mdn web docs

position

The `position` CSS property sets how an element is positioned in a document. The `top`, `right`, `bottom`, and `left` properties determine the final location of positioned elements.

Try it

CSS Demo: position RESET

```
position: static;
```

```
position: relative;
top: 40px; left: 40px;
```

```
position: absolute;
top: 40px; left: 40px;
```

```
position: sticky;
top: 20px;
```

Syntax

CSS

```css
position: static;
position: relative;
position: absolute;
position: fixed;
position: sticky;

/* Global values */
position: inherit;
position: initial;
position: revert;
position: revert-layer;
position: unset;
```

Values

`static`

The element is positioned according to the Normal Flow of the document. The `top`, `right`, `bottom`, `left`, and `z-index` properties have *no effect*. This is the default value.

`relative`

The element is positioned according to the normal flow of the document, and then offset *relative to itself* based on the values of `top`, `right`, `bottom`, and `left`. The offset does not affect the position of any other elements; thus, the space given for the element in the page layout is the same as if position were `static`.

This value creates a new stacking context when the value of `z-index` is not `auto`. Its effect on `table-*-group`, `table-row`, `table-column`, `table-cell`, and `table-caption` elements is undefined.

`absolute`

The element is removed from the normal document flow, and no space is created for the element in the page layout. The element is positioned relative to its closest positioned ancestor (if any) or to the initial containing block. Its final position is determined by the values of `top`, `right`, `bottom`, and `left`.

This value creates a new stacking context when the value of `z-index` is not `auto`. The margins of absolutely positioned boxes do not collapse with other margins.

`fixed`

The element is removed from the normal document flow, and no space is created for the element in the page layout. The element is positioned relative to its initial containing block, which is the viewport in the case of visual media. Its final position is determined by the values of `top`, `right`, `bottom`, and `left`.

This value always creates a new stacking context. In printed documents, the element is placed in the same position on *every page*.

`sticky`

The element is positioned according to the normal flow of the document, and then offset relative to its *nearest scrolling ancestor* and containing block (nearest block-level ancestor), including table-related elements, based on the values of `top`, `right`, `bottom`, and `left`. The offset does not affect the position of any other elements.

This value always creates a new stacking context. Note that a sticky element "sticks" to its nearest ancestor that has a "scrolling mechanism" (created when `overflow` is `hidden`, `scroll`, `auto`, or `overlay`), even if that ancestor isn't the nearest actually scrolling ancestor.

> **Note:** At least one inset property (`top`, `inset-block-start`, `right`, `inset-inline-end`, etc.) needs to be set to a non-`auto` value for the axis on which the element needs to be made

sticky. If both `inset` properties for an axis are set to `auto`, on that axis the `sticky` value will behave as `relative`.

Description

Types of positioning

- A **positioned element** is an element whose computed `position` value is either `relative`, `absolute`, `fixed`, or `sticky`. (In other words, it's anything except `static`.)
- A **relatively positioned element** is an element whose computed `position` value is `relative`. The `top` and `bottom` properties specify the vertical offset from its normal position; the `left` and `right` properties specify the horizontal offset.
- An **absolutely positioned element** is an element whose computed `position` value is `absolute` or `fixed`. The `top`, `right`, `bottom`, and `left` properties specify offsets from the edges of the element's containing block. (The containing block is the ancestor relative to which the element is positioned.) If the element has margins, they are added to the offset. The element establishes a new block formatting context (BFC) for its contents.
- A **stickily positioned element** is an element whose computed `position` value is `sticky`. It's treated as relatively positioned until its containing block crosses a specified threshold (such as setting `top` to value other than auto) within its flow root (or the container it scrolls within), at which point it is treated as "stuck" until meeting the opposite edge of its containing block.

Most of the time, absolutely positioned elements that have `height` and `width` set to `auto` are sized so as to fit their contents. However, non-replaced, absolutely positioned elements can be made to fill the available vertical space by specifying both `top` and `bottom` and leaving `height` unspecified (that is, `auto`). They can likewise be made to fill the available horizontal space by specifying both `left` and `right` and leaving `width` as `auto`.

Except for the case just described (of absolutely positioned elements filling the available space):

- If both `top` and `bottom` are specified (technically, not `auto`), `top` wins.
- If both `left` and `right` are specified, `left` wins when `direction` is `ltr` (English, horizontal Japanese, etc.) and `right` wins when `direction` is `rtl` (Persian, Arabic, Hebrew, etc.).

