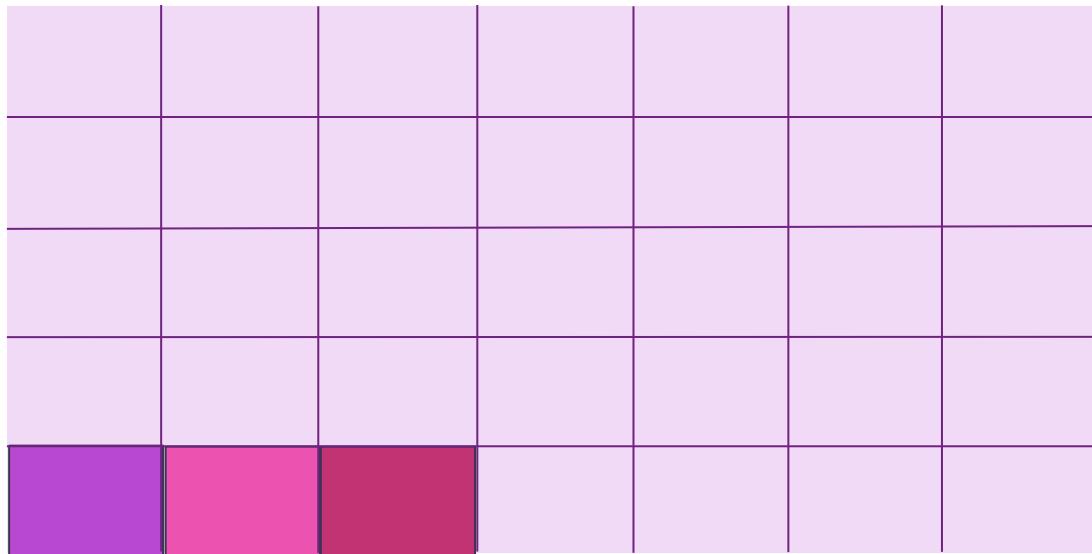
```
.flex-container {  
    display: flex;  
    flex-direction: row;  
    justify-content: start;  
    align-items: center;  
}
```

# FLEXBOX – COLUMN



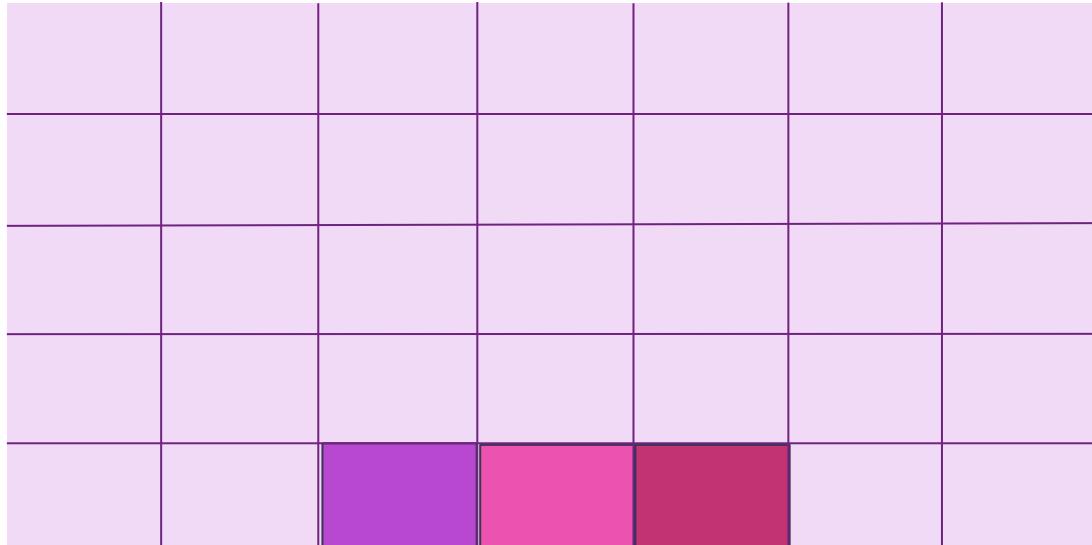
```
.flex-container {  
    display: flex;  
    flex-direction: row;  
    justify-content: start;  
    align-items: end  
}
```

