



**CSS**



# Introduction

# What is CSS ?

- **CSS** stands for **C**ascading **S**tyle **S**heets
- CSS describes **how HTML elements are to be displayed on screen, paper, or in other media**
- CSS **saves a lot of work**. It can control the layout of multiple web pages all at once
- External stylesheets are stored in **CSS files**

CSS is a language that describes the style of an HTML document.

CSS describes how HTML elements should be displayed.

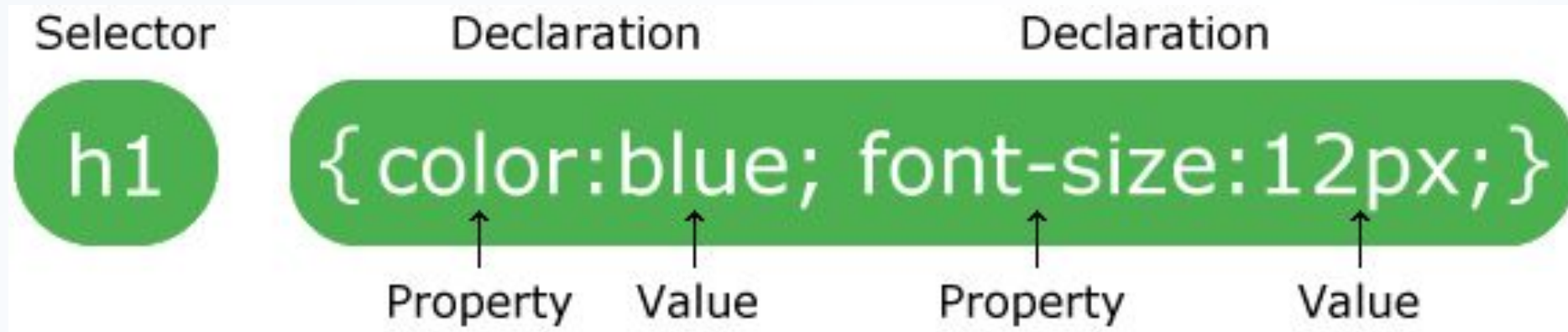
Why Use  
CSS?

CSS Solved a Big Problem ?

CSS Saves a Lot of Work!

# CSS Syntax and Selectors

A CSS rule-set consists of a selector and a declaration block:



## HTML

```
<body>
<p>Hello World!</p>
<p>These paragraphs are styled with CSS.</p>
</body>
```

## CSS

```
p {
  color: red;
  text-align: center;
}
```

# Selectors

Element Selectors:-

```
p {  
    text-align: center;  
    color: red;  
}
```

```
<p>  
This paragraph refers to two  
classes.  
</p>
```

ID Selectors:-

```
#para1 {  
    text-align: center;  
    color: red;  
}
```

```
<p id="para1">  
This paragraph refers to two  
classes.  
</p>
```

Class Selectors:-

```
.center {  
    text-align: center;  
    color: red;  
}
```

```
<p class="center">  
This paragraph refers to two  
classes.  
</p>
```

Specific Selectors:-

```
p.center {  
    text-align: center;  
    color: red;  
}
```

```
<p class="center">  
This paragraph refers to two  
classes.  
</p>
```

Grouping Selectors:-

```
h1, h2, p {  
    text-align: center;  
    color: red;  
}
```

Comments:-

```
p {  
    color: red;  
    /* This is a single-line comment */  
    text-align: center;  
}  
/* This is  
a multi-line  
comment */
```

# Ways to Insert CSS

## Three Ways to Insert CSS

- External style sheet

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

- Internal style sheet

```
<head>
<style>
body { background-color: linen;}
h1 {color: maroon;
    margin-left: 40px;}
</style>
</head>
```

- Inline style

```
<h1 style="color:blue;margin-left:30px;">This
is a heading</h1>
```

- 1.Inline style (inside an HTML element)
- 2.External and internal style sheets (in the head section)
- 3.Browser default

