

Introduction To CSS

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

CSS Syntax:

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

h1- Selector(The Selector points to the HTML element you want to style)

color:blue;-declaration(The declaration includes a CSS property name and a value, separated by a colon)

color- property

blue-value

Example:

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<style>
```

```
p {
```

```
  color: red;
```

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

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<p>Hello World!</p>
```

```
<p>These paragraphs are styled with CSS.</p>
```

```
</body>
```

```
</html>
```

Example Explained:

- p is a selector in CSS (it points to the HTML element you want to style: <p>).
- color is a property, and red is the property value.
- text-align is a property, and the center is the property value.

Example1:

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<style>
```

```
#para1 {
```

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

```
    color: red;
```

```
}
```

```
.center {
```

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

```
    color: red;
```

```
}
```

```
p.large {
```

```
    font-size: 300%;
```

```
}
```

```
#para3 {
```

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

```
    color: green;
```

```
}
```

```
h1,h2,p{
```

```
    color: blue;
```

```
    font-size: 100%;
```

```
}
```

```
</style>
</head>
<body>
<h1 class="center">Red and center-aligned heading</h1>
<h2>Smaller heading!</h2>
<p id="para1">Hello World!</p>
<p>This paragraph is not affected by the style.</p>
<p class="center">This paragraph will be red and center-aligned.</p>
</body>
</html>
```

Three Ways to Insert CSS:

There are three ways of inserting a style sheet:

- External CSS
- Internal CSS
- Inline CSS

1. External CSS:

An external style sheet can be written in any text editor and must be saved with a **.css** extension.

The external **.css** file should not contain any HTML tags.

Example:

```
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" href="mystyle.css">
</head>
<body>
<h1>This is a heading</h1>
<p>This is a paragraph.</p>
</body>
</html>
```

Here is how the "mystyle.css" file looks:

```
body {  
    background-color: lightblue;  
}  
  
h1 {  
    color: navy;  
    margin-left: 20px;  
}
```

1. Internal CSS:

An Internal StyleSheet may be used if one single HTML page has a unique style.

The Internal Style is defined inside the <style> element, inside the head section.

example:

```
<!DOCTYPE html>  
  
<html>  
  
  <head>  
  
    <style>  
  
      body {  
  
        background-color: linen;  
  
      }  
  
      h1 {  
  
        color: maroon;  
  
        margin-left: 40px;  
  
      }  
  
    </style>  
  
  </head>  
  
  <body>  
  
    <h1>This is a heading</h1>  
  
    <p>This is a paragraph.</p>  
  
  </body>
```

</html>

2. Inline CSS:

An inline style may be used to apply a unique style for a single element.

To use inline styles, add the style attribute to the relevant element. The style attribute can contain any CSS property.

Example:

