

CSS All Topics

Learn CSS: Basics to Advanced Concepts

1. CSS Selectors
2. Pseudo-classes and Pseudo-elements
3. CSS Text Styling
4. CSS Table
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INTRODUCTION TO CSS

To specify formatting within an HTML document (fonts, layout, background, colours, etc.), authors have to apply separate tags to different parts to format. The term CSS pertains to **Cascading Style Sheets**, which are used to specify your document's style. While **HTML** is utilized for structuring a web page (the headlines and paragraphs, as well as the ability to include images, video, and other elements), CSS specifies your page layout, colors, and fonts. **CSS** is used to bring style to your web pages.

TYPES OF CSS:

There are 3 **types of CSS**

1. External CSS
2. Internal CSS
3. Inline CSS

1. External CSS: For using an external style sheet, your .html files need to include a header section that links to an external style sheet. Since the CSS code is in a separate document, your HTML files will have a cleaner structure

and are smaller in size.

You can use the same .css file for multiple pages. For example:

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

2. Internal CSS: These CSS instructions are written directly into the header of a specific .html page. This CSS style is an effective method of styling a single page.

For example:

```
<head>
<style>
Body { background-color:thistle; }
P { font-size:20px; color:mediumblue; }
</style>
</head>
```

3. Inline CSS: Lastly, inline styles are CSS blocks that are written directly into a single instance of HTML code.

For example:

```
<h1 style="font-size:55px;color:orange;">Check out this headline!</h1>
```

The most efficient way of implementing CSS on a website is to use external style sheets, whereas internal style sheets and inline styles are suitable for case-by- case changes.

What is CSS Syntax?

CSS syntax is relatively simple. Various attributes, such as font size and background colour, are assigned values within the brackets following the name of the element to style, called the CSS selector.

What are CSS Selectors?

A CSS property value pattern is a pattern of elements, such as HTML elements, that instruct the browser which elements to select when applying the CSS property values.

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1. CSS Selectors

COMMAND	DESCRIPTION	SYNTAX
UNIVERSAL SELECTOR	The CSS universal selector (*) matches elements of any type. When utilising @namespace, universal selectors can be namespaced.	<div></div> <pre>{ }</pre>
ID SELECTOR	The CSS ID selector matches an element based on the value of the element's id attribute. This is what you'd use to refer to that one- of-a-kind element with an id.	<div></div> <pre>id { }</pre> <div></div>
CLASS SELECTOR	The CSS class selector matches elements based on the contents of their class.	<pre>.class { }</pre>

Declarations

CSS

```
h1 {color:blue; font-size:2px;}
```

Selector

Property

Value

Property

Value

COMMANDS	DESCRIPTION	SYNTAX
Mouse over selector	Triggered when the user hovers over an element with the cursor. You can use the hover selection to target an element that a user hovers over with their cursor.	<pre>a:hover {}</pre>
Active Link Selector	The :active pseudo- class is commonly used on <a> and <button> elements. When a link is clicked, you can provide a style for it with this selector.	<pre>a:active {}</pre>
Focus Selector	Triggered when the user clicks or taps on an element or selects it with the keyboard's Tab key.	<pre>input:focus {}</pre>
Visited Links Selector	Represents that the link has already been visited. Its styles for URLs that the user has already	<pre>:visited {}</pre>

visited are
defined.

Link Selector

This represents
that the link has
not yet

```
.class:link {}
```

3. CSS Text Styling

COMMAND	DESCRIPTION	SYNTAX
Font style	It sets the font style. We can set our text as normal, bold, italic, oblique as per our requirement	<code>font-style: normal italic oblique</code>
Font Variant	It sets the font variation. We can set the variant of the font as uppercase or lowercase, small-caps etc as per required by the user.	<code>font-variant: normal small-caps</code>
Font Weight	Sets the font weight. It helps us to set the weight of the font as normal, bold, bolder lighter and we can also set it in numerics.	<code>font-weight: normal bold bolder </code>

4. CSS Table

COMMAND
Adding Borders to Tables
Adjusting spacing inside Tables
Setting Table Width and Height

DESCRIPTION
The CSS border property is the best way to define the borders for the tables.
You may easily use the CSS padding property to provide additional space between the table cell contents and the cell borders.
The width and height CSS properties can also be used to specify the table's width and height, as well as the width and height of its cells.

