기초 웹

22 Winter CNU 기초 스터디

21 남정연

21 박준서

What is CSS?

Cascading Style Sheet

종속되는 스타일 시트

HTML vs CSS

HTML
Structural Layer

HEAD →
BODY →

HTML with CSS
Presentation Layer

← APPEARANCE
← LOOK

How CSS works

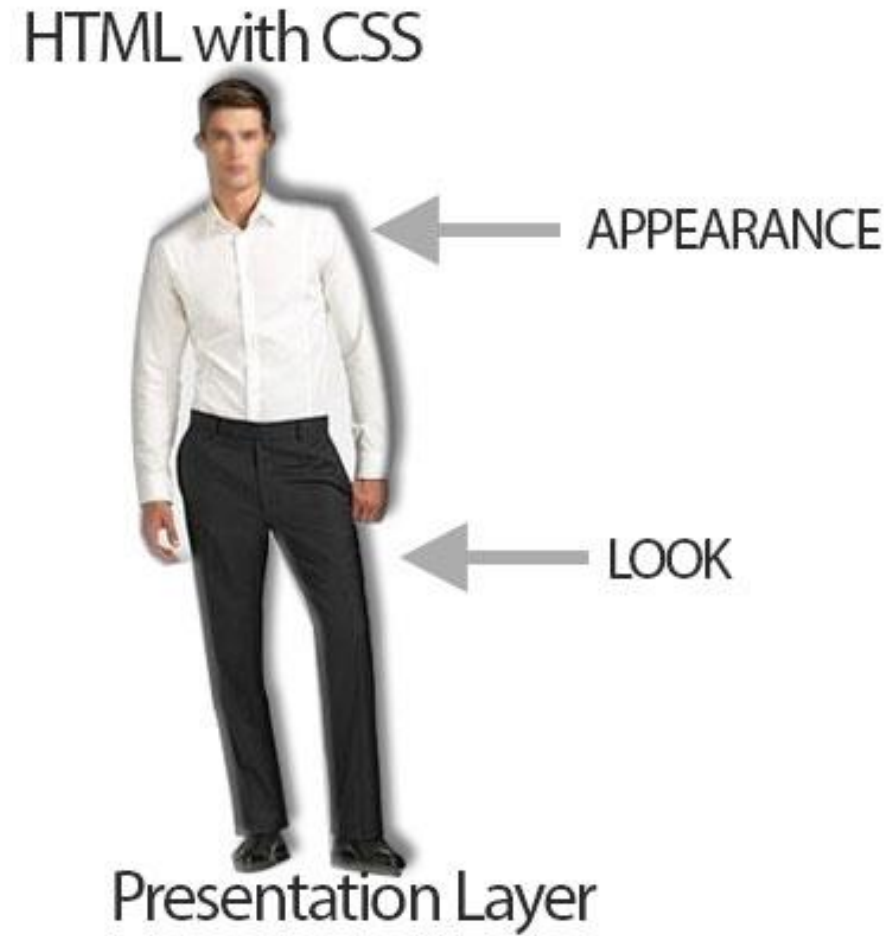# External Stylesheet

```html
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>My CSS experiment</title>
    <link rel="stylesheet" href="styles.css">
  </head>
  <body>
    <h1>Hello World!</h1>
    <p>This is my first CSS example</p>