```
<!DOCTYPE html>
<html>
<body>
<h1 style="color:blue;text-align:center;">This is a heading</h1>
<p style="color:red;">This is a paragraph.</p>
</body>
</html>
```

Property List

CSS supports more than 200 CSS properties. Here's a complete list.

PROPERTY	DESCRIPTION
<u>align-content</u>	Aligns items in a flex container along flex lines.
<u>align-items</u>	Aligns evenly spaced items in a flex container.
<u>align-self</u>	Aligns an item inside a flex container.
<u>all</u>	Resets all element properties to its default or inherited values.
<u>animation</u>	Creates an animating element.
<u>animation-delay</u>	Sets a delay before animation begins.
<u>animation-direction</u>	Sets how, in and which direction, an animation is played.
<u>animation-duration</u>	Defines the duration of an animation cycle.
<u>animation-fill-mode</u>	Defines how styles are applied before and after animation.
<u>animation-iteration-count</u>	Sets the number of times an animation is played.
<u>animation-name</u>	Defines a name for the animation.
<u>animation-play-state</u>	Sets the animation play state to running or paused.
<u>animation-timing-function</u>	Specifies the animation speed curve.
<u>backface-visibility</u>	Shows or hides the backface visibility of an element.
<u>background</u>	Sets the background of an element.
<u>background-attachment</u>	Defines how the background is attached to an element.
<u>background-blend-mode</u>	Defines the background layer blending mode.
<u>background-clip</u>	Defines how background extends beyond the element.

<u>background-color</u>	Sets the background color of the element.
<u>background-image</u>	Specifies a background image for an element.
<u>background-origin</u>	Specifies the background image origin position.
<u>background-position</u>	Sets the position of a background image.
<u>background-repeat</u>	Specifies how the background image is repeated.
<u>background-size</u>	Sets the size of the background image.
<u>border</u>	Specifies a border for an element
<u>border-bottom</u>	Specifies a bottom border for an element.
<u>border-bottom-color</u>	Sets the color of a bottom border .
<u>border-bottom-left-radius</u>	Sets the border radius of the bottom left corner.
<u>border-bottom-right-radius</u>	Sets the border radius of the bottom right corner
<u>border-bottom-style</u>	Sets the style of the bottom border.
<u>border-bottom-width</u>	Sets the width of the bottom border
<u>border-collapse</u>	Sets table borders to single collapsed line or separated.
<u>border-color</u>	Sets the color of the border.
<u>border-image</u>	Defines an image as border, instead of a color.
<u>border-image-outset</u>	Sets how far a border image extends beyond the border.
<u>border-image-repeat</u>	Defines if and how the border image is repeated.
<u>border-image-slice</u>	Defines how the border image will be sliced.
<u>border-image-source</u>	Specifies the url of the border image file.
<u>border-image-width</u>	Sets the width of the image border.
<u>border-left</u>	Sets the left border of the element.
<u>border-left-color</u>	Sets the color of the left border.
<u>border-left-style</u>	Sets the style of the left border.
<u>border-left-width</u>	Sets the width of the left border.
<u>border-radius</u>	Sets the radius of the border.
<u>border-right</u>	Sets the right border of the element.
<u>border-right-color</u>	Sets the color of the right border.
<u>border-right-style</u>	Sets the style of the right border.
<u>border-right-width</u>	Sets the width of the right border.
<u>border-spacing</u>	Sets the adjacent table cell distance.
<u>border-style</u>	Defines the style of the border
<u>border-top</u>	Sets the top border of the element.
<u>border-top-color</u>	Sets the color of the top border.
<u>border-top-left-radius</u>	Sets the border radius of the top left corner.
<u>border-top-right-radius</u>	Sets the border radius of the top right corner.
<u>border-top-style</u>	Sets the style of the top border.

<u>border-top-width</u>	Sets the width of the top border.
<u>border-width</u>	Sets the border width of the element.
<u>bottom</u>	Positions the element from the bottom of the relative container.
<u>box-shadow</u>	Adds a shadow effect to an element.
<u>box-sizing</u>	Sets how element height and width are calculated.
<u>caption-side</u>	Defines on which side of the table a caption is placed.
<u>caret-color</u>	Sets the color of the blinking mouse caret.
<u>@charset</u>	Specifies the character encoding of the stylesheet.
<u>clear</u>	Sets the element side that does not allow floating elements.
<u>clip</u>	Sets how an image is cropped or clipped inside a container.
<u>clip-path</u>	Clips an element inside a specific shape or SVG.