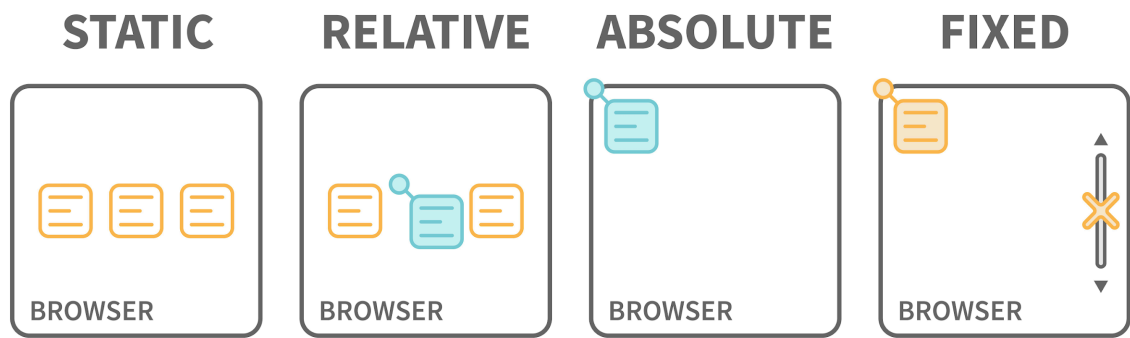
SYNTAX
<code>border: 1px solid black;</code>
<code>th, td {padding: 15px;}</code>
<code>table {width: 100%;} th {height:</code>

5. CSS Position

COMMAND	DESCRIPTION	SYNTAX
Position	Set the position of the elements in a document.	<code>position: static relative absolute</code>
Position Properties	Defines the position of an element in a document.	<code>top right bottom left</code>
Float Element	Defines the position of an element in a document text and inline elements to wrap around.	<code>float: left right none</code>
Clear Floating Elements	Whether an element must be moved below (cleared) floating elements that precede it.	<code>clear: none left right both</code>
Z Index	Sets overlapping elements with	

a larger z-index cover those with a

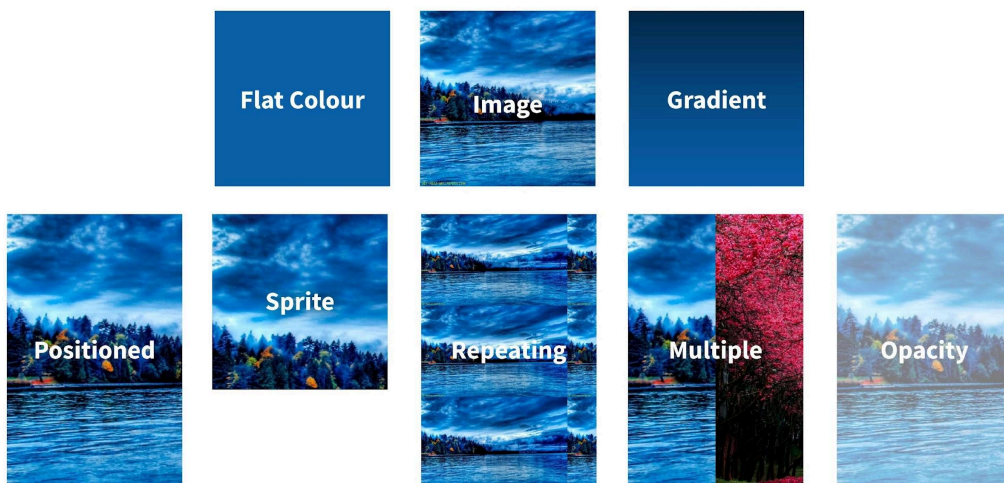
```
z-index: 3 | auto | inherit
```



COMMANDS	DESCRIPTION	SYNTAX
Background Image	Sets the background image in a div. An element's background-image attribute specifies one or more background images.	<code>background-image: url()</code>
Background Repeat	Sets whether the background is to be repeated or not, in other words, it determines whether or not the background picture will be repeated.	<code>background-repeat: repeat-x</code>
Background Attachment	Sets the background image scroll or fixed. CSS's	

<div>Background Color</div> <div>Background Position</div>	background-attachment attribute controls how the background moves in relation to the viewport.	<code>background-attachment: scroll</code>
	Set the background colour of the div or container.	<code>background-color: #2AA9E0</code>
	Sets the position of the background.	<code>background-position: top ri</code>

Different properties and how it works:



COMMAND

DESCRIPTION

SYNTAX

Box Sizing

Sets the width and height of the box. Building CSS layouts with the box-sizing property may be a lot more straightforward.

```
box-sizing:  
border-box |  
content-box
```

Margin

Sets the margin from all the sides of the box. This CSS tutorial explains how to use the CSS property called margin with syntax and examples.