# FLEXBOX – COLUMN



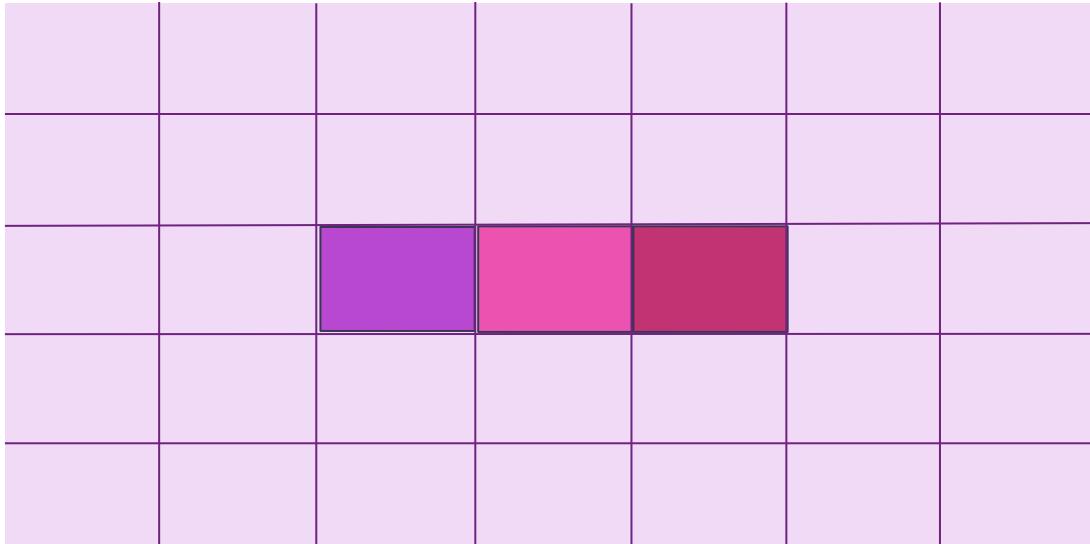
```
.flex-container {  
    display: flex;  
    flex-direction: row;  
    justify-content:center  
    align-items:end;  
}
```

