Web Fundamentals

Session-05

CSS Basics

Thanos is on a mission to make his website standout from his rest of universe

Agenda : CSS Basics

01 CSS Intro

02 CSS Selectors(Basic+ Advanced)

03 Box Model & Properties

04 All about width & height

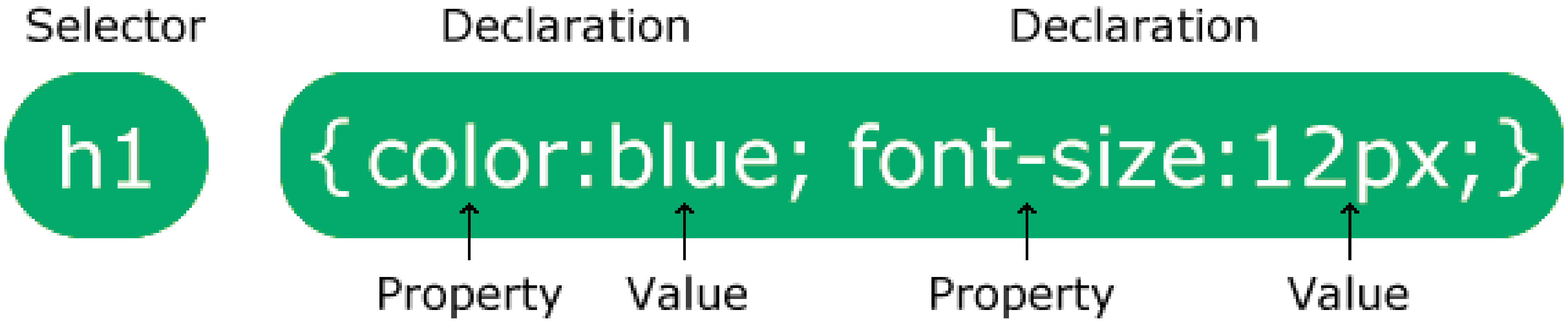
05 Positioning, Fonts, Alignment

06 Hands-On on portfolio website

CSS Intro

- CSS stands for **Cascading Style Sheets**
- CSS is the language we use **to style an HTML document.**
- CSS describes **how HTML elements should be displayed.**

CSS Syntax



Selector

Declaration

Declaration

h1 {color:blue; font-size:12px;}

Property

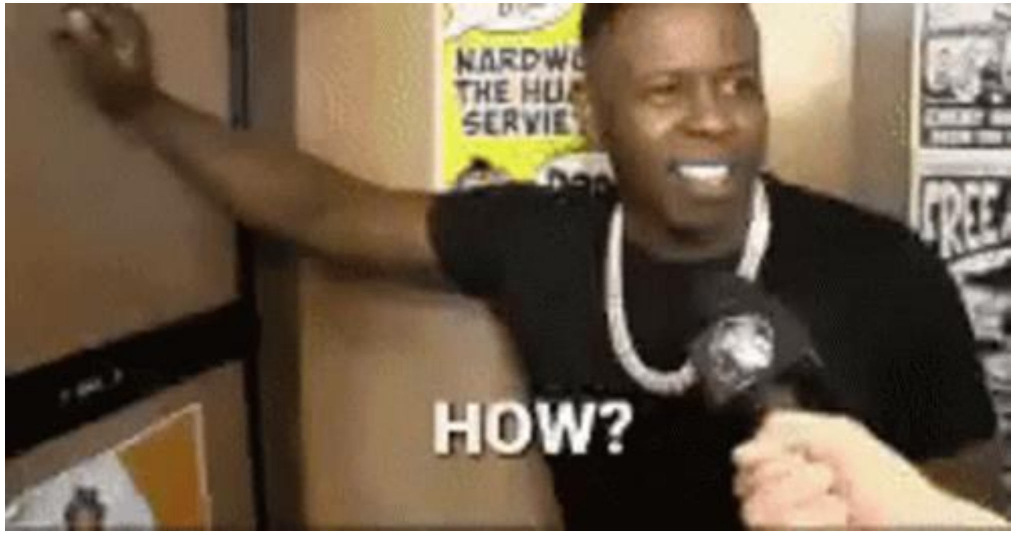
Value

Property

Value

- The declaration block contains one or more declarations
- Each declaration includes a CSS property name and a value

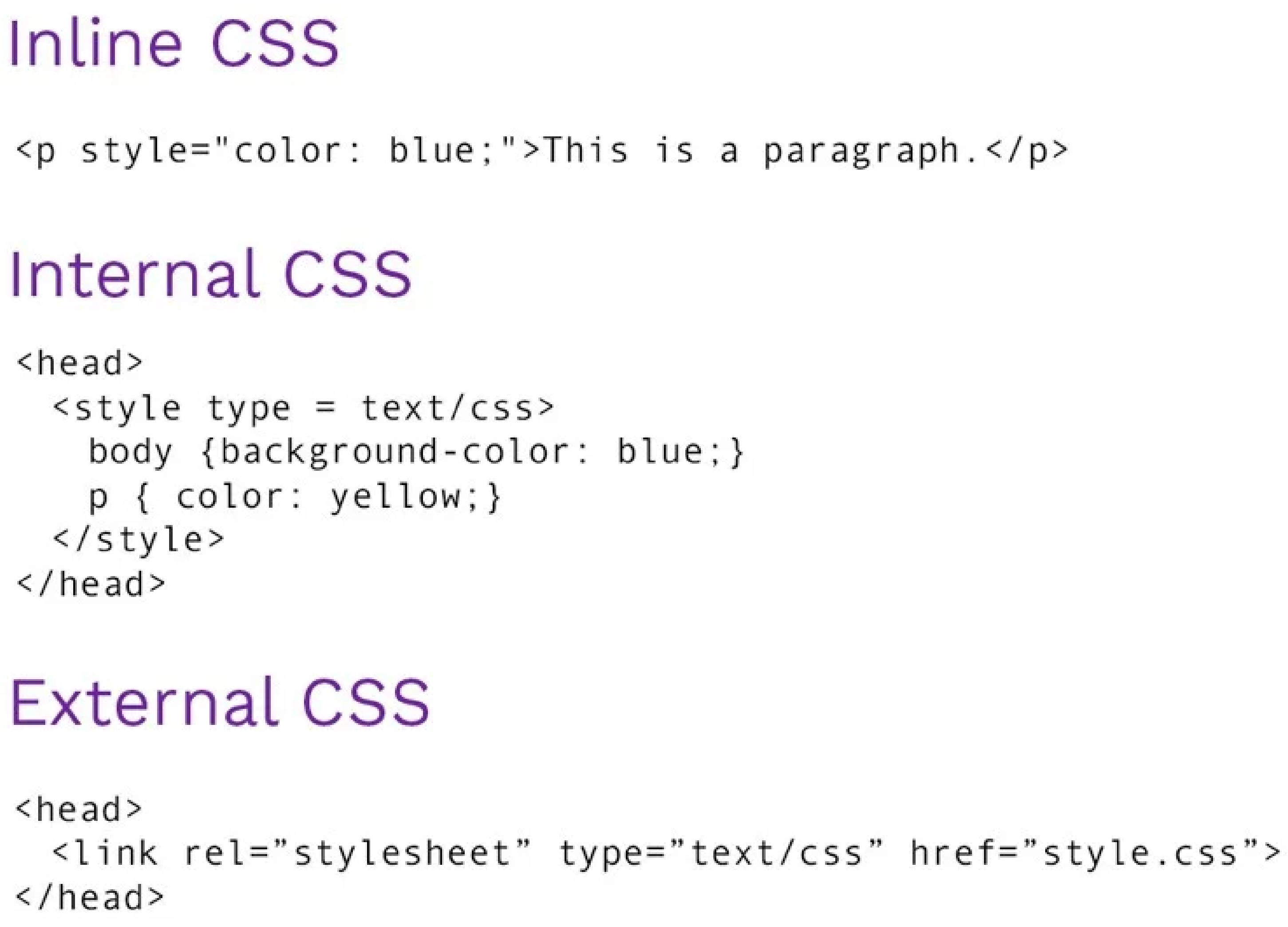
How/where to add a CSS?



Three ways to add a CSS into HTML

- External CSS
- Internal CSS
- Inline CSS

How/where to add a CSS?



Inline CSS

```
<p style="color: blue;">This is a paragraph.</p>
```

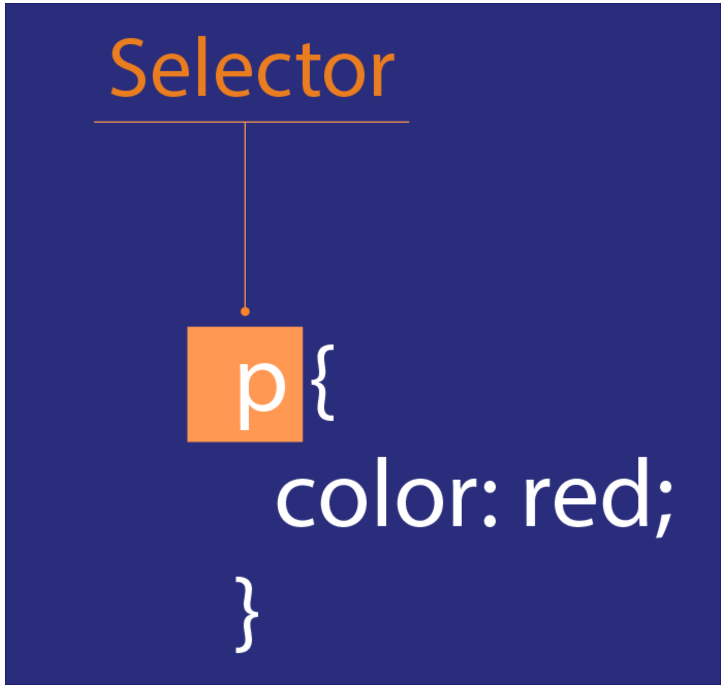
Internal CSS

```
<head>
  <style type = text/css>
    body {background-color: blue;}
    p { color: yellow;}
  </style>
</head>
```