Sets the area inside the box from the content. CSS's box-sizing attribute determines how the box model is applied to the element to which it applies.

```
margin: 2px 4px 6px  
8px | 0 auto | i
```

Padding

Sets the colour

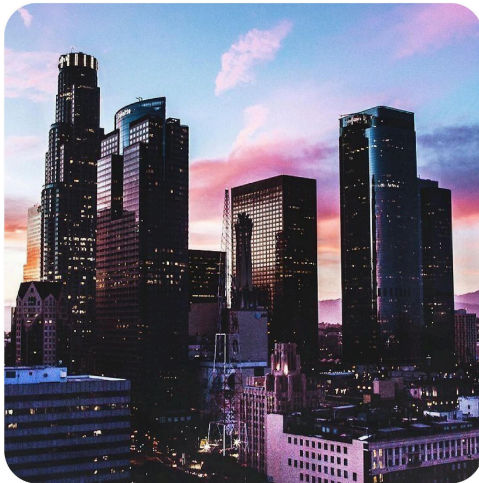
```
padding: 2px 4px 6px  
8px | 100% | in
```

Border

For example, in the following code,

```
img{  
  border-radius: 8px;  
}
```

The output will look like the below:



For this code

```
img{  
  border-radius: 50px;  
}
```

Output for the above code looks like the below:

11. CSS Styling Lists



COMMANDS	DESCRIPTION
SYNTAX	
List Type	It sets the type of list. The List is of many types. You can select the type of list you want to add whether it is an ordered or unordered list.
List Position	Sets the position of the list.
List Image	Sets the background image of the list.

```
list-style-type: disc | circle | square
```

```
list-style-position: inside | outside
```

```
list-style-image: url()
```

12. CSS Flexbox

COMMAND	DESCRIPTION	SYNTAX
Flex Direction	Sets how flex items are placed in the flex container.	<pre>flex-direction: row row-reverse column</pre>

Flex Wrap	<p>Sets whether flex items are forced onto one line or can wrap onto multiple lines.</p>	<code>flex-wrap: nowrap wrap wrap-revers</code>
Justify Content	<p>Defines how the browser distributes space between and around content items.</p>	<code>justify-content: flex-start flex-end</code>
Align Items	<p>It sets the align-self value on all direct children as a group.</p>	<code>gn-items: flex-start flex-end cent</code>
Align Content	<p>Sets the distribution of space between and around content.</p>	<code>align-content: flex-start flex-end </code>

Let's understand flexbox with an example:

```
Code:
.flex-container {
  display:
  flex;
}
```

utput:

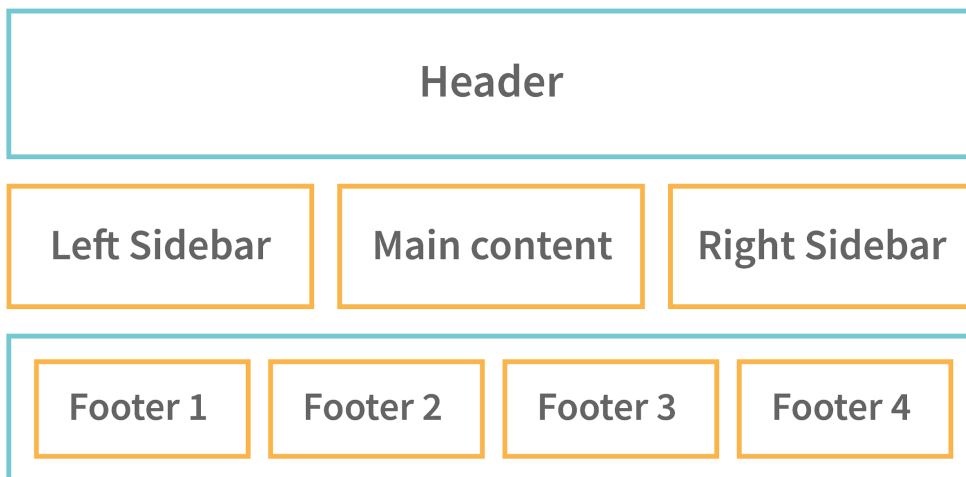


13. CSS Grid

COMMAND	DESCRIPTION	SYNTAX
Grid Template Columns	Specifies the size of the columns, and how many columns are in a grid layout.	<code>d-template-columns: 40px 50px auto 50p</code>
Grid Template Rows	Specifies the size of the rows in a grid layout.	<code>grid-template-rows: 25% 100px auto</code>
Grid	Specifies how	

Template Areas	to display columns and rows, using named grid items.	<code>grid-template-areas: "a b c" none</code>
Grid Template	Property for defining grid columns, rows, and areas.	<code>grid-template: "a a a" 20% "b b b" aut</code>
Grid Column Gap	Sets the size of the gap between columns.	<code>grid-template: "a a a" 20% "b b b" aut</code>

HOW A GIRD LOOKS LIKE:



COMMAND	DESCRIPTION	SYNTAX
CSS Variable	Used in other declarations using the var() function.	<div></div> <pre>--variable-name: value</pre>
Variable Usage	Used in other declarations using the var() function.	<div></div> <pre>var(--variable-name)</pre>
Counter Reset	Create a new counter or reversed counter with the given name on the specified element.	<div></div> <pre>counter-reset: name-of-counter</pre> <div></div>
Counter Increment	Increases or decreases the value of a CSS counter by a given.	<div></div> <pre>counter-increment: name-of-counter</pre>
Counter	Adjust the	

Dynamic Value

appearance of content based on its location in a document.

```
content: counter(name-of-counter)
```
