

CSS Position and it's properties

→ CSS position is a very Powerful technique used to control the layout of elements on a web page. we can easily specify the posⁿ of an element within the document flow and can also control the behaviour of elements when they are rendered on the screen.

Why do we use CSS position?

1. control over element position
2. positioning relative to other elements
3. Removing elements from document flow
4. overlapping elements
5. positioning relative to viewport
6. Create scroll effect
7. Accessibility

CSS position property

There are majorly 5 posⁿ prop. names

1. static
2. relative
3. absolute
4. fixed

5. sticky



Top, Bottom, left and right properties

These properties are used to set for^n an element relative to its parent container or to the view port.

The value of top, bottom, left and right can be negative

= - indeed

Static

This is the default pos^n set for all the HTML elements.

Properties of pos^n static

1. It is the default pos^n of an element.
2. It will not break the normal document flow to pos^n the element on the page.
3. The properties like top, left, right, bottom and z-index have no effect to pos^n the elements.

Note :- we will learn more about z-index property in further classes

Relative

The element will be positioned according to the normal document flow and will change its pos^n according to the given values of top, left, right and bottom.

Properties of pos^n relative :-

1. It will break the normal document flow to pos^n the element on the page.
2. The properties like top, left, right, bottom and z-index will have an effect on the element.
3. The element will leave the space at its original pos^n .

Absolute

The element will break the normal document flow to position the elements on the page according to the given values of top, left, right and bottom.

Properties of `position: absolute`

1. It will break the normal document flow to position the element on the page.
2. The properties like top, left, right, bottom and z-index will have an effect on the element.
3. The element will not leave any space at its original position.
4. The element will be positioned in respect of its closest positioned ancestor.
5. If there is no positioned ancestor element then it will take the document body as his ancestor.

Note: Positioned ancestor means an element which will be using any `position` property like relative, absolute, fixed or sticky.

Fixed

As the name suggests, the element will be fixed to a particular position on the page, which means the element will be at the same position always even if the user scrolls the page.

Properties of position fixed

1. It will break the normal document flow to position the element on the page.
 2. The element will be positioned relative to the browser's window (width and height of screen) and will be in the same position even if the user is scrolling the page.
 3. The properties like top, right, bottom and z-index will have an effect on the element.
 4. The element will not leave any space in its original position.
- Example:- we can see the chat support icon on the flipkart website, which is always fixed on the bottom right side of the screen even if we scroll the page.

Q Sticky

The element is positioned based on the user's scroll position.

position properties of position sticky

1. it will not break the normal flow of the document to position the element on the page.
2. it toggles between the position relative and fixed
3. it will behave like a relative position unless it reaches the given position, after reaching the given position it will behave like a fixed position
4. The properties like top, left, right, bottom and z-index will have an effect on the element
5. it will work only if any of the property (top, right, left or bottom) is specified

overflow and z-index

overflow in CSS

The overflow property in CSS determines what happens to content that is too large to fit in an element's box.

The overflow property has the following values:

- visible → default. The overflow is not clipped. The content renders outside the element's box.
- hidden → The overflow is clipped, and the rest of the content will be invisible.
- scroll → The overflow is clipped, and a scrollbar is added to see the rest of the content.
- auto → similar to scroll, but it adds scrollbar only when necessary.

overflow: visible

By default, the overflow is visible, meaning that it is not clipped and it renders outside the element's box

overflow: hidden

With the hidden value, the overflow is clipped, and the rest of the content is hidden

overflow: scroll

Setting the value to scroll, the overflow is clipped and a scrollbar is added to scroll inside the box. Note that this will add a scrollbar both horizontally and vertically (even if you don't need it)

overflow: auto

The auto value is similar to scroll, but it adds scrollbar only when necessary

overflow → x and overflow → y

The overflow → x and overflow → y properties specify whether to change the overflow of content just horizontally or vertically (or both):

overflow-x specifies what to do with the left/right edge of the content

overflow-y specifies what to do with the top/bottom edges of the content

CSS Z-index

The z-index property in CSS is used to specify the stack order of an element. An element with a higher z-index value will be placed in front of an element with a lower z-index value.

The value of the z-index property is an integer, the element with a higher number is placed on top of the elements with lower numbers.