  </body>
</html>
```
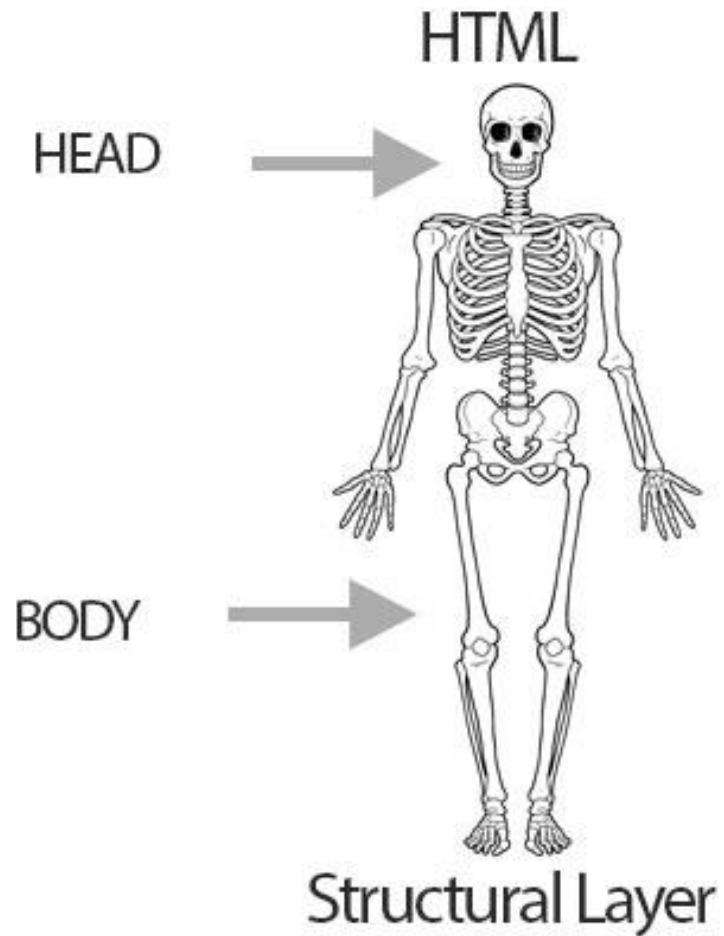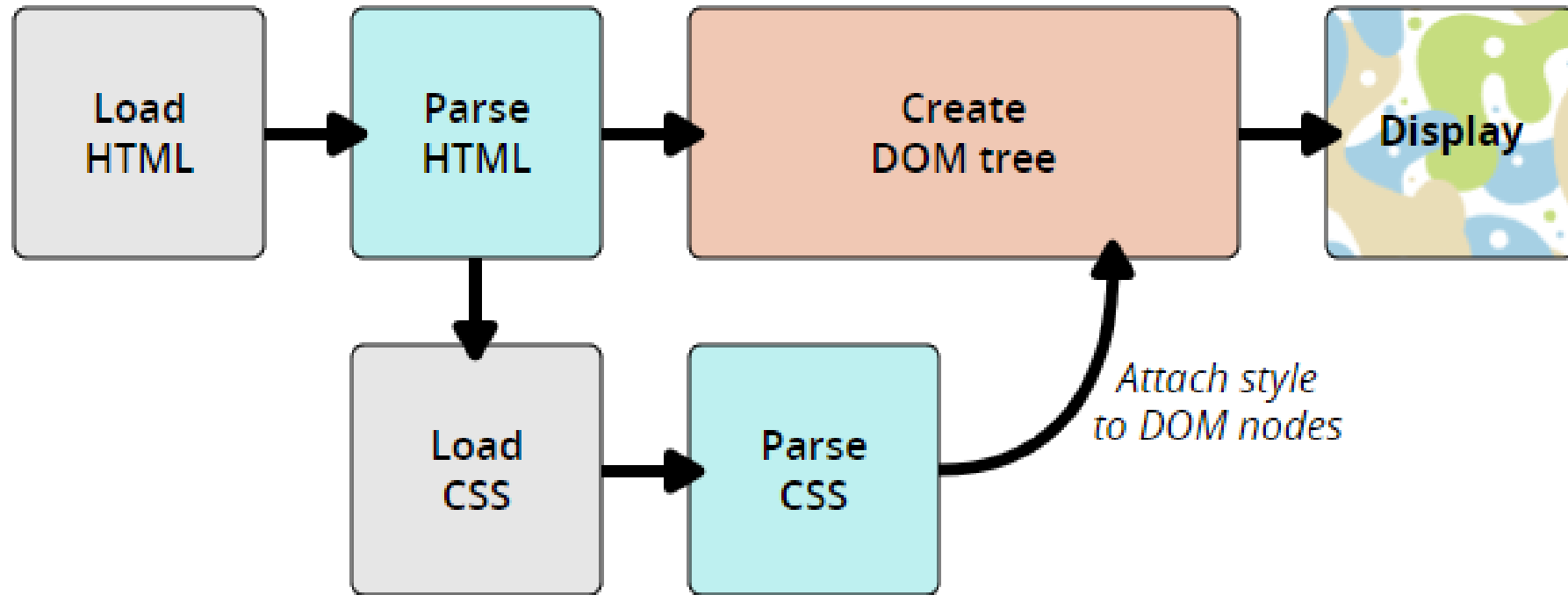
Internal Stylesheet

```html
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>My CSS experiment</title>
    <style>
      h1 {
        color: blue;
        background-color: yellow;
        border: 1px solid black;
      }

      p {
        color: red;
      }
    </style>
  </head>
  <body>
    <h1>Hello World!</h1>
    <p>This is my first CSS example</p>
  </body>
</html>
```