# background:

Property	Description
<a href="#"><u>background</u></a>	Sets all the background properties in one declaration
<a href="#"><u>background-attachment</u></a>	Sets whether a background image is fixed or scrolls with the rest of the page
<a href="#"><u>background-clip</u></a>	Specifies the painting area of the background
<a href="#"><u>background-color</u></a>	Sets the background color of an element
<a href="#"><u>background-image</u></a>	Sets the background image for an element
<a href="#"><u>background-origin</u></a>	Specifies where the background image(s) is/are positioned
<a href="#"><u>background-position</u></a>	Sets the starting position of a background image
<a href="#"><u>background-repeat</u></a>	Sets how a background image will be repeated
<a href="#"><u>background-size</u></a>	Specifies the size of the background image(s)

# border:

Property	Description		
		<a href="#">border-radius</a>	Sets all the four border-*-radius properties for rounded corners
<a href="#">border</a>	Sets all the border properties in one declaration	<a href="#">border-right</a>	Sets all the right border properties in one declaration
<a href="#">border-bottom</a>	Sets all the bottom border properties in one declaration	<a href="#">border-right-color</a>	Sets the color of the right border
<a href="#">border-bottom-color</a>	Sets the color of the bottom border	<a href="#">border-right-style</a>	Sets the style of the right border
<a href="#">border-bottom-style</a>	Sets the style of the bottom border	<a href="#">border-right-width</a>	Sets the width of the right border
<a href="#">border-bottom-width</a>	Sets the width of the bottom border	<a href="#">border-style</a>	Sets the style of the four borders
<a href="#">border-color</a>	Sets the color of the four borders	<a href="#">border-top</a>	Sets all the top border properties in one declaration
<a href="#">border-left</a>	Sets all the left border properties in one declaration	<a href="#">border-top-color</a>	Sets the color of the top border
<a href="#">border-left-color</a>	Sets the color of the left border	<a href="#">border-top-style</a>	Sets the style of the top border
<a href="#">border-left-style</a>	Sets the style of the left border	<a href="#">border-top-width</a>	Sets the width of the top border
<a href="#">border-left-width</a>	Sets the width of the left border	<a href="#">border-width</a>	Sets the width of the four borders



# margin:

Property	Description
<a href="#"><u>margin</u></a>	A shorthand property for setting the margin properties in one declaration
<a href="#"><u>margin-bottom</u></a>	Sets the bottom margin of an element
<a href="#"><u>margin-left</u></a>	Sets the left margin of an element
<a href="#"><u>margin-right</u></a>	Sets the right margin of an element
<a href="#"><u>margin-top</u></a>	Sets the top margin of an element

# padding:

Property	Description
<a href="#"><u>padding</u></a>	A shorthand property for setting all the padding properties in one declaration
<a href="#"><u>padding-bottom</u></a>	Sets the bottom padding of an element
<a href="#"><u>padding-left</u></a>	Sets the left padding of an element
<a href="#"><u>padding-right</u></a>	Sets the right padding of an element
<a href="#"><u>padding-top</u></a>	Sets the top padding of an element