External CSS

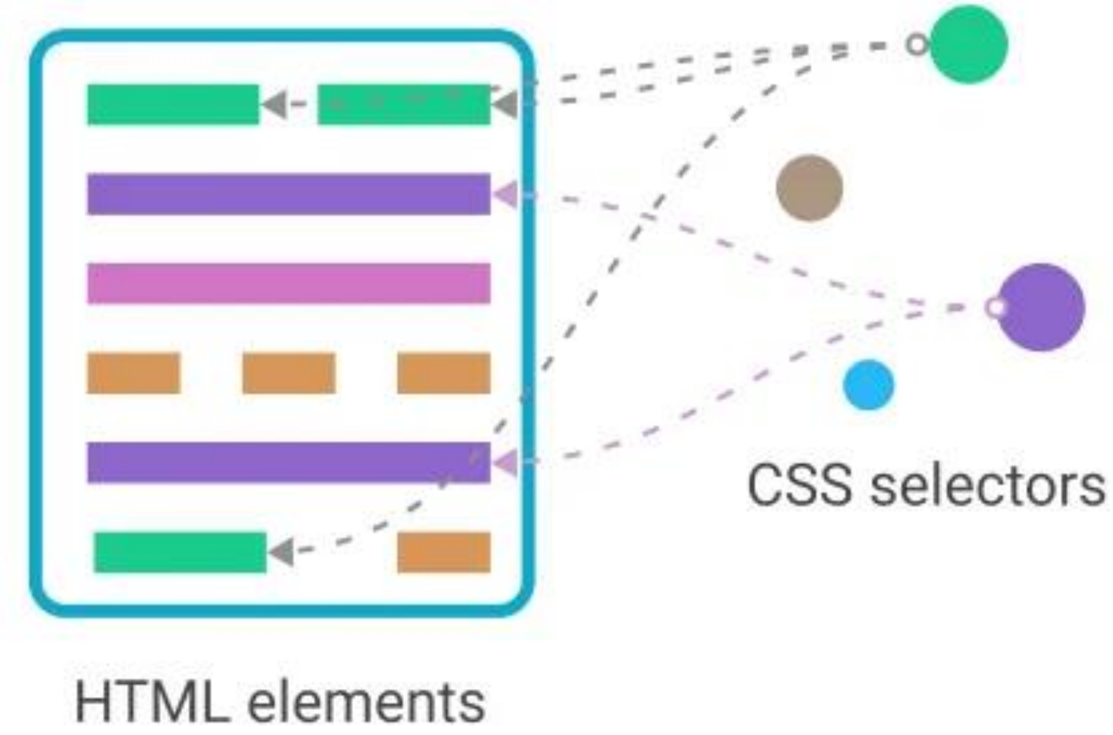
```
<head>
  <link rel=”stylesheet” type=”text/css” href=”style.css”>
</head>
```

CSS Selectors

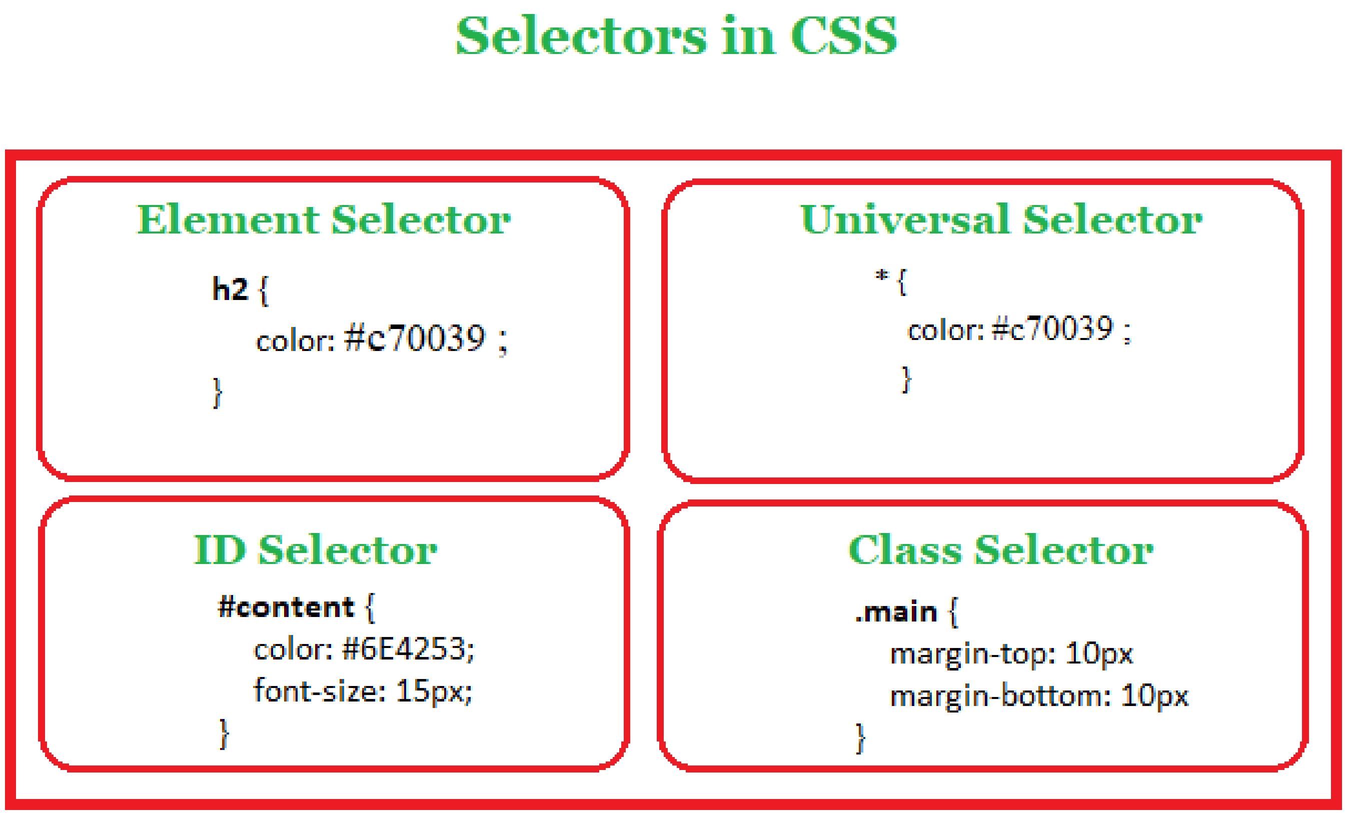


```
p {
  color: red;
}
```

CSS selector selects the HTML element(s) you want to style



CSS Simple Selectors



Selectors in CSS

Element Selector

```
h2 {
    color: #c70039 ;
}
```

Universal Selector

```
* {
    color: #c70039 ;
}
```

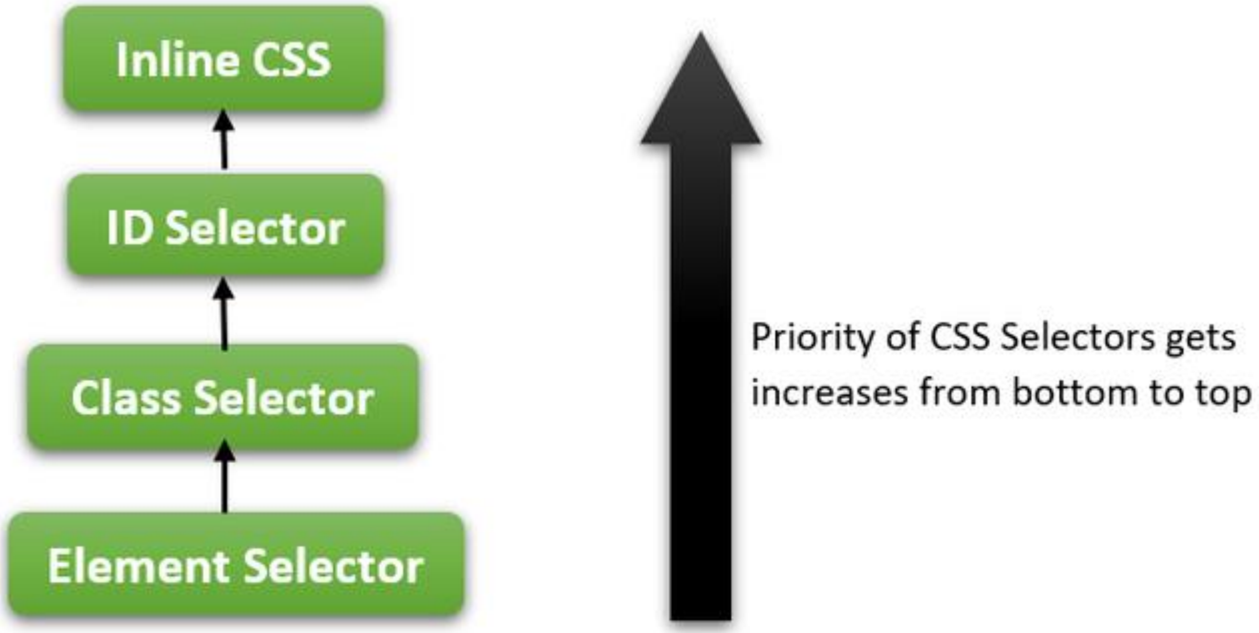
ID Selector

```
#content {
    color: #6E4253;
    font-size: 15px;
}
```

Class Selector

```
.main {
    margin-top: 10px
    margin-bottom: 10px
}
```

CSS – Priority order



Inline CSS

ID Selector

Class Selector

Element Selector

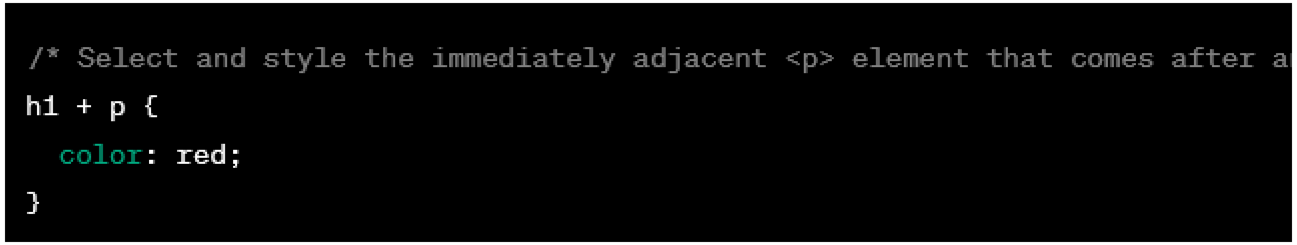
Priority of CSS Selectors gets increases from bottom to top

If we have to do a quick styling hot fix , which one should we use?

Is it a good practice? Why/Why not?

