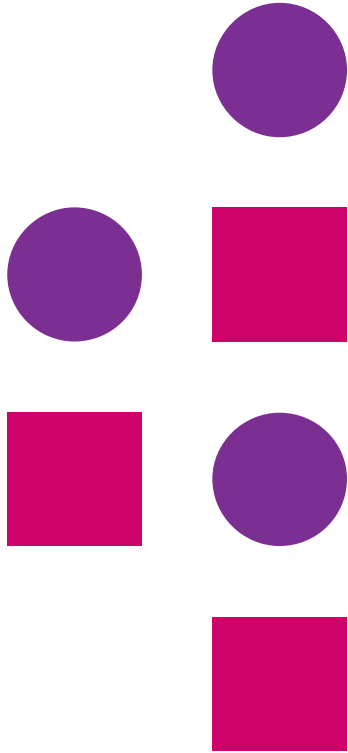
WSA | Forward looking IT finishing school

Selectors and Combinators

Cascading Style Sheets (CSS3)

Table of Content

- Selectors
- Combinators



Selectors

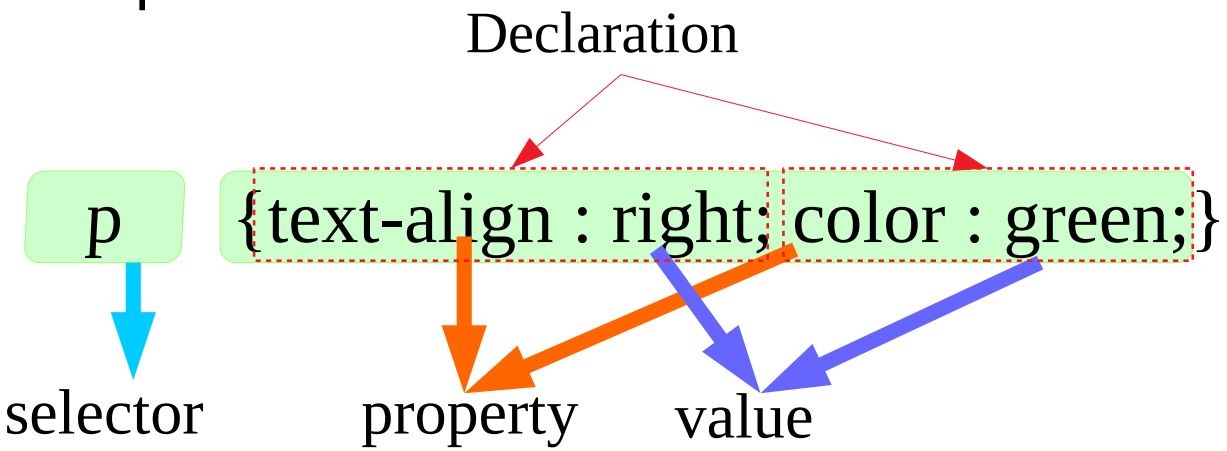
(Cascading Style Sheets 3)

The CSS selector

- The CSS selector points to the HTML element you want to style
- Selectors are the part of CSS rule-set
- CSS selectors select HTML elements according to its id, class, type, attribute etc
- The rule-set has 3 parts
  - Selector
  - Property
  - Value

Rule-set Syntax

- Selector { property : value }
- Example



Selectors

- Selectors tell the browser where to apply the rule
  - Element type Selector
  - ID Selector
  - Class Selector
  - Attributes Selector
  - Universal Selectors

Element Type Selector

- The element type selector selects element based on element name

Syntax :

Element-type-selector { property : value }

Element Type Selector

Example :

```
h1 {
  font-family : “Times New Roman”;
  color  : green;
}
```

ID Selectors

- ID selector must be unique for entire page
- ID selector is used to specify single element
- The Selector is created by prefixing ID with hash or pound sign (#)

Syntax :

```
#id-selector {  property : value; }
```

ID Selectors

Example :

```
#p {  font-size : 12px;
        color : blue;
}
```

Class Selectors

- Class selector is used to specify group of elements
- Classes are not unique
- We can use same class on multiple elements
- We can use multiple class on the same element
- Class selector is defined with dot (.)