Inline Styles

```html
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>My CSS experiment</title>
  </head>
  <body>
    <h1 style="color: blue;background-color: yellow;border: 1px solid black;">Hello World!</h1>
    <p style="color:red;">This is my first CSS example</p>
  </body>
</html>
```
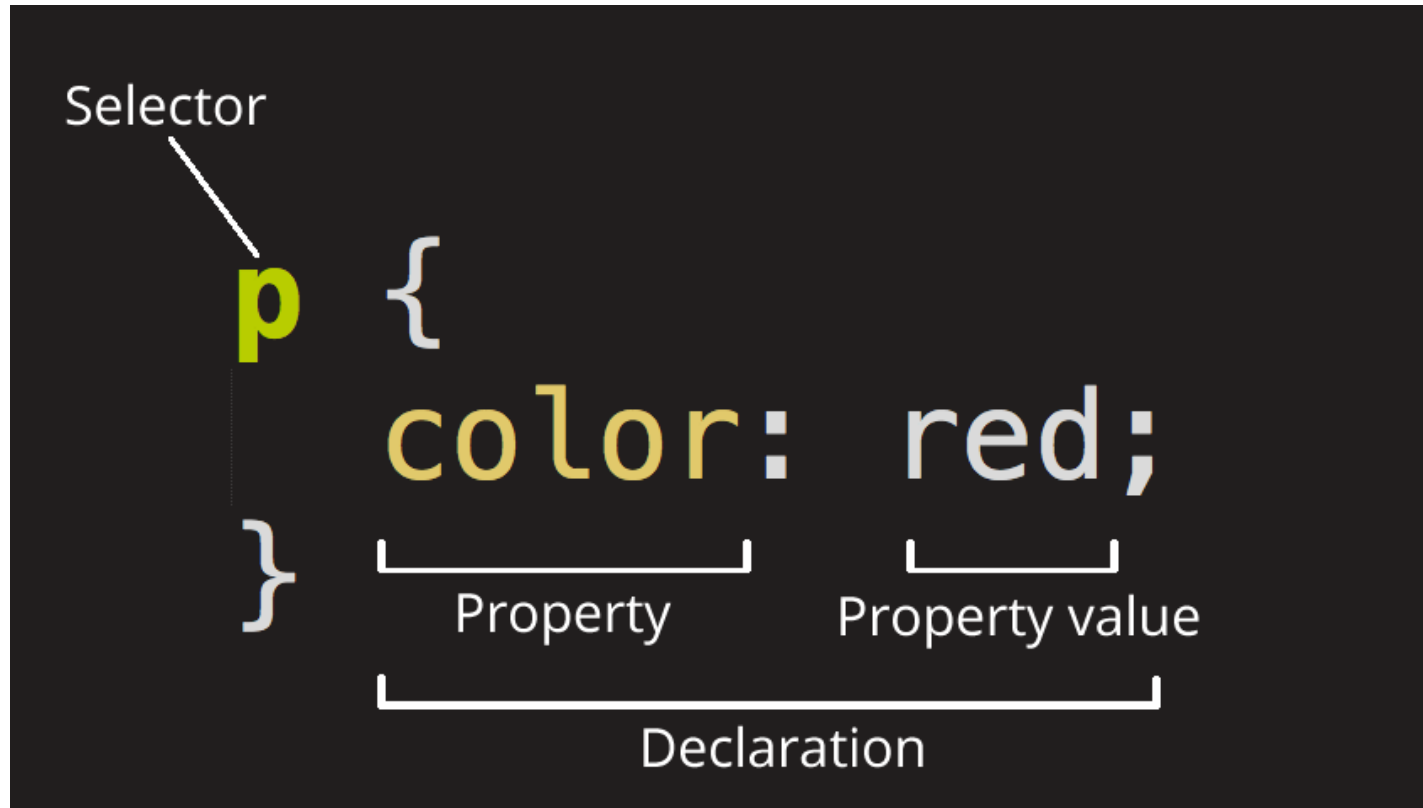
Anatomy of Style Sheet