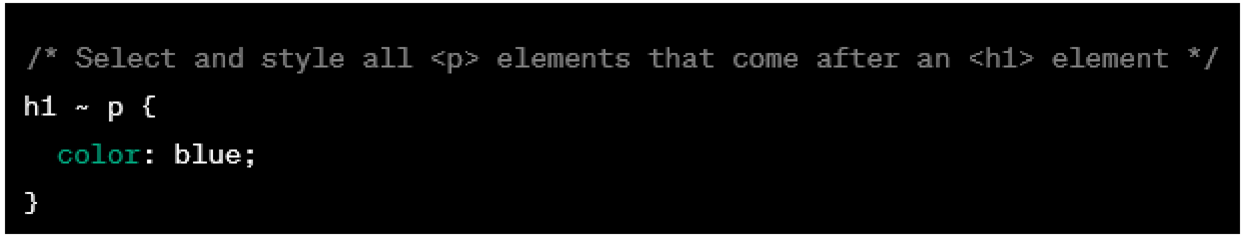
Advanced Selectors- Combinators

Adjacent sibling selector (+)



```
/* Select and style the immediately adjacent <p> element that comes after a
h1 + p {
  color: red;
}
```

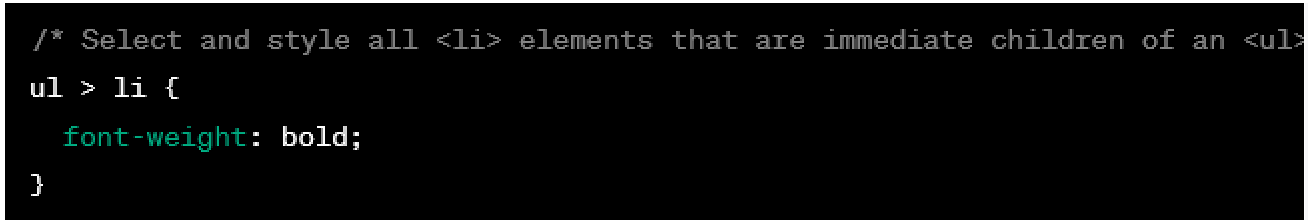
General sibling selector (~)



```
/* Select and style all <p> elements that come after an <h1> element */
h1 ~ p {
  color: blue;
}
```

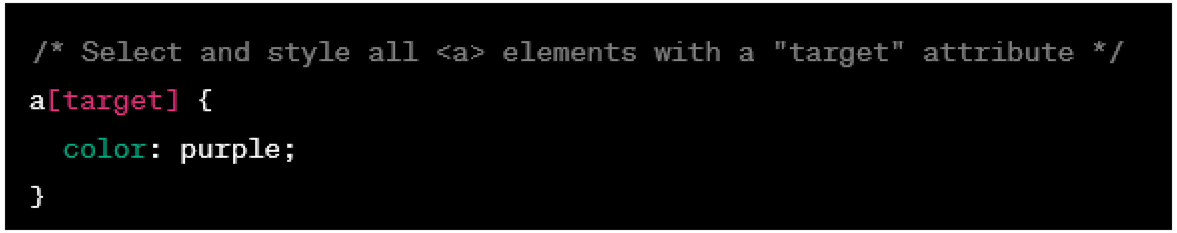
Advanced Selectors- Combinators

Child selector (>)



```css
/* Select and style all <li> elements that are immediate children of an <ul>
ul > li {
  font-weight: bold;
}
```

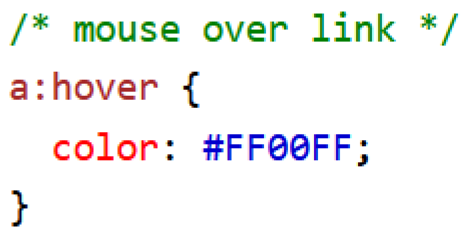
Attribute selector ([])



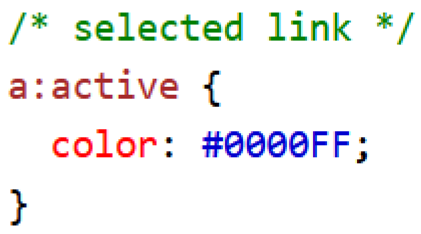
```css
/* Select and style all <a> elements with a "target" attribute */
a[target] {
  color: purple;
}
```

Pseudo Elements/ Classes

A pseudo-class is used to define a special state of an element.

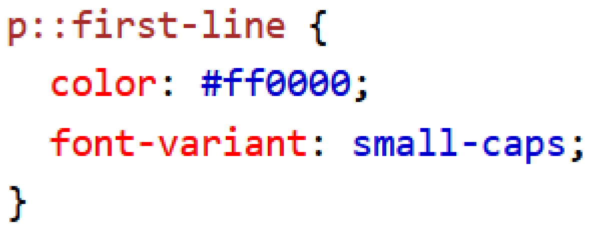


```
/* mouse over link */
a:hover {
  color: #FF00FF;
}
```



```
/* selected link */
a:active {
  color: #0000FF;
}
```

A CSS pseudo-element is used to style specified parts of an element.

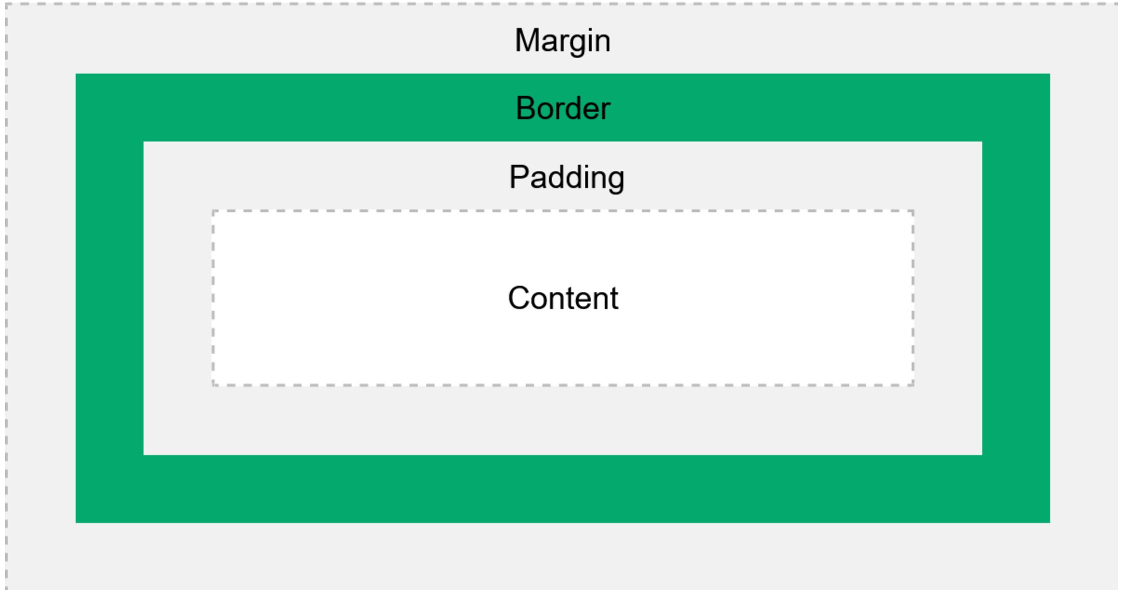


```
p::first-line {
  color: #ff0000;
  font-variant: small-caps;
}
```

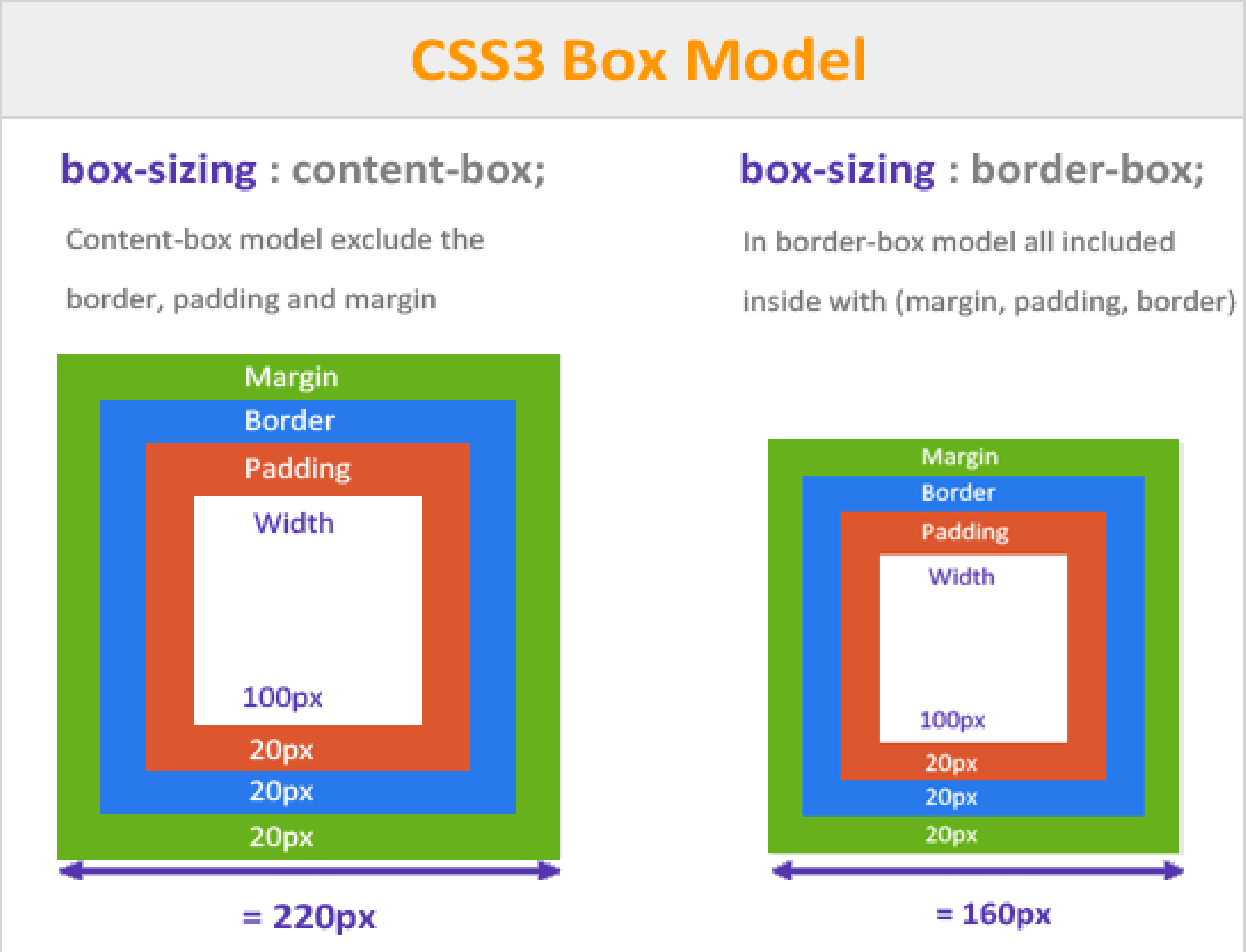
Box Model

All HTML elements can be considered as boxes.

- CSS box model - a **box that wraps around** element.
- Consists of: **margins, borders, padding, and the content**.



