



CSS

CASCADING STYLE SHEET

- CSS is the language we use to style a Web page.
- What is CSS?
- CSS stands for Cascading Style Sheets
- 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

Why Use CSS?

- CSS is used to define styles for your web pages, including the design, layout and variations in display for different devices and screen sizes.

CSS SYNTAX

A CSS rule consists of a selector and a declaration block.

p is a selector in CSS.

color is a property, and red is the property value

text-align is a property, and center is the property value

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

CSS SELECTORS

A **CSS selector** selects the HTML element(s) for styling purpose. CSS selectors select HTML elements according to its id, class, type, attribute etc.

There are many basic different types of selectors.

- Element Selector
- Id Selector
- Class Selector
- Universal Selector
- Group Selector
- Attribute Selector
- Pseudo-Class Selector
- Pseudo-Element Selector

CSS TYPES

There are three types of CSS which are given below:

- **Inline:** Inline CSS contains the CSS property in the body section attached with the element known as inline CSS.
- **Internal or Embedded:** The CSS ruleset should be within the HTML file in the head section i.e the CSS is embedded within the HTML file.
- **External:** External CSS contains a separate CSS file that contains only style property with the help of tag attributes.

CSS BOX MODEL

The CSS box model is essentially a box that wraps around every HTML element. It consists of: borders, padding, margins, and the actual content.

In CSS, the term "box model" is used when talking about design and layout.

The CSS box model is essentially a box that wraps around every HTML element.

It consists of: margins, borders, padding, and the actual content.

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

CSS COLORS

RGB

An RGB color value represents RED, GREEN, and BLUE light sources.

RGB Value

In CSS, a color can be specified as an RGB value, using this formula:

`rgb(red, green, blue)`

Each parameter (red, green, and blue) defines the intensity of the color between 0 and 255.

For example, `rgb(255, 0, 0)` is displayed as red, because red is set to its highest value (255) and the others are set to 0.

To display black, set all color parameters to 0, like this: `rgb(0, 0, 0)`.

To display white, set all color parameters to 255, like this: `rgb(255, 255, 255)`.

```
<h1 style="background-color:rgb(18, 37, 18);">HI</h1>
```

CSS COLORS

RGBA

RGBA Value

RGBA color values are an extension of RGB color values with an alpha channel - which specifies the opacity for a color.

An RGBA color value is specified with:

`rgba(red, green, blue, alpha)`

The alpha parameter is a number between 0.0 (fully transparent) and 1.0 (not transparent at all)

```
<h1 style="background-color:rgba  
(255, 99, 71, 1);">HI</h1>
```

```
<h1 style="background-color:rgba  
(255, 99, 71, 0.8);">HI</h1>
```

```
<h1 style="background-color:rgba  
(255, 99, 71, 0.6);">HI</h1>
```


CSS COLORS

HEX

HEX Value

In CSS, a color can be specified using a hexadecimal value in the form:

`#rrggbb`

Where rr (red), gg (green) and bb (blue) are hexadecimal values between 00 and ff (same as decimal 0-255).

For example, `#ff0000` is displayed as red, because red is set to its highest value (ff) and the others are set to the lowest value (00).

```
<h1 style="background-color:#1ac265;">HI</h1>
```

```
<h1 style="background-color:#ee82ee;">HI</h1>
```

CSS COLORS

HSL

HSL Value

In CSS, a color can be specified using hue, saturation, and lightness (HSL) in the form:

`hsl(hue, saturation, lightness)`

Hue is a degree on the color wheel from 0 to 360. 0 is red, 120 is green, and 240 is blue.

Saturation is a percentage value, 0% means a shade of gray, and 100% is the full color.

Lightness is also a percentage, 0% is black, 50% is neither light or dark, 100% is white

```
<h1 style="background-color:hsl(39, 100%, 30%);">hsl(39, 100%, 50%)</h1>
```

```
<h1 style="background-color:hsl(248, 30%, 58%);">hsl(248, 53%, 58%)</h1>
```

CSS FONT-FAMILY

Font Selection is Important

Choosing the right font has a huge impact on how the readers experience a website.

The right font can create a strong identity for your brand.

Using a font that is easy to read is important. The font adds value to your text. It is also important to choose the correct color and text size for the font.

Generic Font Families

In CSS there are five generic font families:

- Serif fonts have a small stroke at the edges of each letter. They create a sense of formality and elegance.
- Sans-serif fonts have clean lines (no small strokes attached). They create a modern and minimalistic look.
- Monospace fonts - here all the letters have the same fixed width. They create a mechanical look.
- Cursive fonts imitate human handwriting.
- Fantasy fonts are decorative/playful fonts.
- All the different font names belong to one of the generic font families.