<u>color</u>	Specifies the color of text in an element.
<u>column-count</u>	Divides an element into the specified number of columns.
<u>column-fill</u>	Specifies how divided columns are filled.
<u>column-gap</u>	Specifies the space between divided columns.
<u>column-rule</u>	Sets the style, width, and color of a column divider.
<u>column-rule-color</u>	Sets the color of a column divider.
<u>column-rule-style</u>	Sets the style of a column divider.
<u>column-rule-width</u>	Sets the width of a column divider.
<u>column-span</u>	Sets number of divided columns an element should span.
<u>column-width</u>	Specifies the width of a divided column.
<u>columns</u>	Divide an element into columns of a certain width.
<u>content</u>	Used to insert content before or after an element.
<u>counter-increment</u>	Increase or decrease a CSS counter.
<u>counter-reset</u>	Initialize or reset CSS counter.
<u>cursor</u>	Specifies the shape of the mouse cursor.
<u>direction</u>	Specifies the text writing direction of a block-level element.
<u>display</u>	Specify an element's display behavior.
<u>empty-cells</u>	Specifies whether empty table cell borders will be displayed.
<u>filter</u>	Adds an image enhancing effect to an image.
<u>flex</u>	Specifies the width of the flexible items.
<u>flex-basis</u>	Specifies the initial width of a flex item.
<u>flex-direction</u>	Specifies the direction for the flex item to align.
<u>flex-flow</u>	Controls the direction and wrapping of flexible items.
<u>flex-grow</u>	Specifies how a flex item can grow inside the container.
<u>flex-shrink</u>	Specifies how a flex item can shrink inside the container.
<u>flex-wrap</u>	Specifies how flexible items wrap inside the container.

<u>float</u>	Sets how an element is positioned relative to other elements.
<u>font</u>	Sets font family, variant, weight, height, and size for an element.
<u>@font-face</u>	Embeds a custom font inside a web page
<u>font-family</u>	Sets the font family for an element.
<u>font-kerning</u>	Sets the spacing between the font's characters.
<u>font-size</u>	Sets the size of the font for an element.
<u>font-size-adjust</u>	Specifies a fall-back font size.
<u>font-stretch</u>	Sets the text characters to a wider or narrower variant.
<u>font-style</u>	Set the font style to normal, italic, or oblique.
<u>font-variant</u>	Specifies that text is displayed in a small-caps font.
<u>font-weight</u>	Sets the weight or thickness of the font.
<u>grid</u>	Defines a grid layout with responsive rows and columns.
<u>grid-area</u>	Sets the size and location of grid items in a grid container.
<u>grid-auto-columns</u>	Specifies the size of the columns in a grid container.
<u>grid-auto-flow</u>	Specifies the initial placement of items in a grid container.
<u>grid-auto-rows</u>	Specifies the initial size of the items in a grid container.
<u>grid-column</u>	Specifies the size and location of a grid item in a grid container.
<u>grid-column-end</u>	Specifies in which column-line the grid item will end.
<u>grid-column-gap</u>	Specifies the gap size between columns in a grid container.
<u>grid-column-start</u>	Specifies in which column line the grid item will start.
<u>grid-gap</u>	Specifies the gap size between grid rows and columns.
<u>grid-row</u>	Specifies the grid item size and location in a grid container.
<u>grid-row-end</u>	Specifies in which row-line the grid item will end.
<u>grid-row-gap</u>	Specifies the gap size between rows in a grid container.
<u>grid-row-start</u>	Specifies in which row line the grid item will start
<u>grid-template</u>	Divides a page into sections with a size, position, and layer.
<u>grid-template-areas</u>	Specifies area in a grid container.
<u>grid-template-columns</u>	Sets the number and width of columns in a grid container.
<u>grid-template-rows</u>	Sets the number and height of rows in a grid container.
<u>height</u>	Sets the height of an element.
<u>hyphens</u>	Specifies hyphenation with wrap opportunities in a line of text.
<u>@import</u>	Imports a style sheet inside another style sheet.
<u>justify-content</u>	Defines the alignment of items in a flex container.
<u>@keyframes</u>	Defines the CSS style to animate.
<u>left</u>	Positions the element from the left of the relative container.
<u>letter-spacing</u>	Sets the spacing between characters.
<u>line-height</u>	Sets the vertical spacing between lines of text.

<u>list-style</u>	Defines the markers (bullet points) for items in a list.
<u>list-style-image</u>	Defines an image markers (bullet points) for items in a list.
<u>list-style-position</u>	Sets the marker (bullet point) positions for items in a list
<u>list-style-type</u>	Defines the marker types (bullet points) for items in a list