Box Model



CSS3 Box Model

box-sizing : content-box;

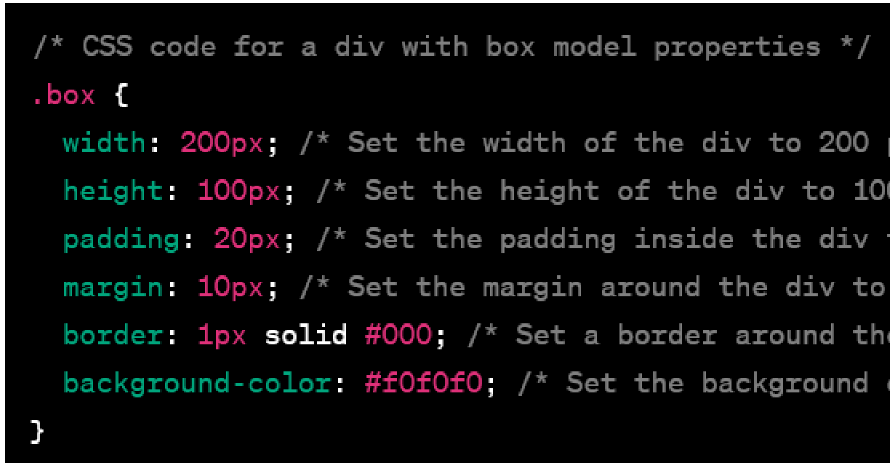
Content-box model exclude the border, padding and margin

box-sizing : border-box;

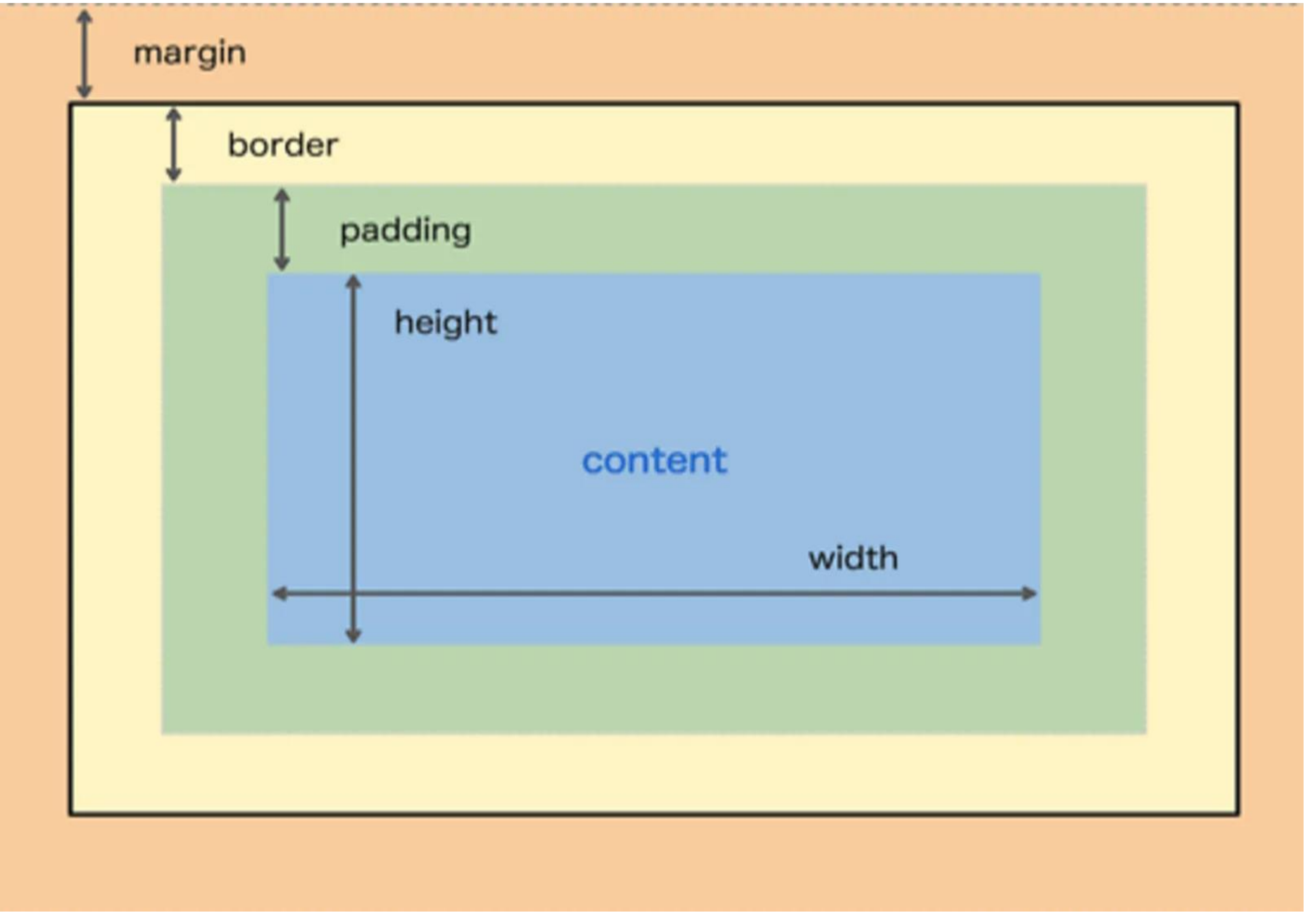
In border-box model all included inside with (margin, padding, border)

Box Model - Properties

These properties play a key role in design of HTML element

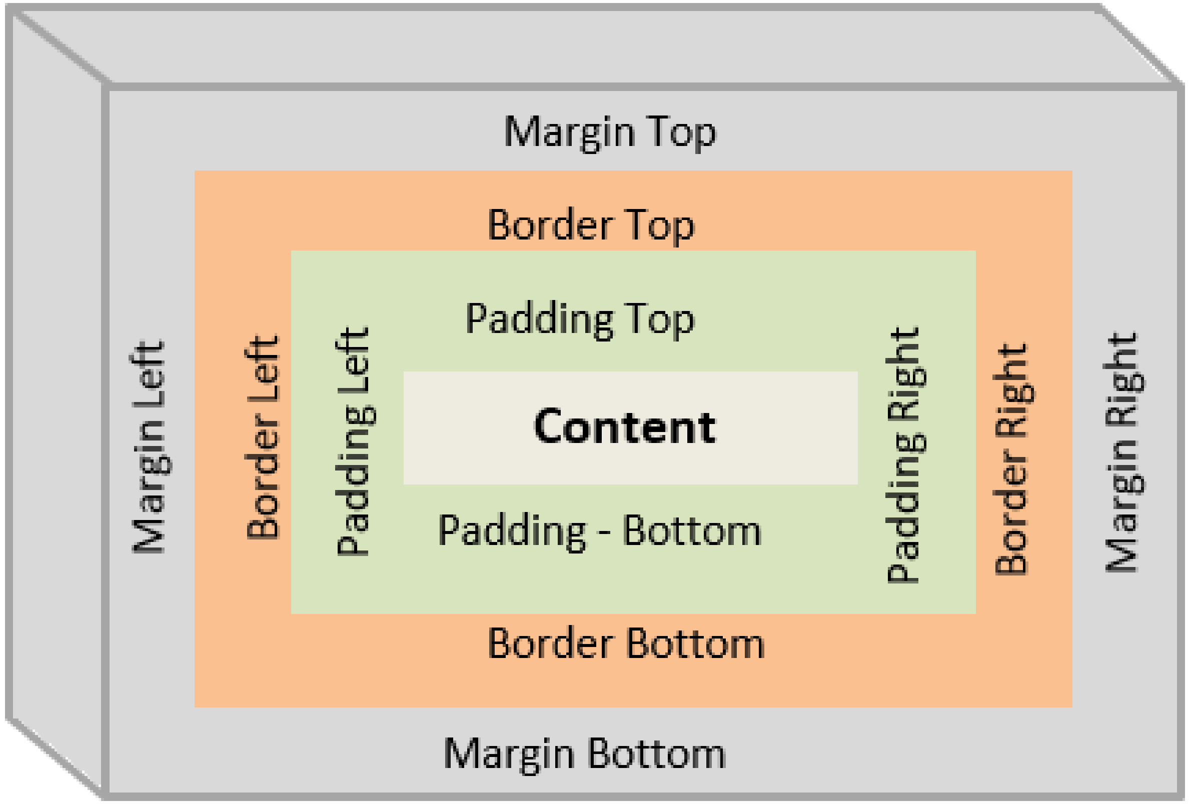


```
/* CSS code for a div with box model properties */
.box {
  width: 200px; /* Set the width of the div to 200
  height: 100px; /* Set the height of the div to 10
  padding: 20px; /* Set the padding inside the div
  margin: 10px; /* Set the margin around the div to
  border: 1px solid #000; /* Set a border around th
  background-color: #f0f0f0; /* Set the background
}
```



Box Model - Properties

Deep dive into properties



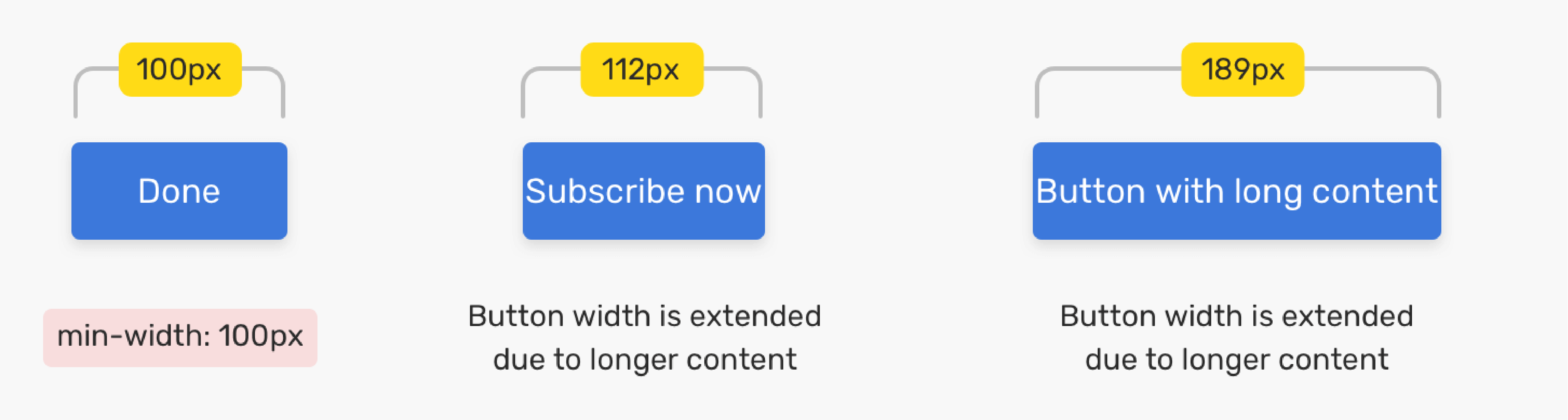
Knowledge check

If we want to style specific part of element like first line or first word, which concept should be applied?

If we want to style specific state of element like hover, which concept should be applied?

