Advanced Selectors

Important games: CSS Dinner

A. Combinators

```
    space - the descendant combinator
    > - the child combinator
    + - the adjacent sibling combinator
    ~ - the general sibling combinator
```

Example:

Following: muncul setelah

1) Descendant (keturunan)

```
1 main div {
```

This will select all 'child' and 'grand-child' <div> inside of <main>

2) Child (anak)

```
2 main > div {
```

This will only select direct children(of main, which is div with class '.child')

3) Adjacent sibling (saudara terdekat)

To select an element that is (following) adjacent on the same level of indentation.

```
2 | .group1 + div {
```

This will only select the div with the class child group2

```
7 .group1 + div + div {
```

This will only select the div with the class child group3

4) General sibling (saudara umum)

To select all of the siblings following an element.

```
2 | .group1 ~ div {
```

This will select all of .group1 siblings - in this case the 2nd and 3rd .child div

B. Pseudo-selectors

1. Pseudo-classes (:single-colon)
Untuk memilih elemen berdasarkan keadaan tertentu. Misal saat elemen dalam keadaan hover, fokus, atau saat elemen adalah anak pertama

1) Dynamic & user action

These can make your page feel much dynamic and interactive

```
:focus Menargetkan elemen saat elemen tersebut mendapat fokus, seperti input form yang sedang aktif.
:hover Menargetkan elemen saat pengguna mengarahkan kursor ke atasnya.
:active Menargetkan elemen saat sedang diklik
:link Menargetkan unvisited link
:visited Menargetkan visited link
```

2) Structural pseudo-classes

A powerful way to select elements based on their position within the DOM.

```
:root Menargetkan elemen root dari dokumen, yaitu <html>.

:first-child Menargetkan first child of any element

:last-child Menargetkan last child of any element

p:only-child Selects every  element that is the only child of its parent

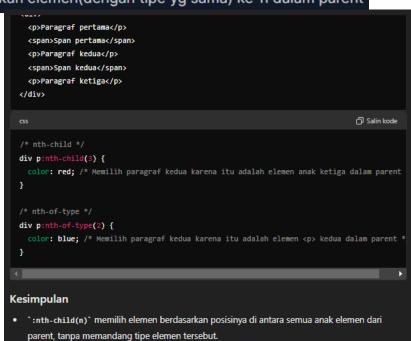
:empty Menargetkan elemen yang tidak memiliki anak

:nth-child(n) Menargetkan elemen anak ke-n dalam parent

:nth-of-type(n) Menargetkan elemen(dengan tipe yg sama) ke-n dalam parent
```

yang sama dalam parent.

Perbedaan:nth-child(n) &:nth-of-type(n)



`:nth-of-type(n)` memilih elemen berdasarkan posisinya di antara elemen-elemen dari tipe

2. Pseudo-elements (:double-colon)

Untuk menata bagian spesifik dari elemen yang sudah ada. Mereka memungkinkan developer untuk membuat elemen yang sebenarnya tidak ada dalam markup HTML, seperti menambahkan konten sebelum atau sesudah elemen, atau menata huruf pertama dari paragraf.

```
::before Menambahkan elemen sebelum elemen yg dipilih.

::after Menambahkan elemen sesudah elemen yg dipilih.

::first-letter Menargetkan huruf pertama dari elemen text.

::first-line Menargetkan baris pertama dari elemen text.

::marker Menargetkan penanda dari item  (seperti bullet atau angka dalam ).

::selection Menargetkan bagian dari elemen yang dipilih oleh pengguna, seperti saat teks di-highlight.
```

C. Attribute Selectors

Attribute is anything in the opening tag of an HTML element, such as src='picture.jpg' or href="www.web.com".

```
    [attribute] - This general selector will select anything where the given attribute exists. Its value doesn't matter.
    [attribute="value"] - To get really specific, we can use = to match a specific attribute with a specific value.
    selector[attribute] - Optionally we can combine our attribute selectors with other types of selectors, such as class or element selectors.
    selector[attribute="value"] - To get really specific
```

Based on how we access:

```
    [attribute^="value"] - ^= Will match strings from the start.
    [attribute$="value"] - $= Will match strings from the end.
    [attribute*="value"] - *= The wildcard selector will match anywhere inside the string.
```

Example:

```
1  [class^='aus'] {
2    /* Classes are attributes too!
3    This will target any class that begins with 'aus':
4    class='austria'
5    class='australia'
6    */
7  }
```

```
9  [src$='.jpg'] {
    /* This will target any src attribute that ends in '.jpg':
    src='puppy.jpg'
    src='kitten.jpg'
    */

14  }

15  [for*='ill'] {
    /* This will target any for attribute that has 'ill' anywhere
    for="bill"
    for="jill"
    for="silly"
    for="ill"
    */
```