# Color Syntax and Types

## Colors:-

Red/Green/Blue    `rgb(255, 99, 71)`

Hexadecimal    `#ff6347`

Hue/Saturation/Lightness    `hsl(9, 100%, 64%)`

Red/Green/Blue/Alpha    `rgba(255, 99, 71, 0.5)`

Hue/Saturation/Lightness/Alpha    `hsla(9, 100%, 64%, 0.5)`

# Height and Width

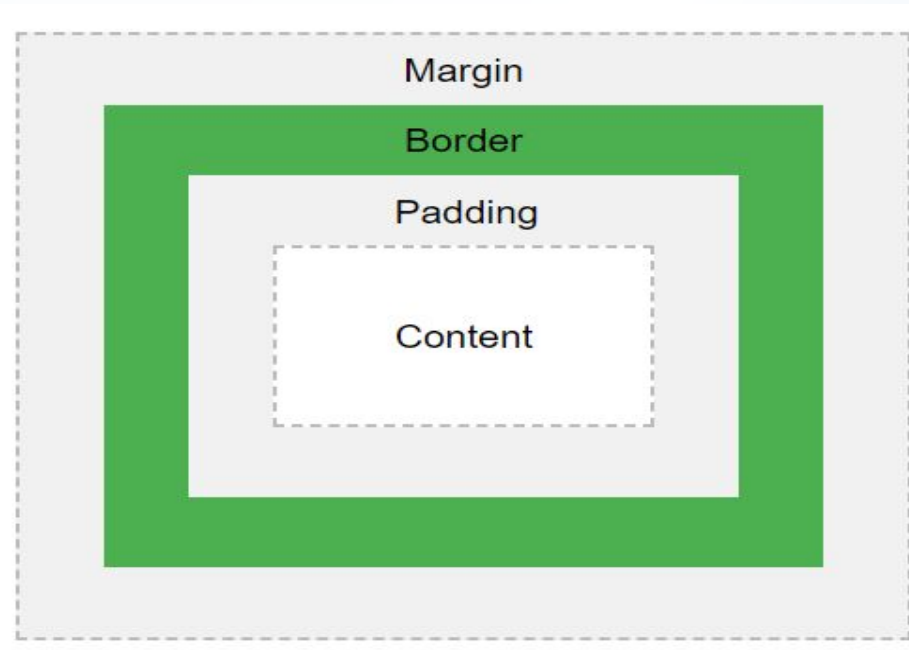
Property	Description
<a href="#"><u>height</u></a>	Sets the height of an element
<a href="#"><u>max-height</u></a>	Sets the maximum height of an element
<a href="#"><u>max-width</u></a>	Sets the maximum width of an element
<a href="#"><u>min-height</u></a>	Sets the minimum height of an element
<a href="#"><u>min-width</u></a>	Sets the minimum width of an element
<a href="#"><u>width</u></a>	Sets the width of an element

# Explaining Box Model

Explanation of the different parts:

- **Content** - The content of the box, where text and images appear
- **Padding** - Clears an area around the content. The padding is transparent
- **Border** - A border that goes around the padding and content
- **Margin** - Clears an area outside the border. The margin is transparent

```
div {  
  width: 300px;  
  border: 25px solid green;  
  padding: 25px;  
  margin: 25px;  
}
```



# outline:

Property	Description
<a href="#"><u>outline</u></a>	A shorthand property for setting outline-width, outline-style, and outline-color in one declaration
<a href="#"><u>outline-color</u></a>	Sets the color of an outline
<a href="#"><u>outline-offset</u></a>	Specifies the space between an outline and the edge or border of an element
<a href="#"><u>outline-style</u></a>	Sets the style of an outline
<a href="#"><u>outline-width</u></a>	Sets the width of an outline

# text:

Property	Description
<a href="#">color</a>	Sets the color of text
<a href="#">direction</a>	Specifies the text direction/writing direction
<a href="#">letter-spacing</a>	Increases or decreases the space between characters in a text
<a href="#">line-height</a>	Sets the line height
<a href="#">text-align</a>	Specifies the horizontal alignment of text
<a href="#">text-decoration</a>	Specifies the decoration added to text
<a href="#">text-indent</a>	Specifies the indentation of the first line in a text-block
<a href="#">text-shadow</a>	Specifies the shadow effect added to text
<a href="#">text-transform</a>	Controls the capitalization of text
<a href="#">text-overflow</a>	Specifies how overflowed content that is not displayed should be signaled to the user
<a href="#">unicode-bidi</a>	Used together with the <a href="#">direction</a> property to set or return whether the text should be overridden to support multiple languages in the same document
<a href="#">vertical-align</a>	Sets the vertical alignment of an element
<a href="#">white-space</a>	Specifies how white-space inside an element is handled
<a href="#">word-spacing</a>	Increases or decreases the space between words in a text