Min-width/height

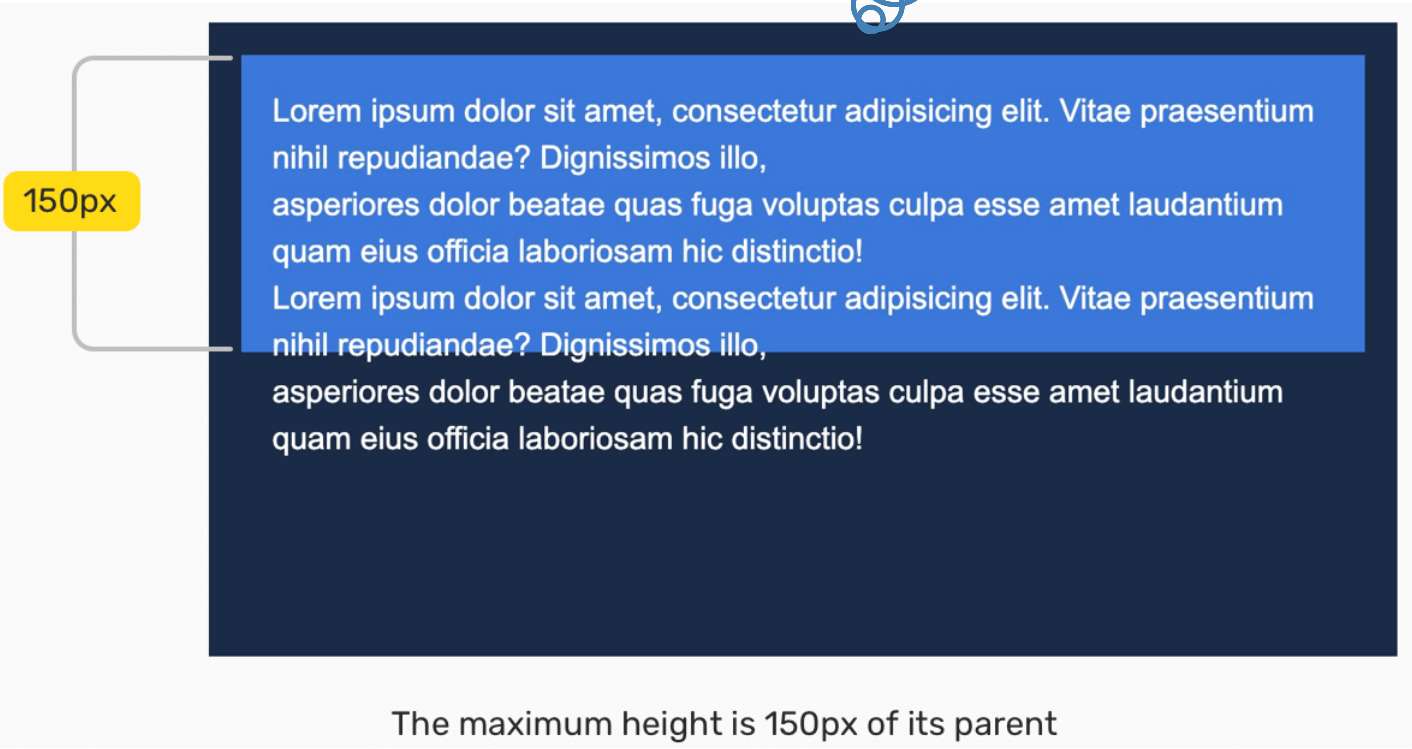
- The "min-width" and "min-height" - the **minimum allowable width** or height of an element
- If the element requires more space than the specified minimum, the element will expand to accommodate the content.
- if the element requires less space than the minimum, the element will still be displayed with the minimum width or height.


100px
112px
189px
Done
Subscribe now
Button with long content
min-width: 100px
Button width is extended due to longer content
Button width is extended due to longer content

Max-width/height

This looks like a problem!

The "max-width" and "max-height" - the **maximum allowable width** or **height** of an element

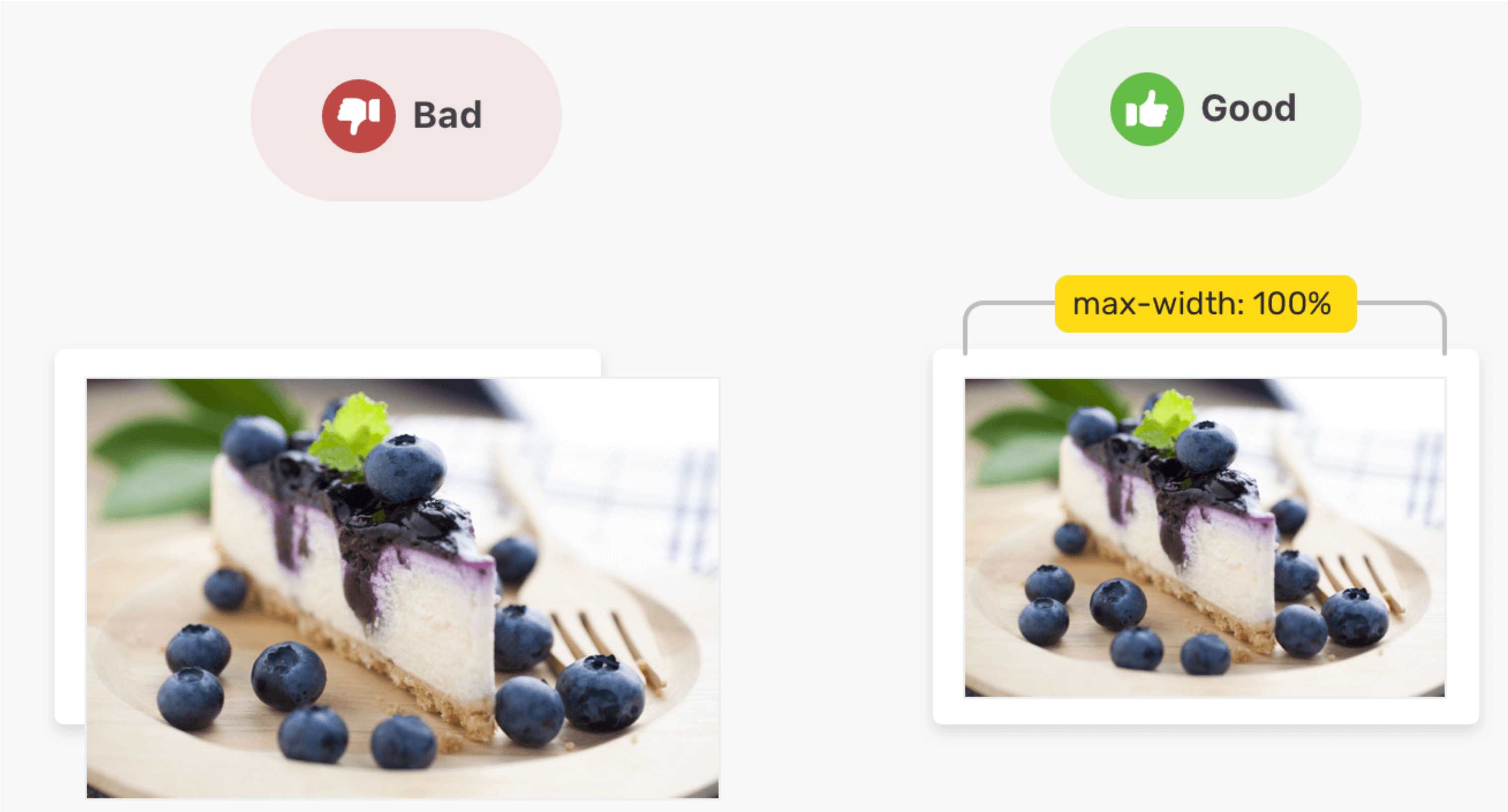


Lorem ipsum dolor sit amet, consectetur adipisicing elit. Vitae praesentium nihil repudiandae? Dignissimos illo,
asperiores dolor beatae quas fuga voluptas culpa esse amet laudantium quam eius officia laboriosam hic distinctio!
Lorem ipsum dolor sit amet, consectetur adipisicing elit. Vitae praesentium nihil repudiandae? Dignissimos illo,
asperiores dolor beatae quas fuga voluptas culpa esse amet laudantium quam eius officia laboriosam hic distinctio!

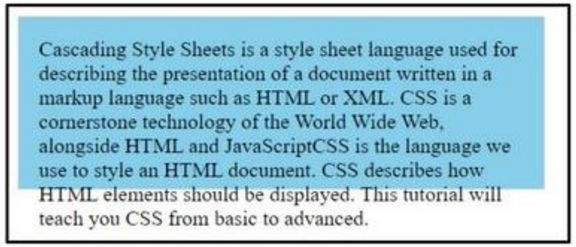
The maximum height is 150px of its parent

Address Max-Width/height-Problems

When you render dynamic content prefer **max-width:100%**

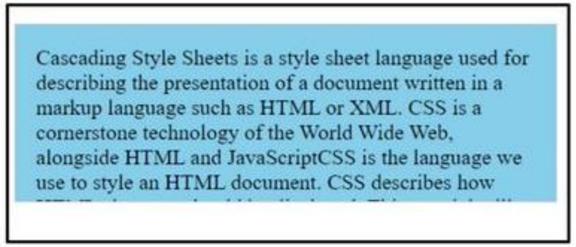


Handling Overflow



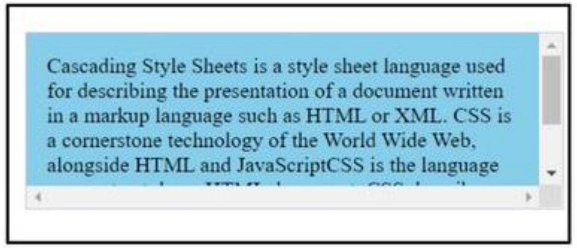
Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML or XML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScriptCSS is the language we use to style an HTML document. CSS describes how HTML elements should be displayed. This tutorial will teach you CSS from basic to advanced.

```
overflow: visible;
```



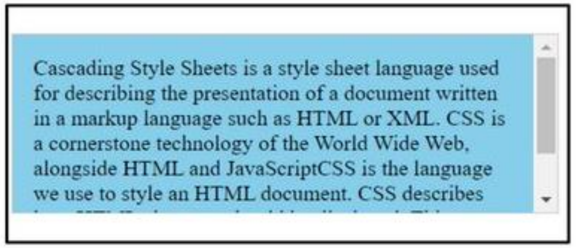
Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML or XML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScriptCSS is the language we use to style an HTML document. CSS describes how

```
overflow: hidden;
```



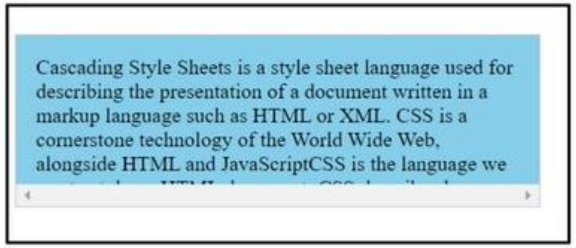
Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML or XML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScriptCSS is the language

```
overflow: scroll;
```



Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML or XML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScriptCSS is the language we use to style an HTML document. CSS describes

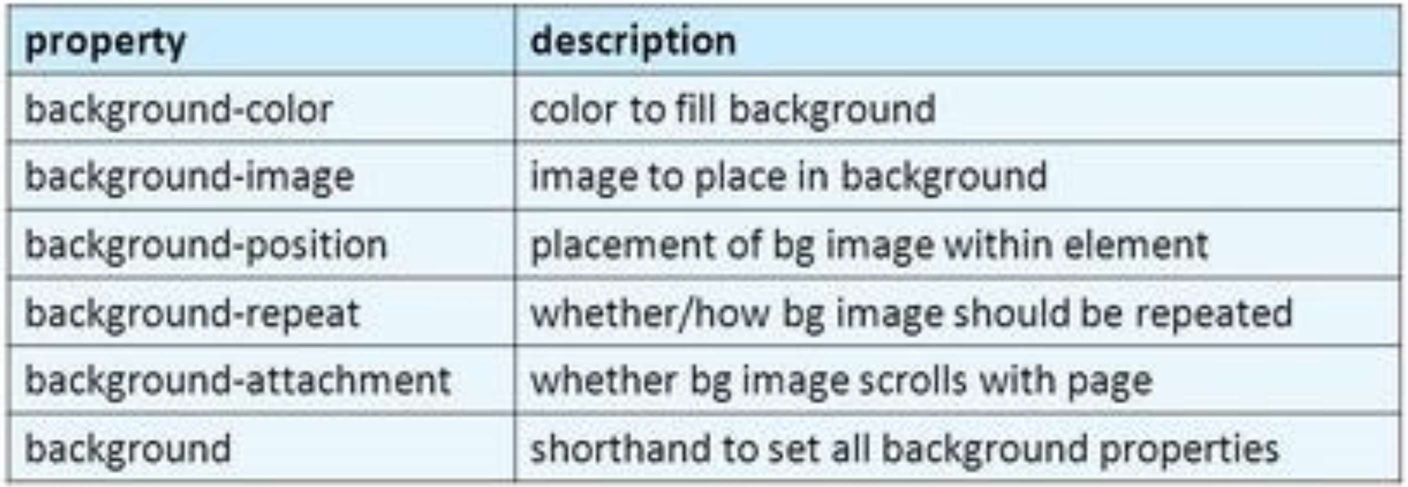
```
overflow: auto;
```



Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML or XML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScriptCSS is the language we

```
overflow-x: scroll;
overflow-y: hidden;
```

