

Lesson:

More CSS selectors



Topics

- Combinator selectors (space, >, +, ~)
- Attribute selector

Combinator selectors (space, >, +, ~)

In CSS, combinators are used to select elements based on their relationship to other elements in the HTML document. Here are some of the different types of combinators in CSS, they are – Descendant combinator, child combinator, General sibling combinator, and Adjacent sibling combinator.

Now let's look at details on each type of combinator selector in CSS

Descendant combinator (space i.e. “ ”) –

The descendant combinator (“ ”) in CSS is used to select an element that is a descendant of another element, regardless of how deeply nested it is in the HTML structure. The descendant combinator is represented by a space between two selectors in a CSS rule

Syntax of Descendant selectors

```
Unset
selector1 selector2 {
    /* styles properties */
}
```

Example of Descendant selector

index.html

```
Unset
<ul>
    <li> home</li>
    <li> about</li>
    <li> contact</li>
</ul>
```

style.css

```
Unset
/* Example of Descendant Selector*/
ul li {
  color: red
}
/* This will change the color of the list element to red */
```

Browser output -

- home
- about
- contact

Descendant combinator (space i.e. " ") -

The child combinator (>) is placed between two CSS selectors. It matches only those elements matched by the second selector that are direct children of elements matched by the first. Elements matched by the second selector must be immediate children of the elements matched by the first selector.

Syntax of child combinator

```
Unset
selector1 > selector2 {
  /* styles properties */
}
```

Example of Child Combinator
index.html

```
Unset
<header>
    <a href="#"> logo </a>
    <nav>
        <ul>
            ....
        </ul>
    <!-- this anchor tag will not be changed since it is not an
immediate child of the second selector -->
    <a href="#"> logo </a>
</nav>
</header>
```

Example of Child Combinator
index.html

```
Unset
header > a {
    color: aqua;
}
/*
This will change the header immediate child anchor tag color
to aqua
*/
```

Browser output -



logo

....

logo

Adjacent sibling combinator (+) -

The adjacent sibling combinator (+) separates two selectors and matches the second element only if it immediately follows the first element, and both are children of the same parent element.

Syntax of Adjacent sibling combinator

```
Unset
former_element + target_element {
    /* ...style properties */
}
```

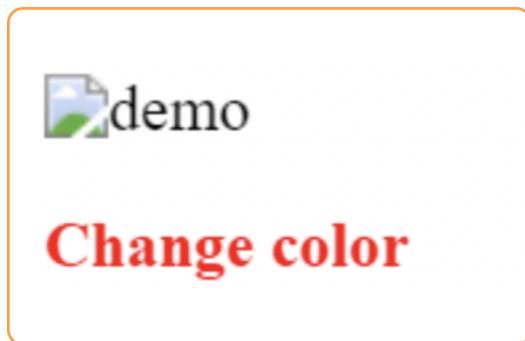
Syntax of Adjacent sibling combinator

```
Unset
<div>
    
    <p>Change color</p>
</div>
```

style.css

```
Unset
img + p {
    font-weight: bold;
    color: red;
}
/*
    Change the paragraphs that come immediately after any
    image to bold font-weight with color red.
*/
```

Browser output -



General sibling combinator (~) -

The general sibling combinator (`~`) in CSS is used to select all elements that come after another element with the same parent. The general sibling combinator is represented by a tilde (`~`) between two selectors in a CSS rule.

Syntax of General sibling selector(~)

```
Unset  
former_element ~ target_element {  
    /* ... style properties */  
}
```

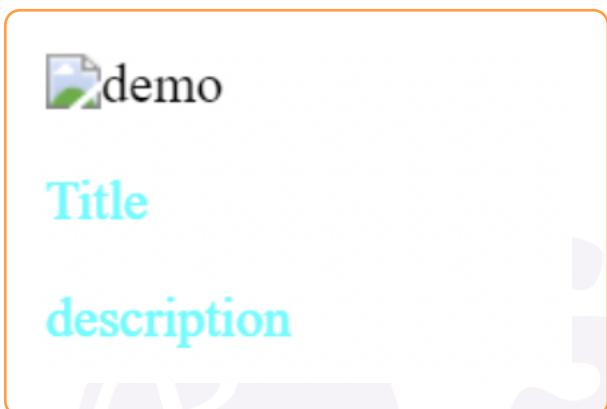
Syntax of General sibling selector(~)

```
Unset  
<div>  
    
  <p>Title</p>  
  <p> description </p>  
</div>
```

style.css

```
Unset  
img ~ p {  
    color: aqua;  
}  
/* Change the color of any paragraph to aqua that is a  
sibling to the image element*/
```

Browser output -



Attribute selectors -

Attribute selectors are a type of CSS selector that allows you to select and target HTML elements based on their attributes and attribute values.

There are several types of attribute selectors in CSS, such as

Presence attribute, Exact value attribute, Value Prefix Attribute, Value suffix attribute, Value Space-separated attribute, Value Hyphen-separated attribute and Value substring Attribute selectors

Now, let's look at the details of all the different types of attribute selectors in CSS with an example -

Presence attribute selector [attribute] -

Selects elements that have a specific attribute, regardless of its value.

