

1. what is Pseudo class and what is Pseudo element?

Pseudo-class (:)

A pseudo-class is used to define a special state of an element.

It acts like you are adding a “temporary class” to an element based on user action or element condition.

:hover When the mouse is over an element

:active When an element is being clicked

:focus When an element (like input) is focused

:visited For visited links

:first-child When element is the first child of its parent

:last-child When element is the last child of its parent

Pseudo-element (::)

A pseudo-element lets you style specific parts of an element, or add content without changing HTML.

Example:

```
p::first-letter {  
  font-size: 30px;  
  color: red;  
}
```

Pseudo-element	Description
::before	Adds content before an element
::after	Adds content after an element
::first-letter	Styles the first letter
::first-line	Styles the first line of text
::selection	Styles the portion of text selected by the user.

2. What is the difference between pseudo class and element

Definition: Defines a special state of an element, Defines a specific part of an element.

Purpose: Used to style an element based on its state (like hover, focus, etc.). Used to style or insert content inside an element without changing HTML.

Syntax: Uses one colon (:) → :hover Uses two colons (::) → ::after

3. syntax:

Pseudo class: Pseudo-Class Syntax

selector:pseudo-class {

```
property: value;
}
```

Pseudo element:

Pseudo-Element Syntax

```
selector::pseudo-element {
  property: value;
}
```

4.usage?

Pseudo-Class — Usage

Purpose:

Used to style an element based on its state or position (like hover, focus, visited, etc.) without adding extra classes or JavaScript.

Pseudo-Element — Usage

Purpose:

Used to style or insert content inside elements (like before or after content, first letter, first line, etc.) without modifying HTML.

5.when we using all our webpage in pseudo class and elements?

Buttons: :hover (pseudo-class) + ::before arrow icon (pseudo-element) + relative or absolute positioning

Navigation menu: :hover dropdown (pseudo-class) + absolute submenu (position) + ::after arrow (pseudo-element)

Blog content: First letter drop cap → ::first-letter (pseudo-element) + sticky sidebar menu (position)

Forms: Input focus → :focus (pseudo-class) + validation checkmark → ::after (pseudo-element) + positioned using relative or absolute

6.positions in css:

Position	Description	Behavior / Usage
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Static-	Default for all elements,	Elements appear in the normal flow. top, left, z-index do not apply.
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Relative-	Positioned relative to its normal position,	Can move using top, left, bottom, right. Space for the element is still reserved.
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absolute-Positioned relative to the nearest positioned ancestor (not static) Removed from normal flow. Can place exactly using top, left, bottom, right.

fixed-Positioned relative to the viewport, Stays in place even when scrolling. Removed from normal flow.

7. z-index when use create separate values?

When to Use z-index

To stack elements that overlap.

Example situations:

Modals or popups appear above content.

Dropdown menus appear over other elements.

Tooltips, banners, sticky buttons.

Boxes overlap, but their stacking order is controlled by z-index.

Box 2 (green) → top layer (z-index: 3)

Box 3 (blue) → middle layer (z-index: 2)

Box 1 (red) → bottom layer (z-index: 1).