Background properties



property	description
background-color	color to fill background
background-image	image to place in background
background-position	placement of bg image within element
background-repeat	whether/how bg image should be repeated
background-attachment	whether bg image scrolls with page
background	shorthand to set all background properties

Font properties

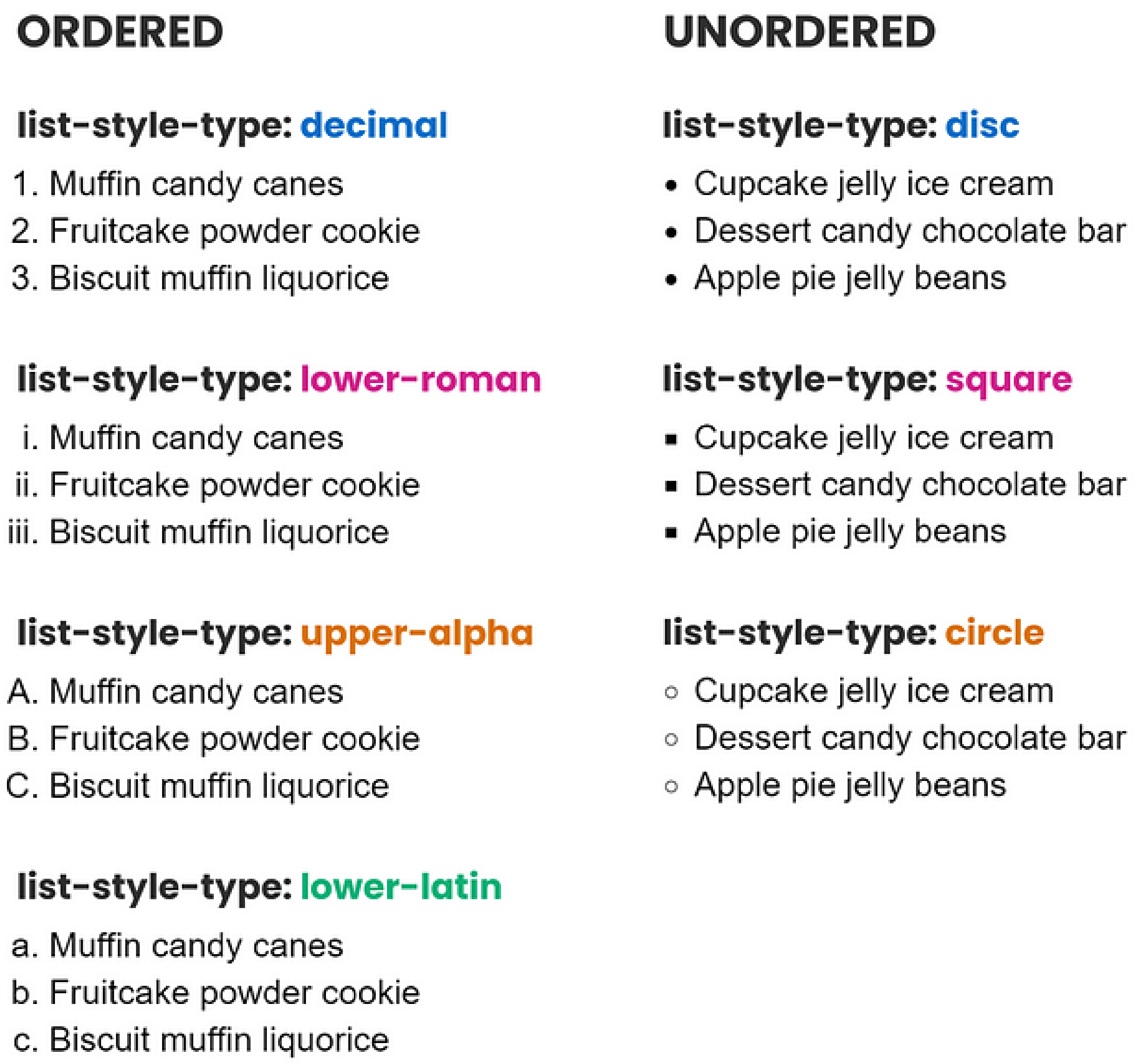
font-weight: bold

font-style: italic

Font-Variant: Small-Caps

TEXT-TRANSFORM: UPPERCASE

List Style Properties



ORDERED

list-style-type: decimal

1. Muffin candy canes
2. Fruitcake powder cookie
3. Biscuit muffin liquorice

list-style-type: lower-roman

i. Muffin candy canes
ii. Fruitcake powder cookie
iii. Biscuit muffin liquorice

list-style-type: upper-alpha

A. Muffin candy canes
B. Fruitcake powder cookie
C. Biscuit muffin liquorice