* Case Sensitive

CSS Comments

```css
/* Handle basic element styling */
/* -------------------------------------------------------------------- */
body {
  font: 1em/150% Helvetica, Arial, sans-serif;
  padding: 1em;
  margin: 0 auto;
  max-width: 33em;
}

@media (min-width: 70em) {
  /* Increase the global font size on larger screens or windows
     for better readability */
  body {
    font-size: 130%;
  }
}

h1 {font-size: 1.5em;}

/* Handle specific elements nested in the DOM  */
/* -------------------------------------------------------------------- */
div p, #id:first-line {
  background-color: red;
  border-radius: 3px;
}
```

HTML Attribute

* Empty Element
⟨img src="…"/⟩

HTML Boolean Attribute

```html
<!-- Boolean Attribute -->

<!-- Disable: true -->
<input type="text" disabled="disabled">
<input type="text" disabled>

<!-- Disable: false -->
<input type="text">
```

CSS Selectors

Selector name	What does it select	Example
Element selector (sometimes called a tag or type selector)	All HTML elements of the specified type.	`p` selects `<p>`
ID selector	The element on the page with the specified ID. On a given HTML page, each id value should be unique.	`#my-id` selects `<p id="my-id">` or `<a id="my-id">`
Class selector	The element(s) on the page with the specified class. Multiple instances of the same class can appear on a page.	`.my-class` selects `<p class="my-class">` and `<a class="my-class">`
Attribute selector	The element(s) on the page with the specified attribute.	`img[src]` selects `<img src="myimage.png">` but not `<img>`
Pseudo-class selector	The specified element(s), but only when in the specified state. (For example, when a cursor hovers over a link.)	`a:hover` selects `<a>`, but only when the mouse pointer is hovering over the link.

Universal Selector

```css
* {
    color : green;
}
```

Universal selector

Veggies es bonus vobis, proinde vos postulo essum magis kohlrabi welsh onion daikon amaranth tatsoi tomatillo melon azuki bean garlic.

Gumbo beet greens corn soko **endive** gumbo gourd. Parsley shallot courgette tatsoi pea sprouts fava bean collard greens dandelion okra wakame tomato. Dandelion cucumber earthnut pea peanut soko zucchini.

```html
<h1>Universal selector</h1>
<p>
    Veggies es bonus vobis, proinde vos postulo essum magis
    <span>kohlrabi welsh onion</span>
    daikon amaranth tatsoi tomatillo
    melon azuki bean garlic.
</p>

<p>
    Gumbo beet greens corn soko
    <strong>endive</strong>
    gumbo gourd. Parsley shallot courgette tatsoi pea sprouts
    fava bean collard greens dandelion okra wakame tomato.
    Dandelion cucumber earthnut pea peanut soko zucchini.
</p>
```

Type Selector

Alias : tag name selector, element selector

ID Selector

ID selector

Veggies es bonus vobis, proinde vos postulo essum magis kohlrabi welsh onion daikon amaranth tatsoi tomatillo melon azuki bean garlic.