# fonts

## Difference Between Serif and Sans-serif Fonts



Property	Description
<a href="#">font</a>	Sets all the font properties in one declaration
<a href="#">font-family</a>	Specifies the font family for text
<a href="#">font-size</a>	Specifies the font size of text
<a href="#">font-style</a>	Specifies the font style for text
<a href="#">font-variant</a>	Specifies whether or not a text should be displayed in a small-caps font
<a href="#">font-weight</a>	Specifies the weight of a font



# Icons

## Font Awesome Icons Link

```
<link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.
min.css">
<i class="fa fa-cloud"></i>
<i class="fa fa-heart"></i>
<i class="fa fa-car"></i>
<i class="fa fa-file"></i>
<i class="fa fa-bars"></i>
```

## Bootstrap Icons Link

```
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">

<i class="glyphicon glyphicon-cloud"></i>
<i class="glyphicon glyphicon-remove"></i>
<i class="glyphicon glyphicon-user"></i>
<i class="glyphicon glyphicon-envelope"></i>
<i class="glyphicon glyphicon-thumbs-up"></i>
```

# links

a:link - a normal, unvisited link

a:visited - a link the user has visited

a:hover - a link when the user mouses over it

a:active - a link the moment it is clicked

Use:- `text-decoration: none;`

# display:

display :none vs visibility: hidden

Value	Description
inline	Displays an element as an inline element (like <span>). Any height and width properties will have no effect
block	Displays an element as a block element (like <p>). It starts on a new line, and takes up the whole width
contents	Makes the container disappear, making the child elements children of the element the next level up in the DOM
flex	Displays an element as a block-level flex container
grid	Displays an element as a block-level grid container
inline-block	Displays an element as an inline-level block container. The element itself is formatted as an inline element, but you can apply height and width values
inline-flex	Displays an element as an inline-level flex container
inline-grid	Displays an element as an inline-level grid container
inline-table	The element is displayed as an inline-level table
list-item	Let the element behave like a <li> element
run-in	Displays an element as either block or inline, depending on context
none	The element is completely removed
initial	Sets this property to its default value.
inherit	Inherits this property from its parent element.

# CSS Layout - width and (max-width, min-width)

```
div.ex1 {  
    width: 500px;  
    margin: auto;  
    border: 3px solid #73AD21;  
}
```

```
div.ex2 {  
    max-width: 500px;  
    margin: auto;  
    border: 3px solid #73AD21;  
}
```

```
div.ex3 {  
    max-width: 500px;  
    margin: auto;  
    border: 3px solid #73AD21;  
}
```

# position:

Value	Description
static	Default value. Elements render in order, as they appear in the document flow
absolute	The element is positioned relative to its first positioned (not static) ancestor element
fixed	The element is positioned relative to the browser window
relative	The element is positioned relative to its normal position, so "left:20px" adds 20 pixels to the element's LEFT position
sticky	<p>The element is positioned based on the user's scroll position. A sticky element toggles between relative and fixed, depending on the scroll position. It is positioned relative until a given offset position is met in the viewport - then it "sticks" in place (like position:fixed).</p> <p><b>Note:</b> Not supported in IE/Edge 15 or earlier. Supported in Safari from version 6.1 with a -webkit- prefix.</p>
initial	Sets this property to its default value.
inherit	Inherits this property from its parent element.