list-style-type: lower-latin

a. Muffin candy canes
b. Fruitcake powder cookie
c. Biscuit muffin liquorice

UNORDERED

list-style-type: disc

- Cupcake jelly ice cream
- Dessert candy chocolate bar
- Apple pie jelly beans

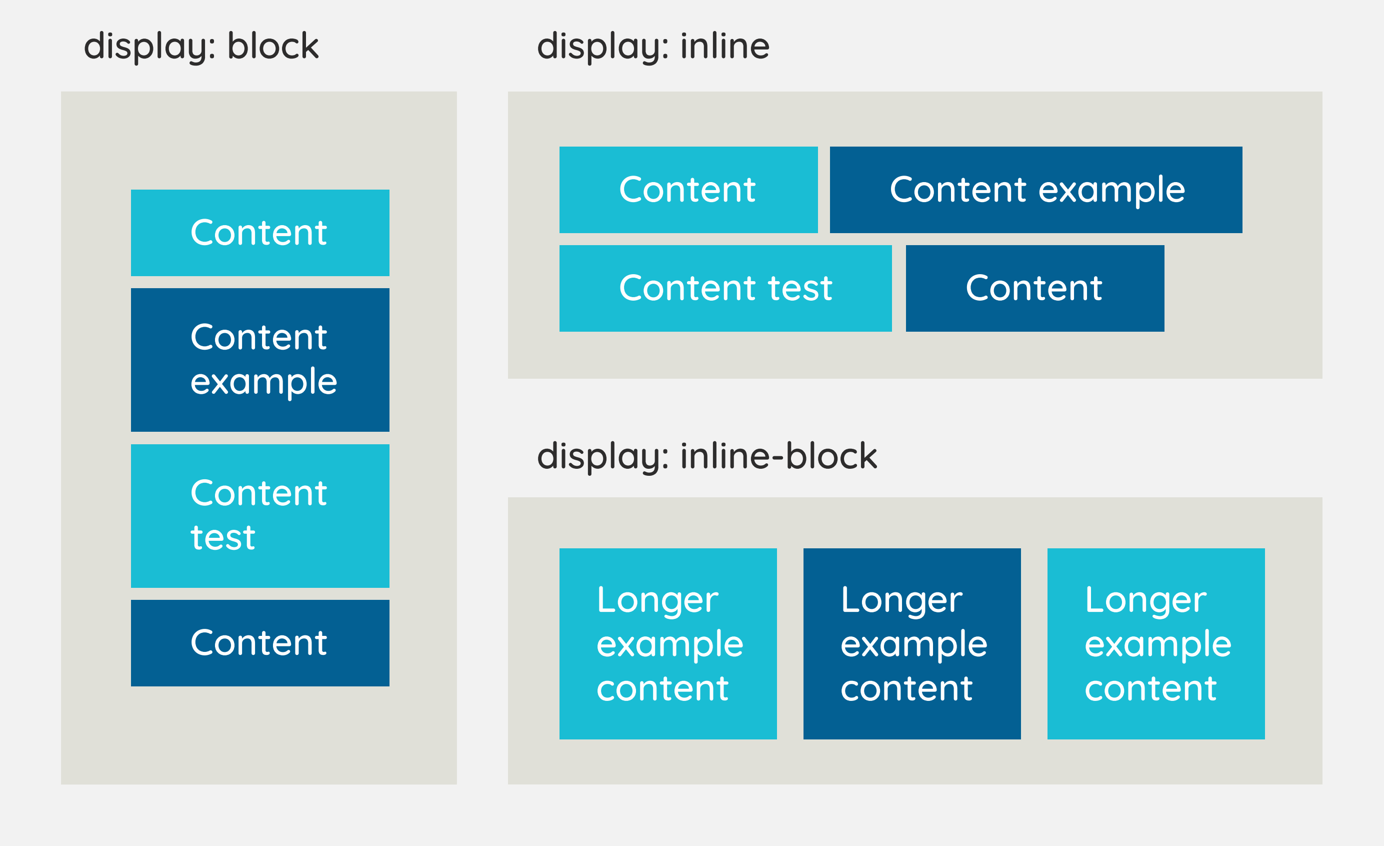
list-style-type: square

▪ Cupcake jelly ice cream
▪ Dessert candy chocolate bar
▪ Apple pie jelly beans

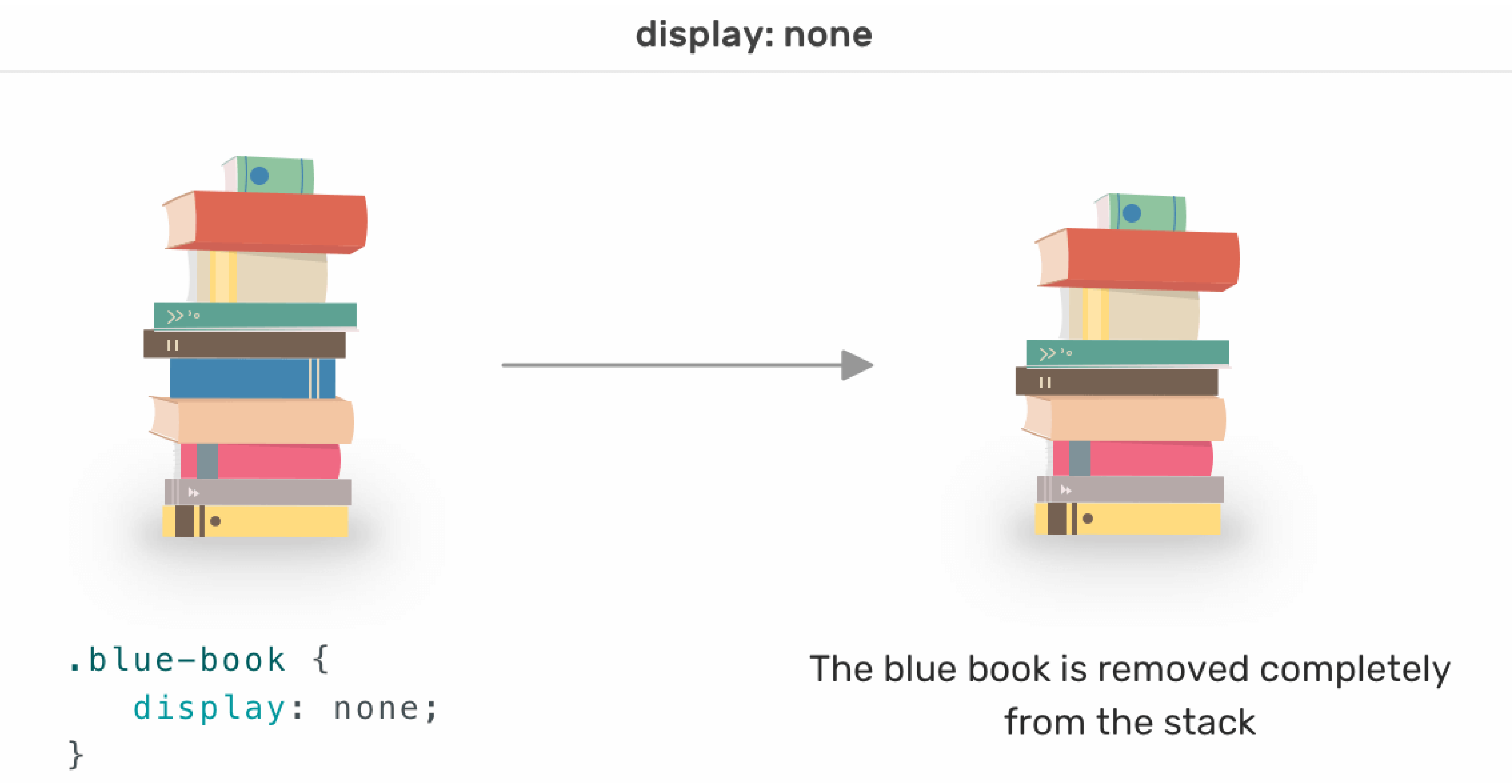
list-style-type: circle

◦ Cupcake jelly ice cream
◦ Dessert candy chocolate bar
◦ Apple pie jelly beans

Display


display: block
Content
Content example
Content test
Content
display: inline
Content
Content example
Content test
Content
display: inline-block
Longer example content
Longer example content
Longer example content

display: none

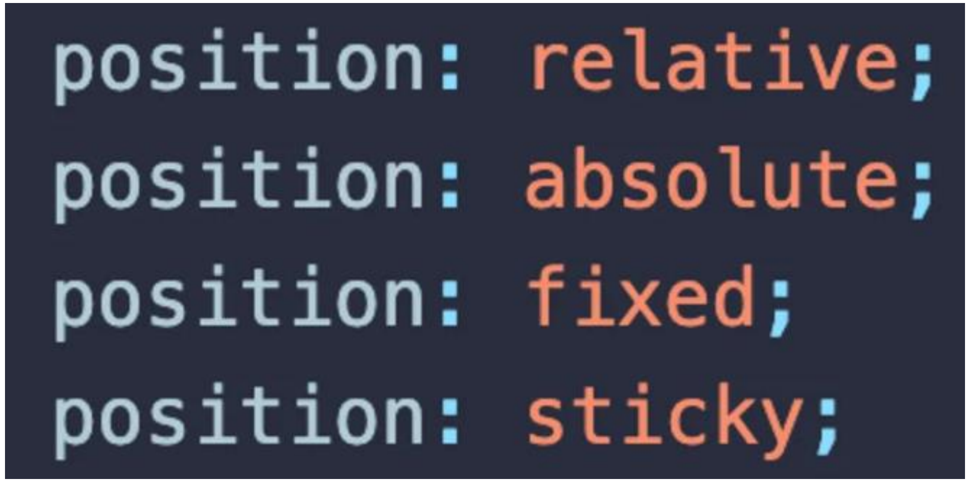


display: none

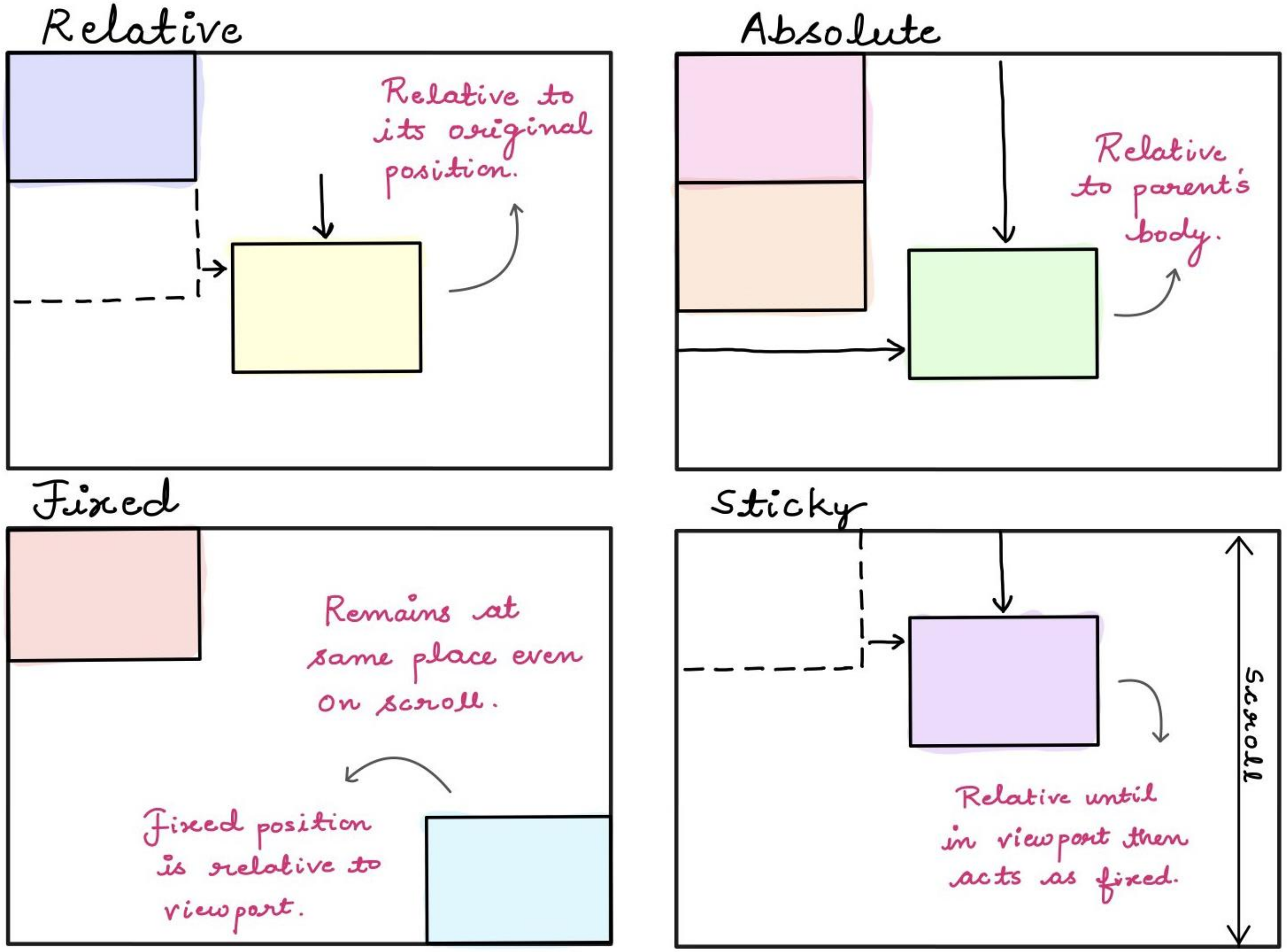
```
.blue-book {
    display: none;
}
```