Gumbo beet greens corn soko **endive** gumbo gourd. Parsley shallot courgette tatsoi pea sprouts fava bean collard greens dandelion okra wakame tomato. Dandelion cucumber earthnut pea peanut soko zucchini.

```css
#one {
    background-color: yellow;
}

h1#heading {
    color: rebeccapurple;
}
```

```html
<h1 id="heading">ID selector</h1>
<p>Veggies es bonus vobis, proinde vos postulo essum magis kohlrabi welsh onion
daikon amaranth tatsoi tomatillo
    melon azuki bean garlic.</p>

<p id="one">Gumbo beet greens corn soko <strong>endive</strong> gumbo gourd.
Parsley shallot courgette tatsoi pea sprouts fava bean collard
    greens dandelion okra wakame tomato. Dandelion cucumber earthnut pea peanut
soko zucchini.</p>
```

Class Selector

Class selectors

Veggies es bonus vobis, proinde vos postulo essum magis kohlrabi welsh onion daikon amaranth tatsoi tomatillo melon azuki bean garlic.

Gumbo beet greens corn soko **endive** gumbo gourd. Parsley shallot courgette tatsoi pea sprouts fava bean collard greens dandelion okra wakame tomato. Dandelion cucumber earthnut pea peanut soko zucchini.

```css
.highlight {
    background-color: yellow;
}
```

```html
<h1 class="highlight">Class selectors</h1>
<p>Veggies es bonus vobis, proinde vos postulo essum magis <span class="highlight">kohlrabi welsh onion</span> daikon amaranth tatsoi tomatillo
    melon azuki bean garlic.</p>

<p class="highlight">Gumbo beet greens corn soko <strong>endive</strong> gumbo gourd. Parsley shallot courgette tatsoi pea sprouts fava bean collard
    greens dandelion okra wakame tomato. Dandelion cucumber earthnut pea peanut soko zucchini.</p>
```

Presence and Value Selectors

Selector	Example	Description
`[attr]`	`a[title]`	Matches elements with an *attr* attribute (whose name is the value in square brackets).
`[attr=value]`	`a[href="https://example.com"]`	Matches elements with an *attr* attribute whose value is exactly *value* — the string inside the quotes.
`[attr~=value]`	`p[class~="special"]`	Matches elements with an *attr* attribute whose value is exactly *value*, or contains *value* in its (space separated) list of values.
`[attr|=value]`	`div[lang|="zh"]`	Matches elements with an *attr* attribute whose value is exactly *value* or begins with *value* immediately followed by a hyphen.

Presence and Value Selectors

Attribute presence and value selectors

- Item 1
- Item 2
- Item 3
- Item 4

```css
li[class] {
    font-size: 200%;
}

li[class="a"] {
    background-color: yellow;
}

li[class~="a"] {
    color: red;
}
```

```html
<h1>Attribute presence and value selectors</h1>
<ul>
    <li>Item 1</li>
    <li class="a">Item 2</li>
    <li class="a b">Item 3</li>
    <li class="ab">Item 4</li>
</ul>
```

Substring Matching Selectors

Selector	Example	Description
[attr^=value]	li[class^="box-"]	Matches elements with an *attr* attribute, whose value begins with *value*.
[attr$=value]	li[class$="-box"]	Matches elements with an *attr* attribute whose value ends with *value*.
[attr*=value]	li[class*="box"]	Matches elements with an *attr* attribute whose value contains *value* anywhere within the string.