# 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;  
}
```

Please Like & Share the  
World's Best CSS Course  
Ever ❤️

# 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.

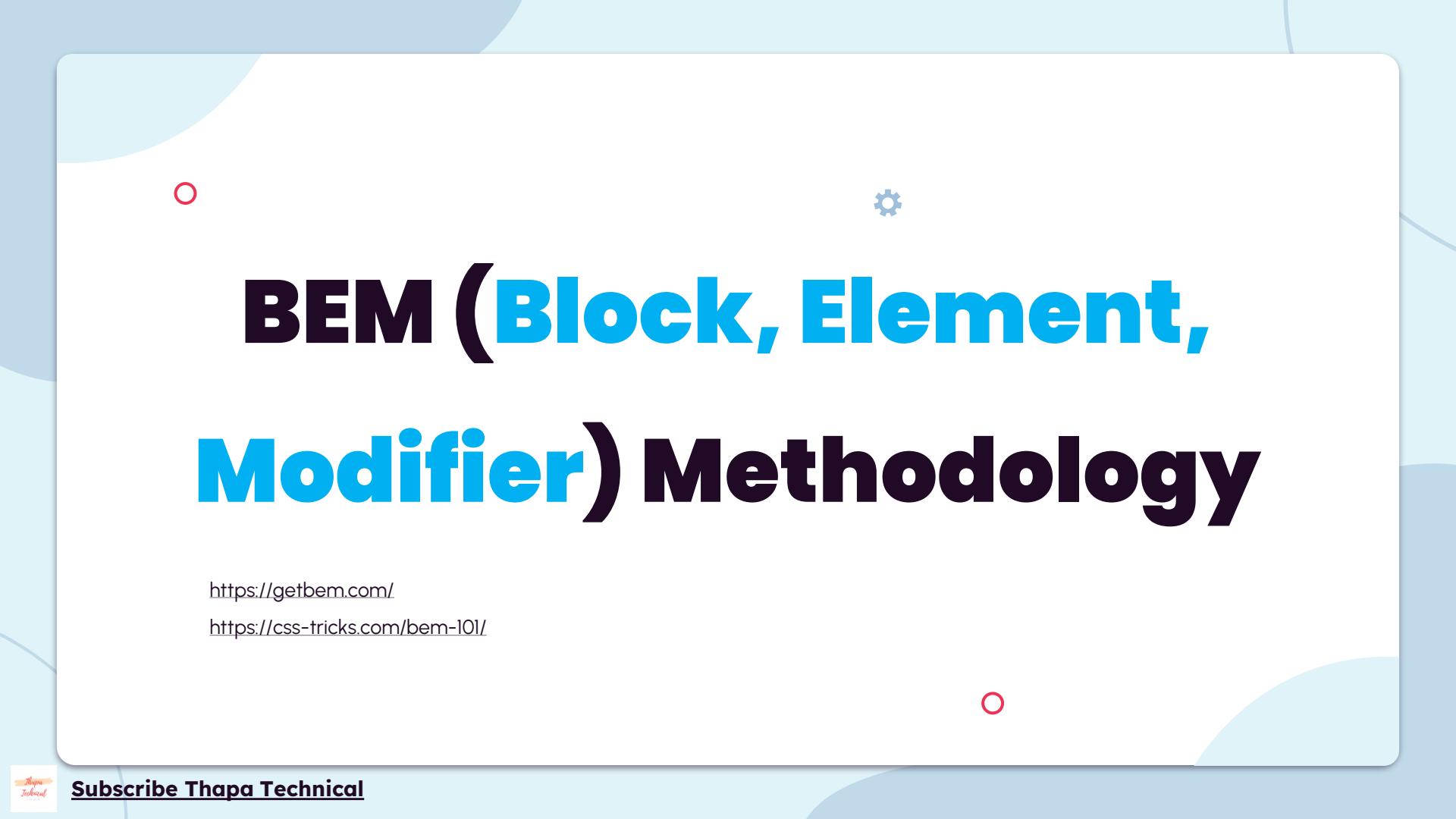
Notice that an unprefixed version of the property has also been included, at the bottom of the list: this is so that when the CSS feature is finalised, and the prefixes are removed, the code will still work — this is good future proofing practice.

[https://www.w3.org/community/webed/wiki/Optimizing\\_content\\_for\\_different\\_browsers:\\_the\\_RIGHT\\_way](https://www.w3.org/community/webed/wiki/Optimizing_content_for_different_browsers:_the_RIGHT_way)

# BEM



[Subscribe Thapa Technical](#)



# **BEM (Block, Element, Modifier) Methodology**

<https://getbem.com/>

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

# SMACSS



[Subscribe Thapa Technical](#)



# **SMACSS**

## **(Scalable and Modular Architecture for CSS)**

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

40

# FINAL PROJECTS IN CSS



# 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



# 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/>



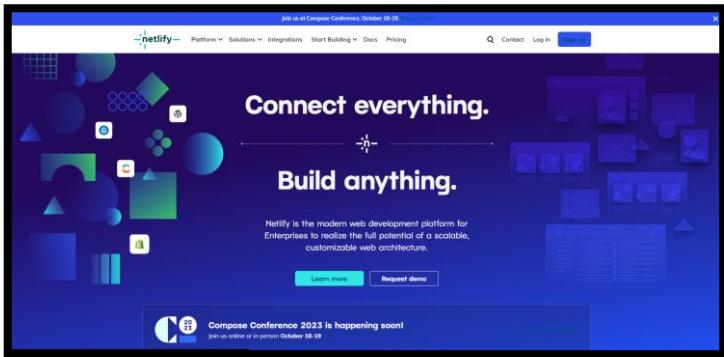
# HOSTING WEBSITE LIVE



# HOSTING WEBSITE LIVE

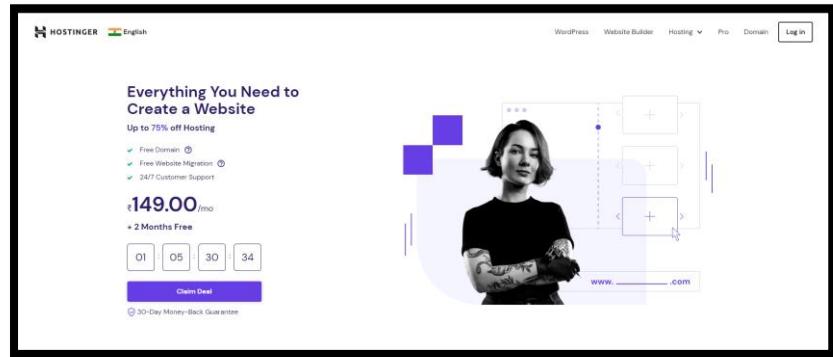


## NETLIFY



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

## HOSTINGER



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

# Thanks!

**Subscribe Thapa Technical if you liked  
the presentation.**