# Positioning properties

Property	Description
<a href="#"><u>bottom</u></a>	Sets the bottom margin edge for a positioned box
<a href="#"><u>clip</u></a>	Clips an absolutely positioned element
<a href="#"><u>left</u></a>	Sets the left margin edge for a positioned box
<a href="#"><u>position</u></a>	Specifies the type of positioning for an element
<a href="#"><u>right</u></a>	Sets the right margin edge for a positioned box
<a href="#"><u>top</u></a>	Sets the top margin edge for a positioned box
<a href="#"><u>z-index</u></a>	Sets the stack order of an element

# Responsive Details

Property	Description
<a href="#"><u>box-sizing</u></a>	Defines how the width and height of an element are calculated: should they include padding and borders, or not
<a href="#"><u>clear</u></a>	Specifies what elements can float beside the cleared element and on which side
<a href="#"><u>float</u></a>	Specifies how an element should float
<a href="#"><u>overflow</u></a>	Specifies what happens if content overflows an element's box
<a href="#"><u>overflow-x</u></a>	Specifies what to do with the left/right edges of the content if it overflows the element's content area
<a href="#"><u>overflow-y</u></a>	Specifies what to do with the top/bottom edges of the content if it overflows the element's content area

# transformation 2d

```
translate():  
div {  
    -ms-transform: translate(50px, 100px); /* IE 9 */  
    -webkit-transform: translate(50px, 100px); /* Safari */  
    transform: translate(50px, 100px);  
}
```

```
rotate():  
div {  
    -ms-transform: rotate(20deg); /* IE 9 */  
    -webkit-transform: rotate(20deg); /* Safari */  
    transform: rotate(20deg);  
}
```

```
scale();  
div {  
    -ms-transform: scale(2, 3); /* IE 9 */  
    -webkit-transform: scale(2, 3); /* Safari */  
    transform: scale(2, 3);  
}
```



# transformation 2d

The rotateX() Method

```
#myDiv {  
    -webkit-transform: rotateX(150deg); /* Safari */  
    transform: rotateX(150deg);  
}
```

The rotateY() Method

```
#myDiv {  
    -webkit-transform: rotateY(130deg); /*  
Safari */  
    transform: rotateY(130deg);  
}
```

The rotateZ() Method

```
#myDiv {  
    -webkit-transform: rotateZ(90deg); /*  
Safari */  
    transform: rotateZ(90deg);  
}
```

# Transition

```
div:hover {  
  width: 300px;  
}
```

```
div {  
  width: 100px;  
  height: 100px;  
  background: red;  
  -webkit-transition: width 2s; /* For Safari 3.1 to 6.0 */  
  transition: width 2s; }
```

Property	Description
<a href="#"><u>transition</u></a>	A shorthand property for setting the four transition properties into a single property
<a href="#"><u>transition-delay</u></a>	Specifies a delay (in seconds) for the transition effect
<a href="#"><u>transition-duration</u></a>	Specifies how many seconds or milliseconds a transition effect takes to complete
<a href="#"><u>transition-property</u></a>	Specifies the name of the CSS property the transition effect is for
<a href="#"><u>transition-timing-function</u></a>	Specifies the speed curve of the

# Media Query

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
* {  
  box-sizing: border-box;  
}
```

```
.col-1 {width: 8.33%;}  
.col-2 {width: 16.66%;}  
.col-3 {width: 25%;}  
.col-4 {width: 33.33%;}  
.col-5 {width: 41.66%;}  
.col-6 {width: 50%;}  
.col-7 {width: 58.33%;}  
.col-8 {width: 66.66%;}  
.col-9 {width: 75%;}  
.col-10 {width: 83.33%;}  
.col-11 {width: 91.66%;}  
.col-12 {width: 100%;}
```

# Media Query

```
@media only screen and (max-width: 600px) {  
    body {  
        background-color: lightblue;  
    }  
}  
  
/* Extra small devices (phones, 600px and down) */  
@media only screen and (max-width: 600px) {...}  
  
/* Small devices (portrait tablets and large phones, 600px and up) */  
@media only screen and (min-width: 600px) {...}  
  
/* Medium devices (landscape tablets, 768px and up) */  
@media only screen and (min-width: 768px) {...}  
  
/* Large devices (laptops/desktops, 992px and up) */  
@media only screen and (min-width: 992px) {...}  
  
/* Extra large devices (large laptops and desktops, 1200px and up) */  
@media only screen and (min-width: 1200px) {...}
```

Thank You 🥰