Substring Matching Selectors

Attribute substring matching selectors

- # Item 1
- # Item 2
- Item 3
- Item 4

```
li[class^="a"] {
    font-size: 200%;
}

li[class$="a"] {
    background-color: yellow;
}

li[class*="a"] {
    color: red;
}
```

```
<h1>Attribute substring matching selectors</h1>
<ul>
    <li class="a">Item 1</li>
    <li class="ab">Item 2</li>
    <li class="bca">Item 3</li>
    <li class="bcabc">Item 4</li>
</ul>
```

Case-sensitivity

Case-insensitivity

- Item 1
- Item 2
- Item 3

```
li[class^="a"] {
    background-color: yellow;
}

li[class^="a" i] {
    color: red;
}
```

```
<h1>Case-insensitivity</h1>
<ul>
    <li class="a">Item 1</li>
    <li class="A">Item 2</li>
    <li class="Ab">Item 3</li>
</ul>
```

Pseudo-class

`:pseudo-class-name`

pseu·do

1. 허위의, 가짜의; 모조의 2. 꾸며 보이는 사람, 사칭자

발음 　　　　미국식 [sú:dou]　　　　영국식 [sjú:-]

동아출판　　YBM　　교학사　　슈프림

형용사 | 명사 | 영영사전

형용사

1. 허위의, 가짜의; 모조의

Pseudo-class

Gumbo beet greens corn soko endive gumbo gourd. Parsley shallot courgette tatsoi pea sprouts fava bean collard greens dandelion okra wakame tomato. Dandelion cucumber earthnut pea peanut soko zucchini.

Veggies es bonus vobis, proinde vos postulo essum magis kohlrabi welsh onion daikon amaranth tatsoi tomatillo melon azuki bean garlic.

```
p:first-child {
    font-weight: bold;
}
```

```
<article>
    <p>Gumbo beet greens corn soko endive gumbo gourd. Parsley
shallot courgette tatsoi pea sprouts fava bean collard
            greens dandelion okra wakame tomato. Dandelion
cucumber earthnut pea peanut soko zucchini.</p>
    <p class="first">Veggies es bonus vobis, proinde vos
postulo essum magis kohlrabi welsh onion daikon amaranth
tatsoi tomatillo
            melon azuki bean garlic.</p>
</article>
```

Pseudo-class

Hover over me

- `:hover` — mentioned above; this only applies if the user moves their pointer over an element, typically a link.

- `:focus` — only applies if the user focuses the element by clicking or using keyboard controls.

```
a:link,
a:visited {
    color: rebeccapurple;
    font-weight: bold;
}

a:hover {
    color:hotpink;
}
```

```
<p><a href="">Hover over me</a></p>
```

:is()

```css
/* Selects any paragraph inside a header, main
   or footer element that is being hovered */
:is(header, main, footer) p:hover {
  color: red;
  cursor: pointer;
}

/* The above is equivalent to the following */
header p:hover,
main p:hover,
footer p:hover {
  color: red;
  cursor: pointer;
}
```

:not()

```css
/* Selects any element that is NOT a paragraph */
:not(p) {
  color: blue;
}
```

:nth-child()

```css
/* Selects the second <li> element in a list */
li:nth-child(2) {
  color: lime;
}


/* Selects every fourth element
    among any group of siblings */
:nth-child(4n) {
  color: lime;
}
```

:only-child()

The `:only-child` CSS [pseudo-class](#) represents an element without any siblings. This is the same as `:first-child:last-child` or `:nth-child(1):nth-last-child(1)`, but with a lower specificity.

```css
/* Selects each <p>, but only if it is the */
/* only child of its parent */
p:only-child {
  background-color: lime;
}
```

Pseudo-element

```
::pseudo-element-name
```

Pseudo-element

Veggies es bonus vobis, proinde vos postulo essum magis
kohlrabi welsh onion daikon amaranth tatsoi tomatillo melon azuki bean garlic.

Gumbo beet greens corn soko endive gumbo gourd. Parsley
shallot courgette tatsoi pea sprouts fava bean collard greens dandelion okra
wakame tomato. Dandelion cucumber earthnut pea peanut soko zucchini.