<u>margin</u>	Sets the margin (outside spacing) for an element.
<u>margin-bottom</u>	Sets the bottom margin (outside spacing) for an element.
<u>margin-left</u>	Sets the left margin (outside spacing) for an element.
<u>margin-right</u>	Sets the right margin (outside spacing) for an element.
<u>margin-top</u>	Sets the top margin (outside spacing) for an element.
<u>max-height</u>	Sets the maximumn height for an element.
<u>max-width</u>	Sets the maximum width for an element.
<u>@media</u>	Applies media queries to a page.
<u>min-height</u>	Sets the minimum height for an element.
<u>min-width</u>	Sets the minimum width for an element.
<u>object-fit</u>	Specifies how an image or video fits inside a container.
<u>object-position</u>	Specifies the image or video position inside a container.
<u>opacity</u>	Sets the opacity (transparency) of the element.
<u>order</u>	Specifies the order of an item in a flex container.
<u>outline</u>	Adds an outline (highlighted border) to an element.
<u>outline-color</u>	Sets the color of an outline.
<u>outline-offset</u>	Sets the space between the outline and border.
<u>outline-style</u>	Sets the style of an outline.
<u>outline-width</u>	Sets the width of an outline.
<u>overflow</u>	Specifies the flow of content that exceeds the container.
<u>overflow-x</u>	Specifies the flow of content that exceeds the container width.
<u>overflow-y</u>	Specifies the flow of content that exceeds the container height.
<u>padding</u>	Sets the spacing between content and element border.
<u>padding-bottom</u>	Sets the spacing between content and bottom element border.
<u>padding-left</u>	Sets the spacing between content and left element border.
<u>padding-right</u>	Sets the spacing between content and right element border.
<u>padding-top</u>	Sets the spacing between content and top element border.
<u>page-break-after</u>	Adds a print page-break after an element.
<u>page-break-before</u>	Adds a print page-break before an element.
<u>page-break-inside</u>	Specifies if print page-break is allowed inside an element.
<u>perspective</u>	Adds perspective to a 3D-positioned element.
<u>perspective-origin</u>	Sets the origin of the perspective for a 3D-positioned element.
<u>pointer-events</u>	Specifies whether element reacts to pointer events or not.

<u>position</u>	Sets the element's positioning method.
<u>quotes</u>	Defines the quotation marks to be used on text.
<u>right</u>	Positions the element from the right of the relative container.
<u>scroll-behavior</u>	Specifies the scrolling behavior of an element
<u>table-layout</u>	Aligns elements according to a table with rows and columns.
<u>text-align</u>	Sets the alignment of text inside an element.
<u>text-align-last</u>	Sets the alignment for the last line of text.
<u>text-decoration</u>	Defines the style and color of underlined text.
<u>text-decoration-color</u>	Defines the color of underlined text.
<u>text-decoration-line</u>	Defines the kind of line to use with text.
<u>text-decoration-style</u>	Defines the style of underlined text.
<u>text-indent</u>	Sets the indentation to the beginning of text.
<u>text-justify</u>	Defines the text justification inside a container.
<u>text-overflow</u>	Sets the display behavior of text that overflows a container.
<u>text-shadow</u>	Adds a shadow effect to text.
<u>text-transform</u>	Defines text capitalization or casing.
<u>top</u>	Positions the element from the top of the relative container
<u>transform</u>	Applies a 2D or 3D transformation to an element.
<u>transform-origin</u>	Sets the origin for the transformation of the element.
<u>transform-style</u>	Specifies the display behavior of 3D space nested elements.
<u>transition</u>	Creates transitions from one property value to another.
<u>transition-delay</u>	Creates a delay before the transition effect starts.
<u>transition-duration</u>	Specifies the time the transition will take.
<u>transition-property</u>	Specifies the CSS property that will transition.
<u>transition-timing-function</u>	Defines the speed curve function of the transition.
<u>user-select</u>	Specifies how text can be selected (highlighted)
<u>vertical-align</u>	Specifies vertical alignment of an element.
<u>visibility</u>	Specifies the visibility of an element.
<u>white-space</u>	Specifies how white-space is handled inside an element.
<u>width</u>	Sets the width of an element.
<u>word-break</u>	Specifies how line breaks take place.
<u>word-spacing</u>	Sets the spacing between words.
<u>word-wrap</u>	Specifies how long words can be wrapped.
<u>writing-mode</u>	Sets the text reading orientation: top to bottom, etc.
<u>z-index</u>	Sets the vertical stacking order relative to other elements.