Syntax of [attribute] selector

Unset

```
element[attribute] {  
    /* .... add CSS style properties */  
}
```

Example of [attribute] selector

index.html

Unset

```
<body>  
    <a href="https://ineuron.ai/" target="_blank"> Ineuron  
</a> <br />  
    <a href="https://pwskills.com/"> PW skills </a>
```

```
</body>
```

style.css

Unset

```
/* check for attribute exists */  
a[target] {  
    color: green;  
}  
/* this will select the anchor tag with target attribute and  
change the color to green */
```

Browser output -

Ineuron
PW skills

Exact value Attribute selector [attribute=value]

Selects elements that have a specific attribute, regardless of its value.

Syntax of [attribute] selector

Unset

```
element[attribute=value] {  
    /* .... add CSS style properties */  
}
```

Example of [attribute=value] selector

index.html

Unset

```
<body>  
  
    <a href="https://ineuron.ai/" target="_blank"> Ineuron  
/> <br />  
    <a href="https://pwskills.com/"> PW skills </a>  
</body>
```

style.css

Unset

```
/* attribute has this exact value*/  
a[target= "_blank"] {  
    color: green;  
}  
/* this will select the anchor tag with attribute name with  
the same value and change the color to green */
```

Browser output -

Ineuron
PW skills

Value prefix attribute selector [attribute^=value] -

Selects elements that have a specific attribute whose value begins with a specific string.

Syntax of [attribute^=value] selector

```
Unset  
[attribute^=value] {  
    /* ....set CSS properties */  
}
```

Example of [attribute^=value] selector

index.html

```
Unset  
<body>  
    <h1 class="top">Hello World</h1>  
    <p class="down">Let's learn CSS</p>  
</body>
```

style.css

```
Unset  
[class^="top"] {  
    background-color: green;  
}  
/* this will select the class attribute value name which  
starts with "top" and change the background color to green*/
```

Browser output -

Hello World

Let's learn CSS

Value suffix attribute selector [attribute\$=value]

Selects elements that have a specific attribute whose value ends with a specific string.

Syntax of value suffix attribute selector

Unset

```
element [attribute$=value] {
    /* CSS styles properties .....*/
}
```

Example of value suffix attribute selector [attribute\$=value]

index.html

Unset

```
<body>
    <h1 class="first-top">Hello World</h1>
    <p class="first-down">Let's learn CSS</p> </body>
```

style.css

Unset

```
/* attribute value ends with this */
[class$="top"] {
    background-color: green;
}
/* this will select the class attribute value name which ends
with "top" and change the background color to green*/
```

Browser output -

Hello World

Let's learn CSS

Value Space-separated attribute selector [attribute~="value"]

Select elements with an attribute value containing a specified word.

Syntax of Value Space-separated attribute selector -

Unset

```
element[attribute~="value"] {  
    /* add CSS properties and values ... */  
}
```

Example of Value Space-separated attribute selector
index.html

Unset

```
<body>  
    <h1 class="first top">Hello World</h1>  
    <p class="first down">Let's learn CSS</p>  
</body>
```

style.css

```
Unset  
[class~="top"] {  
    background-color: green;  
}  
/* select the class that contains a space-separated list of  
words, one of which is "top" and change the background color  
to green */
```

Browser output -



A screenshot of a web browser showing the text "Hello World" in a large, bold, black font on a solid green background.

Let's learn CSS

Value Space-separated attribute selector [attribute~=value]

Select elements with the specified attribute, whose value can be exactly the specified value or the specified value followed by a dash

Syntax of Hyphen-separated attribute

```
Unset  
element[attribute|=value]{  
    /* ... add css style properties */  
}
```

Example of Hyphen-separated attribute
index.html

```
Unset
<body>
  <h1 class="first-top">Hello World</h1>
  <p class="second-down">Let's learn CSS</p>
</body>
```

style.css

```
Unset
[class|="first"] {
    background-color: green;
}

/* select the class that contains a "first" followed by a
hyphen or dash (-) and change the background color to green
*/
```

Browser output -

Hello World

Let's learn CSS

Value substring Attribute selectors

[attribute*=value]

Selects elements that have a specific attribute whose value contains a specific string.
Syntax of Value substring Attribute selectors

Unset

```
element[attribute*=value] {
    /* ... add css style properties */
}
```

Example of Value substring Attribute selectors
index.html

Unset

```
<body>
    <h1 class="first-top">Hello World</h1>
    <p class="second-down">Let's learn CSS</p>
    <p class="first-below">welcome to the class</p>
</body>
```

style.css

Unset

```
/* Attribute value contains this value somewhere in it */
[class*="fi"] {
    background-color: green;
}
/* select the class that contains a specific text i.e "fi"
and change the background color to green */
```

Browser output -

Hello World

Let's learn CSS

welcome to the class