Veggies es bonus vobis, proinde vos postulo
essum magis kohlrabi welsh onion daikon amaranth tatsoi tomatillo melon azuki
bean garlic.

Gumbo beet greens corn soko endive gumbo
gourd. Parsley shallot courgette tatsoi pea sprouts fava bean collard greens
dandelion okra wakame tomato. Dandelion cucumber earthnut pea peanut soko
zucchini.

```
article p::first-line {
    font-size: 120%; /* 160% */
    font-weight: bold;
}
```

```
<article>
    <p>Veggies es bonus vobis, proinde vos
postulo essum magis kohlrabi welsh onion daikon
amaranth tatsoi tomatillo
            melon azuki bean garlic.</p>

    <p>Gumbo beet greens corn soko endive gumbo
gourd. Parsley shallot courgette tatsoi pea
sprouts fava bean collard
            greens dandelion okra wakame tomato.
Dandelion cucumber earthnut pea peanut soko
zucchini.</p>
</article>
```

::before

This should show before the other content.Content in the box in my HTML page.

Interactive editor

```
.box::before {
    content: "This should show before the other content."
}
```

```
<p class="box">Content in the box in my HTML page.</p>
```

::before

Content in the box in my HTML page.

Interactive editor

```css
.box::before {
    content: "";
    display: block;
    width: 100px;
    height: 100px;
    background-color: rebeccapurple;
    border: 1px solid black;
}
```

```html
<p class="box">Content in the box in my HTML page.</p>
```

::after

Content in the box in my HTML page. ➡

Interactive editor

```css
.box::after {
    content: " ➡"
}
```

```html
<p class="box">Content in the box in my HTML page.</p>
```

Combining pseudo-classes & elements

```css
article p:first-child::first-line {
  font-size: 120%;
  font-weight: bold;
}
```

Descendant combinator

Text in .box

Text not in .box

Interactive editor

```
.box p {
    color: red;
}
```

```
<div class="box"><p>Text in .box</p></div>
<p>Text not in .box</p>
```

Descendant combinator

Text in .box

Text not in .box

Interactive editor

```
.box p {
    color: red;
}
```

```
<div class="box"><div class="boxbox"><p>Text in .box</p></div></div>
<p>Text not in .box</p>
```

Child combinator

- Unordered item
- Unordered item
  1. Item 1
  2. Item 2

Interactive editor

```
ul > li {
    border-top: 5px solid red;
}
```

```
<ul>
    <li>Unordered item</li>
    <li>Unordered item
        <ol>
            <li>Item 1</li>
            <li>Item 2</li>
        </ol>
    </li>
</ul>
```

Child combinator

- Unordered item
- Unordered item
    1. Item 1
    2. Item 2

Interactive editor

```css
ul > li {
    border-top: 5px solid red;
}
```

```html
<ul>
    <li>Unordered item</li>
    <li>Unordered item
        <ol>
            <li>Item 1</li>
            <li>Item 2</li>
        </ol>
    </li>
</ul>
```

Child combinator

Text in .box

Text not in .box

Interactive editor

```css
.box > p {
    color: red;
}
```

```html
<div class="box"><div class="boxbox"><p>Text in .box</p></div></div>
<p>Text not in .box</p>
```

Adjacent sibling combinator

A heading

Veggies es bonus vobis, proinde vos postulo essum magis kohlrabi welsh onion daikon amaranth tatsoi tomatillo melon azuki bean garlic.

Gumbo beet greens corn soko endive gumbo gourd. Parsley shallot courgette tatsoi pea sprouts fava bean collard greens dandelion okra wakame tomato. Dandelion cucumber earthnut pea peanut soko zucchini.

```
h1 + p {
    font-weight: bold;
    background-color: #333;
    color: #fff;
    padding: .5em;
}
```

```
<article>
    <h1>A heading</h1>
    <p>Veggies es bonus vobis, proinde vos postulo essum
magis kohlrabi welsh onion daikon amaranth tatsoi
tomatillo
            melon azuki bean garlic.</p>

    <p>Gumbo beet greens corn soko endive gumbo gourd.
Parsley shallot courgette tatsoi pea sprouts fava bean
collard
            greens dandelion okra wakame tomato.
Dandelion cucumber earthnut pea peanut soko zucchini.</p>
</article>
```

Adjacent sibling combinator

Veggies es bonus vobis, proinde vos postulo essum magis kohlrabi welsh onion daikon amaranth tatsoi tomatillo melon azuki bean garlic.