Class Selectors

Syntax :

```
.class-selector { property : value; }
```

Example :

```
.my-class {
    font-size : 12px;
    color : blue;
}
```

Attribute Selectors

- An attribute selector matches any element that has a particular attribute
- We can create an attribute selector by putting the attribute, optionally with a value, in a pair of square brackets
- Element type selector can also be placed before attribute selector

Note : some browsers might not support attribute selectors

Attribute Selectors

Syntax :

```
[attribute] {
    name : val;
}
Element-type-selector [attribute] {  /* optional element selector */
    name : val;
}
Element-type-selector [attribute operator "value" i] {
    name : val;
}
```

Attribute Selectors

- [attr] - Represents an element with an attribute name of attr
- [attr=value] - Represents an element with an attribute name of attr whose value is exactly value
- [attr operator value i] - Adding an i (or I) before the closing bracket causes the value to be compared case-insensitively (for characters within the ASCII range)
  - Operator : *=, ^=, ~=, |=, =, $=

Attribute Selectors

- Setting deep pink color to all the elements where title attribute is used

Example :

```
[title] {    /* title as attribute selector */
    color : deeppink;
}
```

Attribute Selectors

- Setting deep pink color to all the paragraph elements where title attribute is used

Example :

```
p[title] {    /* title as attribute selector */
    color : deeppink;
}
```

Attribute Selectors

- Setting yellow background-color and italic font-style to all input elements whose type attribute is set to email

Example :

```
input[type="email"] {    /* no space between input and square bracket */
    background-color : yellow;
    font-style : italic;
}
```

Attribute Selectors

- [attr~=value] - Represents an element with an attribute name of attr whose value is a whitespace-separated list of words, one of which is exactly value

```
/* All division in US English are blue */
div[lang~="en-us"] {
  color: blue;
}
```

Attribute Selectors

- [attr|=value] - Represents an element with an attribute name of attr whose value can be exactly value or can begin with value immediately followed by a hyphen (-)
  - It is often used for language sub-code matches

```
/* Matches the elements with lang attribute that has the values en, en-US, en-GB etc */
[lang|=en] {
    color: white;
    background: blue;
}
```

Attribute Selectors

- [attr^=value] - Represents an element with an attribute name of attr whose value is prefixed (preceded) by value

```
/* Internal links, beginning with "#" */
a[href^="#"] {
  background-color: gold;
}
```

Attribute Selectors

- [attr$=value] - Represents an element with an attribute name of attr whose value is suffixed (followed) by value

```
/* Anchor elements with an href ending with ".org" */
a[href$=".org"] {
  font-style: italic;
}
```

Attribute Selectors

- [attr*=value] - Represents an element with an attribute name of attr whose value contains at least one occurrence of value within the string

```
/* Anchor elements with an href containing "example" */
a[href*="example"] {
  font-size: 2em;
}
```

Attribute Selectors

- [attr operator value i] - Adding an i (or I) before the closing bracket causes the value to be compared case-insensitively (for characters within the ASCII range)

```
/* Links with "big" anywhere in the URL,
   regardless of capitalization */
a[href*="big" i] {
  color: cyan;
}
```

Universal Selector

- The CSS universal selector (*) matches elements of any type
- In CSS3 and later, the asterisk may be used in combination with namespaces
  - ns|* - matches all elements in namespace ns
  - *|* - matches all elements
  - |* - matches all elements without any declared namespace

Universal Selector

Syntax :

```
* { property : value; }
```

Example :

```
* {
    color : blue;
}
```

Universal Selector

- The asterisk is optional with simple selectors
- Example *.warning and .warning are equivalent

Grouping Selectors

- Elements with same style sheet can be grouped together to avoid repetition
- Element selectors are grouped by separating with comma (,)

Example :

```
h1, h2  {
        font-size : 12px;
        color : blue;
}
```

Combinators

(Cascading Style Sheets 3)

Child Combinator

- The > combinator selects nodes that are direct children of the first element

Syntax : E1 > E2 { . . . }
Example :

```
div > ul {
    color : green;
}
```

Adjacent Sibling Combinator

- The + combinator selects adjacent siblings
- This means, second element immediately follow the first, and both share the same parent

Syntax : E1 + E2 { . . . }
Example :

```
div + p {
    color : blue;
}
```

General Sibling Combinators

- The ~ combinator selects siblings
- This means that the second element follows the first (though not necessarily immediately), and both share the same parent

Syntax : E1 ~ E2 { . . . }

Example :

```
div ~ p {
    color : green;
}
```

Descendent Combinator

- The space combinator selects nodes that are descendants of the first element

Syntax : E1 E2 { . . . }

Example :

```
div p {
    color : green;
}
```

WSA | Forward looking IT finishing school

Web Stack Academy (P) Ltd

#83, Farah Towers,

1st floor,MG Road,

Bangalore – 560001

M: +91-80-4128 9576

T: +91-98862 69112

E: info@www.webstackacademy.com