The blue book is removed completely from the stack

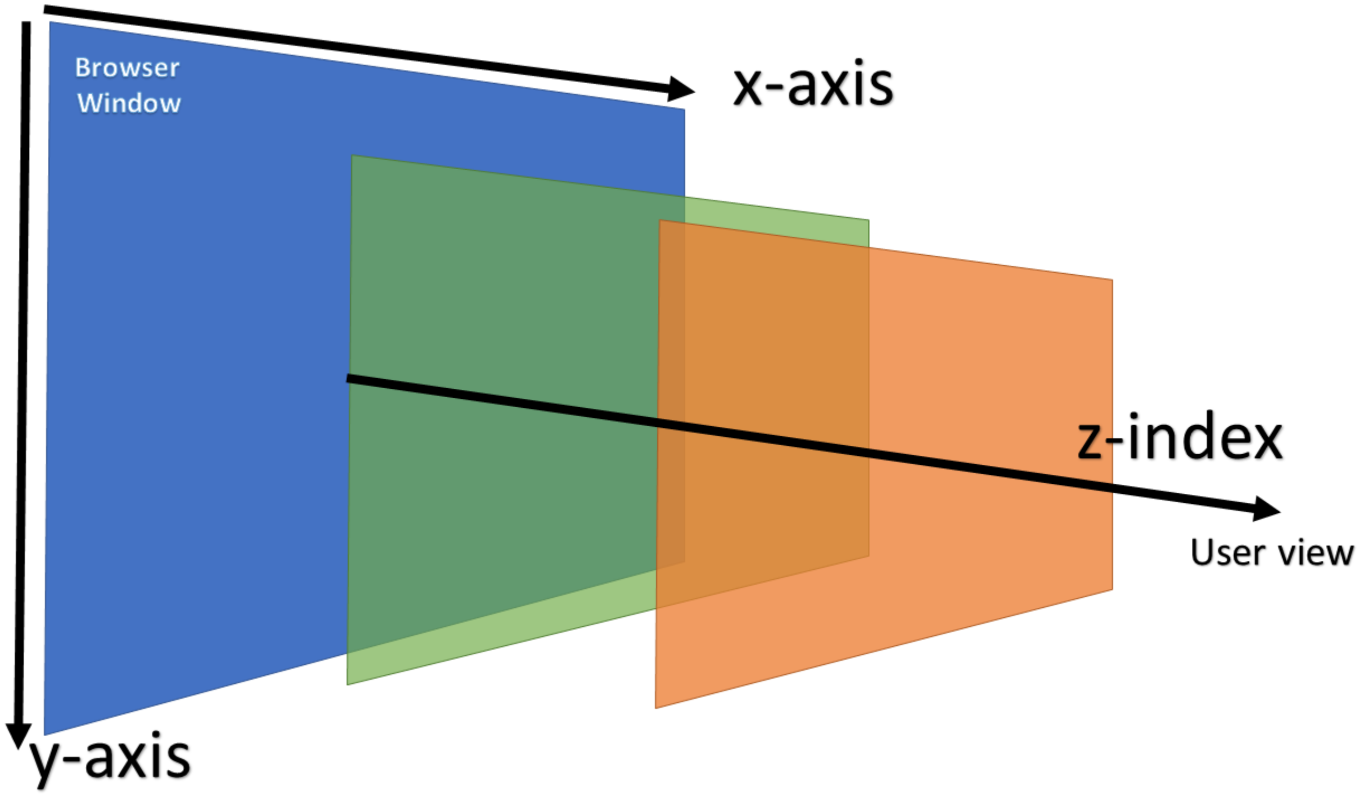
CSS Positioning



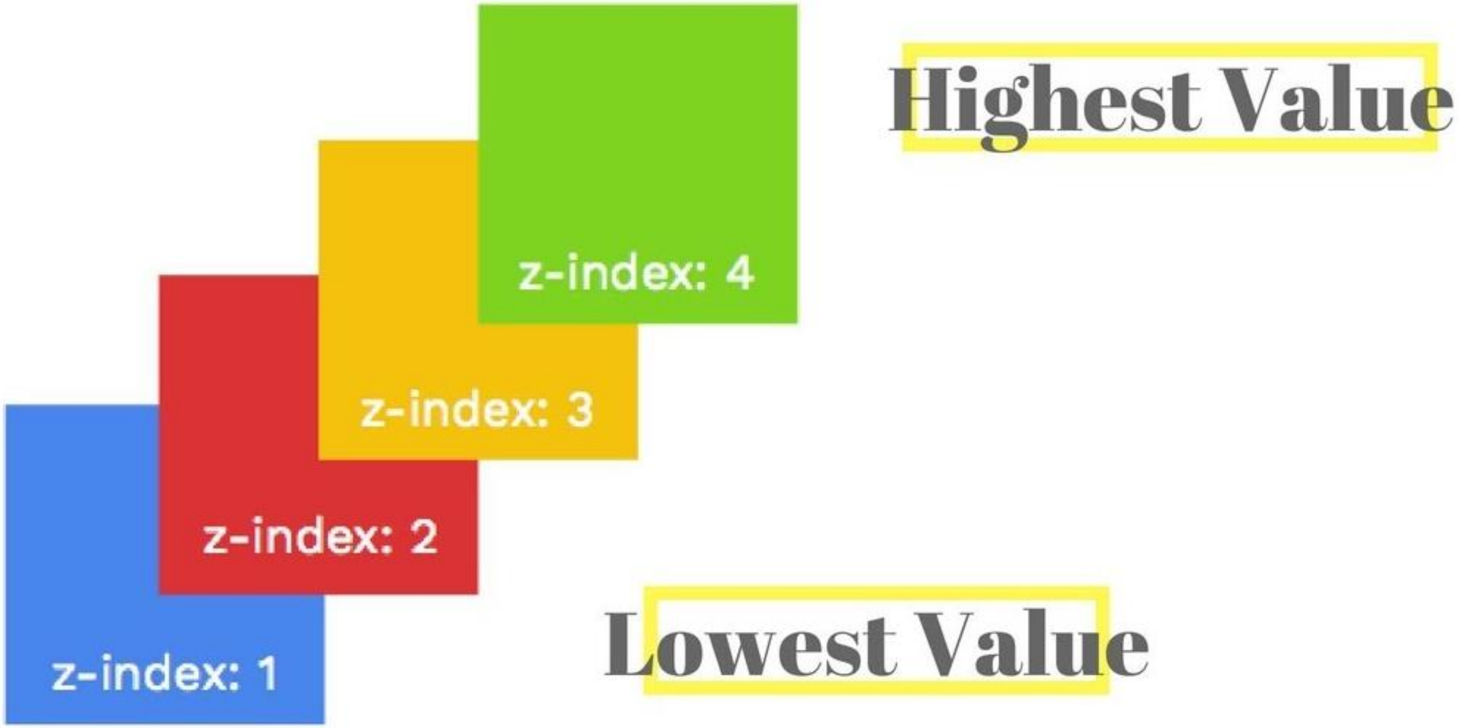
```
position: relative;
position: absolute;
position: fixed;
position: sticky;
```


Relative
Relative to its original position.
Absolute
Relative to parent's body.
Fixed
Remains at same place even on scroll.
Fixed position is relative to viewport.
Sticky
Relative until in viewport then acts as fixed.
scroll

Z-Index

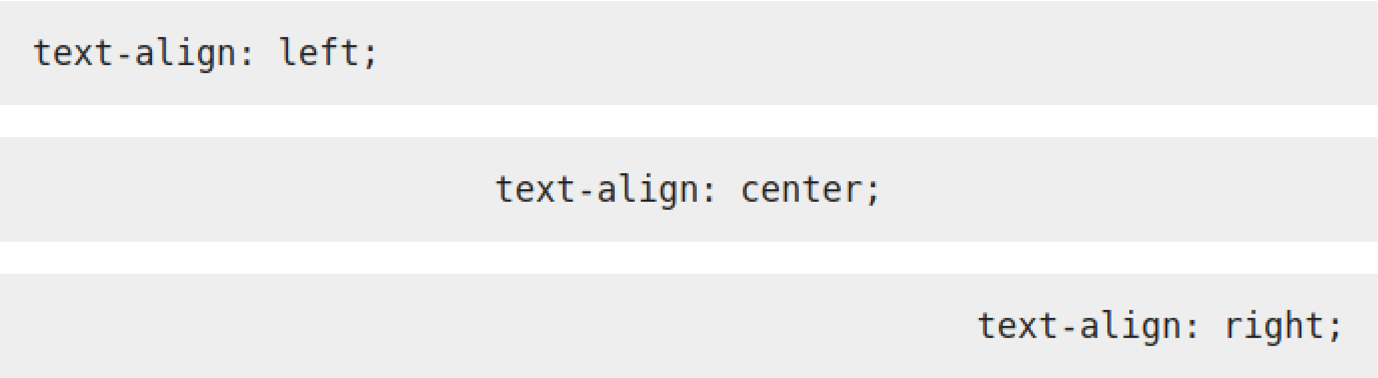


Z-Index



Highest value always takes-over priority in viewport

Alignment



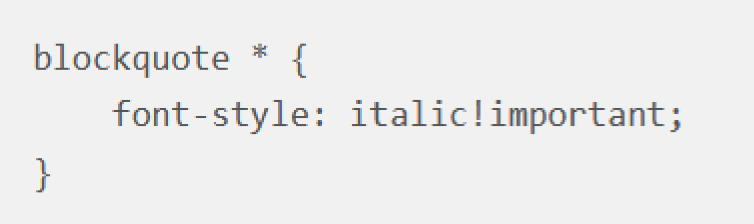
```
text-align: left;
```

```
text-align: center;
```

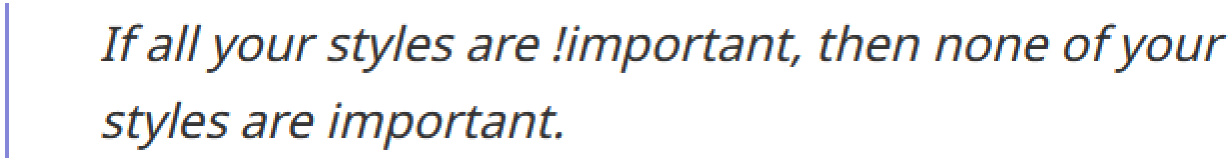
```
text-align: right;
```

!Important

the **!important** rule, it will override ALL previous styling rules for that specific property on that element!

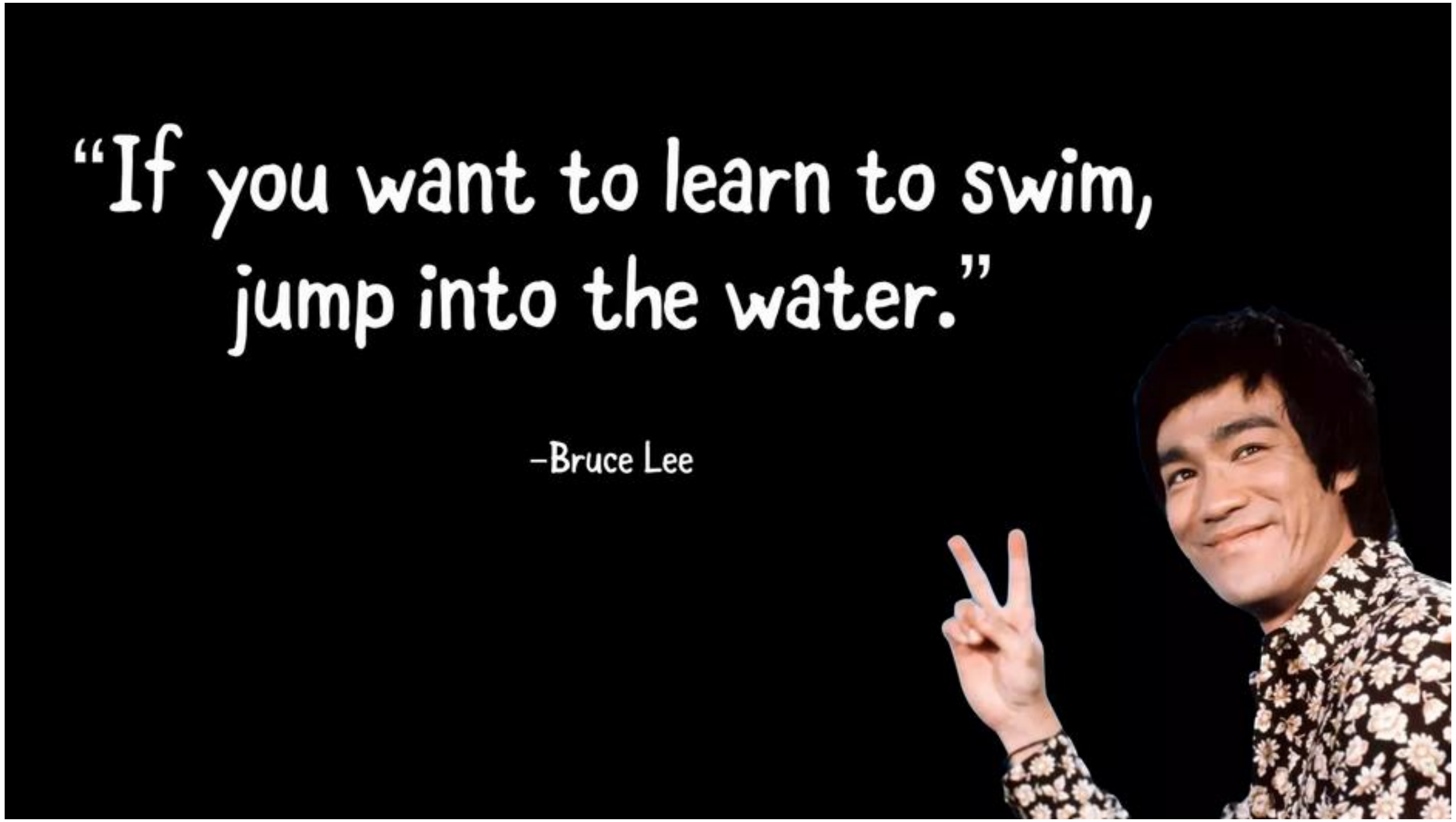


```
blockquote * {
    font-style: italic!important;
}
```



> *If all your styles are !important, then none of your styles are important.*

Best Practice: Avoid !important



“If you want to learn to swim, jump into the water.”

–Bruce Lee

Q & A