

## Day 4.

# Introduction to CSS

Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML.

### **CSS Syntax**

A **CSS Syntax** rule consists of a selector, property, and its value.

**Example :** `selector { Property: value; }`

### **Different CSS selectors :**

1. Id selection
2. class selection
3. type selection
4. universal selector
5. attribute selection
6. pseudo selection

### **Ways To Add CSS To A Web Page**

1. Inline
2. Internal
3. External

#### **1. Type Selection**

Selects an element by its tag name

#### **2. ID Selection**

Selects an element by its ID

Its value for any element has to be unique

ID Values don't start with a number or special character

#### **3. Class Selection**

Selects an element by its Class Name

Multiple elements can have the same class name

Class Values don't start with a number or special character

An Element can have more than one class name

#### **4. Attribute Selector**

Selects an Element By Its Attribute

## 5. Pseudo Class Selection

Selects an Element in a special state

Example of pseudo class : `:link , :visited , :hover , :active , ::after , ::before , :first-child , ::first-line , ::first-letter , :nth-child(number)`

## 6. Universal Selector

Selects all elements

### Comment in HTML and CSS

Comments are used to explain the code and may help you edit the code at a later date

HTML Comment : `<!-- comment -->`

CSS Comment : `/* comment */`

### Unit Of Measurement in CSS

CSS has different units for expressing the length and measurement. We will discuss the best units that are good for screen measurements.

**Percent (%)**: This unit is usually based on the parent size

**Pixel (px)**: This is an absolute value and always going to be the same no matter where it is defined

**View-Width (vw)**: This unit is measured with respect to the screen width.  $1\text{vw} = 1\text{ PERCENT}$  of the entire screen WIDTH. So  $100\text{vw} = 100\%$  of the entire screen width and  $50\text{vw} = 50\%$  of the entire screen width

**View-Height(vh)**: This unit is measured with respect to the screen height.  $1\text{vh} = 1\text{ PERCENT}$  of the entire screen HEIGHT. So  $100\text{vh} = 100\%$  of screen height and  $50\text{vh} = 50\%$  of the screen height

**Root-em(rem)**: This unit is measured relative to the root font size.  $1\text{rem} = 100\%$  of the root font-size. The root font size is mostly based on your browser.

**Em(em)**: This unit is measured relative to the parent font size.  $1\text{em} = 100\%$  of the parent font size

### Height and Width

These two properties in CSS are used to set the height and width of boxes

1. Min-width
2. Max-width
3. Max-height
4. Min-height

## **Border**

With CSS Border we can set the style, color, and width of a border.

1. Border-style
2. Border-width
3. Border-color

Border property can be shorthanded and You can also set the border for individual sides (top, left, right, bottom).

Border: width style color;

## **Text Formatting Properties**

These properties help to format text and style text

1. Color
2. Text-align
3. Text-decoration
4. Text-transform
5. Text-indent
6. Letter-spacing
7. Word-spacing

## **Color Options in CSS**

There are several ways to specify colors in CSS

Color Names

RGB: Red, Green, Blue- This is the color model that monitors the use

RGBA : This is similar to RGB but with an added ALPHA property to define the transparency of the RGB color

HSL: This stands for HUE, SATURATION, and LIGHTNESS

HSLA: This works like the HSL but with an added ALPHA property to define the transparency of the HSL color

Hexadecimal: This is just a different way to represent the RGB. You can use 6 hexadecimal numbers 0-9 and A-F

## **Font Properties**

These properties are used to style font contents.

1. Font-family
2. Font-style
3. Font-weight
4. Font-variant
5. Font-size

## **Margin and Padding**

Margin is used to create space around an element. Every element has individual sides - top, left, right, bottom. Margin can be used to create spaces for each side

Margin property can be shorthanded or written specifically for different sides

Different ways to use the margin property

1. Margin: top right bottom left;
2. Margin : top-bottom left-right;
3. Margin : top-bottom-left-right;
4. Margin-top : value;
5. Margin-bottom : value;
6. Margin-right : value;
7. Margin-left : value;

Padding

CSS Padding property is used to create spaces between element content and its border. Every element has individual sides - top, left, right, bottom. Padding can be used to create spaces between content and its border for each side

Padding property can be shorthanded or written specifically for different sides

Different ways to use the padding property

8. Padding: top right bottom left;
9. Padding : top-bottom left-right;
10. Padding : top-bottom-left-right;
11. Padding-top : value;
12. Padding-bottom : value;
13. Padding-right : value;
14. Padding-left : value;