**Combinators:**

**Introduction**

CSS Combinator is a selector that combines other selectors in a way that gives them a useful relationship with each other and the location of content in the document.

**Types of CSS combinators:**

There are 3 types of combinators in CSS. In this article, we’re gonna talk about them and learn how to use them with examples. Let’s start!

* Child combinator
* Adjacent sibling combinator
* General sibling combinator

**Child combinator (>)**

The child combinator we recognize by the greater-than symbol >, it means, it only affects the direct children select element and not the descendants of the others further down the hierarchy. To understand how it works let’s take the example we used before and we will make some changes.

//example

If we remove the > that recognize the child combinator, all the <p> elements will be font color blue and font-weight bold.

**Adjacent sibling combinator (+)**

The adjacent sibling we use with the + symbol and is used to select some element if it’s right next to another element and at the same level of the hierarchy. This combinator is a common use case to styling a paragraph that follows a heading.

For example, to select the <p> element that comes right after <h1> element.

**General sibling (~)**

General siblings, we use when we want to select siblings of an element even when they are not directly adjacent, in other words, to select the same element that comes anywhere after a certain element. The symbol of the general sibling is ~.

Let see an example, where we want to style all <p> elements that come after the <h1> element, even if there is a <div> element between them.

**Conclusion:**

That concludes our lesson on combinators in CSS. You now have the knowledge to leverage combinators to select elements based on their relationships. In our next session, we will be diving into the topic of pseudo-classes.

**Descendant selector (space):-**

**Introduction:**

The descendant selector is a CSS selector that targets an element that is a descendant of another element. The descendant selector is represented by a space between two selectors.

**Example:**

Let's say you are designing a website for a school and you want to apply the same style to all the links within the paragraphs of the main content section. You can use the descendant selector to target those links.

**Code:**

Here is an example of how to use the descendant selector in CSS:

//example

In this example, we have used the descendant selector .content a to target the links within the paragraphs of the main content section. We have then applied some styles to those links, such as changing the color and adding an underline on hover.

**Next topic:**

That's all for today's lesson on the descendant selector in CSS. Now you know how to use the descendant selector to target elements that are descendants of other elements. In our next session, we will be learning about the child selector in CSS.

**Child selector (>)**

**Introduction**:

The child selector, denoted by the > symbol, is a CSS selector that targets direct child elements of a parent element. It is similar to the descendant selector, but only selects elements that are immediate children, not all descendants.

**Example:**

Let's say you are designing a website for a fashion store and you want to apply different styles to the images inside a product grid and the images inside a product detail page. You can use the child selector to target only the direct child elements of the product grid and the product detail page.

Code:

<!DOCTYPE html>

<html lang="en">

<head>

<title>Home</title>

<meta charset="UTF-8" />

<meta name="viewport" content="width=device-width" />

<link rel="stylesheet" href="styles.css" />

</head>

<body>

<h1>Welcome to our clothing store</h1>

<div class="product-grid">

<div class="product-item">

<img src="product1.jpg" alt="Product 1">

<h3>Product 1</h3>

</div>

<div class="product-item">

<img src="product2.jpg" alt="Product 2">

<h3>Product 2</h3>

</div>

</div>

</body>

</html>

CSS:-

/\* styles for product grid \*/

.product-grid > .product-item {

display: inline-block;

width: 200px;

margin-right: 20px;

}

.product-grid > .product-item img {

width: 100%;

border: 1px solid #ccc;

}

/\* styles for product detail \*/

.product-detail > img {

width: 400px;

border: 1px solid #ccc;

}

.product-detail > h3 {

font-size: 24px;

}

Here is an example of how to use the child selector in CSS:

//example

In this example, we have used the child selector to target only the direct child elements of the .product-grid and .product-detail elements. The styles applied to these elements are different, as they serve different purposes.

**Next topic:**

That's all for today's lesson on the child selector in CSS. You now know how to target direct child elements of a parent element using the > symbol. In our next session, we will be learning about the adjacent sibling selector.

**Adjacent sibling selector (+)**

**Introduction**:

The adjacent sibling selector (+) is a CSS selector that targts an elemeent that is immediately preceded by another specific element. The two elements must share the same parent element.

**Example:**

Let's say you are designing a website for a travel agency and you want to apply a different style to the first paragraph that comes after a heading. You can use the adjacent sibling selector to target the first paragraph and apply a unique style to it.

Code:

Here is an example of how to use the adjacent sibling selector in CSS:

<!DOCTYPE html>

<html lang="en">

<head>

<title>Home</title>

<meta charset="UTF-8" />

<meta name="viewport" content="width=device-width" />

<link rel="stylesheet" href="styles.css" />

<script type="module" src="script.js"></script>

</head>

<body>

<div>

<h2>Travel Destinations</h2>

<p class="first">Explore the world and find your next adventure.</p>

<p>From beaches to mountains, we have it all.</p>

</div>

</body>

</html>

CSS:-

h2 + .first {

font-size: 24px;

color: #fd1ea0;

}

In this example, we have used the adjacent sibling selector to target the first paragraph that comes after the h2 heading. We have applied a unique style to this paragraph, making it stand out from the rest of the content

**Next topic**

That's all for today's lesson on the adjacent sibling selector in CSS. Now you know how to use this selector to target elements that are immediately preceded by another specific element. In our next session, we will be learning about the general sibling selector in CSS.

**General sibling selector (~)**

**Introduction**

The General Sibling Selector is a CSS selector that allows us to select all sibling elements that come after a specified element. The "~" symbol is used to represent the General Sibling Selector in CSS.

Example:

Suppose you have a blog with multiple articles on a single page. You want to apply a specific style to all paragraphs that come after the first heading in each article. You can use the General Sibling Selector to select all the sibling paragraphs after the first heading.

Code:

Here is an example of how to use the General Sibling Selector in CSS:

<!DOCTYPE html>

<html lang="en">

<head>

<title>Home</title>

<meta charset="UTF-8" />

<meta name="viewport" content="width=device-width" />

<link rel="stylesheet" href="styles.css" />

</head>

<body>

<div class="article">

<h2>Article Title</h2>

<p>First paragraph of the article.</p>

<p>Second paragraph of the article.</p>

<p>Third paragraph of the article.</p>

</div>

</body>

</html>

CSS:-

h2 ~ p {

font-size: 16px;

color: rgb(234, 20, 20);

}

In this example, we have used the General Sibling Selector to apply the same style to all paragraphs that come after the first heading. The h2 ~ p selector selects all p elements that come after the h2 element.