A heading

Veggies es bonus vobis, proinde vos postulo essum magis kohlrabi welsh onion daikon amaranth tatsoi tomatillo melon azuki bean garlic.

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Gumbo beet greens corn soko endive gumbo gourd. Parsley shallot courgette tatsoi pea sprouts fava bean collard greens dandelion okra wakame tomato. Dandelion cucumber earthnut pea peanut soko zucchini.

```css
h1 + p {
    font-weight: bold;
    background-color: #333;
    color: #fff;
    padding: .5em;
}
```

```html
<article>
    <p>Veggies es bonus vobis, proinde vos postulo essum
magis kohlrabi welsh onion daikon amaranth tatsoi
tomatillo
        melon azuki bean garlic.</p>

    <h1>A heading</h1>
    <p>Veggies es bonus vobis, proinde vos postulo essum
magis kohlrabi welsh onion daikon amaranth tatsoi
tomatillo
        melon azuki bean garlic.</p>

    <p>Gumbo beet greens corn soko endive gumbo gourd.
Parsley shallot courgette tatsoi pea sprouts fava bean
collard
        greens dandelion okra wakame tomato. Dandelion
cucumber earthnut pea peanut soko zucchini.</p>

    <p>Gumbo beet greens corn soko endive gumbo gourd.
Parsley shallot courgette tatsoi pea sprouts fava bean
collard
        greens dandelion okra wakame tomato. Dandelion
cucumber earthnut pea peanut soko zucchini.</p>
</article>
```

Adjacent sibling combinator

Veggies es bonus vobis, proinde vos postulo essum magis kohlrabi welsh onion daikon amaranth tatsoi tomatillo melon azuki bean garlic.

A heading

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Gumbo beet greens corn soko endive gumbo gourd. Parsley shallot courgette tatsoi pea sprouts fava bean collard greens dandelion okra wakame tomato. Dandelion cucumber earthnut pea peanut soko zucchini.

```css
h1 + p {
    font-weight: bold;
    background-color: #333;
    color: #fff;
    padding: .5em;
}
```

```html
<article>
    <p>Veggies es bonus vobis, proinde vos postulo essum
magis kohlrabi welsh onion daikon amaranth tatsoi
tomatillo
        melon azuki bean garlic.</p>

    <h1>A heading</h1>
    <p>Veggies es bonus vobis, proinde vos postulo essum
magis kohlrabi welsh onion daikon amaranth tatsoi
tomatillo
        melon azuki bean garlic.</p>

    <p>Gumbo beet greens corn soko endive gumbo gourd.
Parsley shallot courgette tatsoi pea sprouts fava bean
collard
        greens dandelion okra wakame tomato. Dandelion
cucumber earthnut pea peanut soko zucchini.</p>

    <p>Gumbo beet greens corn soko endive gumbo gourd.
Parsley shallot courgette tatsoi pea sprouts fava bean
collard
        greens dandelion okra wakame tomato. Dandelion
cucumber earthnut pea peanut soko zucchini.</p>
</article>
```

General sibling combinator

A heading

I am a paragraph.

I am a div

I am another paragraph.

```
h1 ~ p {
    font-weight: bold;
    background-color: #333;
    color: #fff;
    padding: .5em;
}
```

```
<article>
    <h1>A heading</h1>
    <p>I am a paragraph.</p>
    <div>I am a div</div>
    <p>I am another paragraph.</p>
</article>
```

Using Combinators!

```
ul > li[class="a"]  {  }
```