Accessibility concerns

Ensure that elements positioned with an `absolute` or `fixed` value do not obscure other content when the page is zoomed to increase text size.

- MDN Understanding WCAG, Guideline 1.4 explanations
- Visual Presentation: Understanding SC 1.4.8 | Understanding WCAG 2.0

Performance & Accessibility

Scrolling elements containing `fixed` or `sticky` content can cause performance and accessibility issues. As a user scrolls, the browser must repaint the sticky or fixed content in a new location. Depending on the content needing to be repainted, the browser performance, and the device's processing speed, the browser may not be able to manage repaints at 60 fps, causing accessibility concerns for people with sensitivities and jank for everyone. One solution is to add `will-change: transform` to the positioned elements to render the element in its own layer, improving repaint speed and therefore improving performance and accessibility.

Formal definition

Initial value	`static`
Applies to	all elements
Inherited	no
Computed value	as specified
Animation type	discrete
Creates stacking context	yes

Formal syntax

```
position =
  static       |
  relative     |
  absolute     |
  sticky       |
  fixed        |
  <running()>

<running()> =
  running( <custom-ident> )
```

Examples

Relative positioning

Relatively positioned elements are offset a given amount from their normal position within the document, but without the offset affecting other elements. In the example below, note how the other elements are placed as if "Two" were taking up the space of its normal location.

HTML

HTML Play

```html
<div class="box" id="one">One</div>
<div class="box" id="two">Two</div>
<div class="box" id="three">Three</div>
<div class="box" id="four">Four</div>
```

CSS

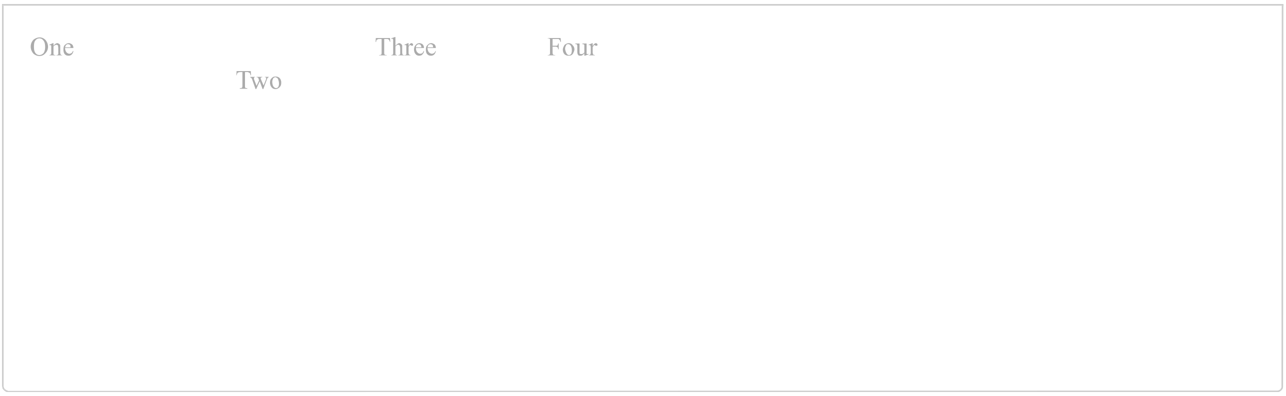
CSS Play

```css
* {
  box-sizing: border-box;
}

.box {
  display: inline-block;
  width: 100px;
  height: 100px;
  background: red;
  color: white;
}

#two {
  position: relative;
  top: 20px;
  left: 20px;
  background: blue;
}
```

Play



Absolute positioning

Elements that are relatively positioned remain in the normal flow of the document. In contrast, an element that is absolutely positioned is taken out of the flow; thus, other elements are positioned as if it did not exist. The absolutely positioned element is positioned relative to its *nearest positioned ancestor* (i.e., the nearest ancestor that is not `static`). If a positioned ancestor doesn't exist, it is positioned relative to the ICB (initial containing block — see also the W3C definition), which is the containing block of the document's root element.

HTML

HTML Play

```html
<h1>Absolute positioning</h1>

<p>
  I am a basic block level element. My adjacent block level elements sit on new
  lines below me.
</p>

<p class="positioned">
  By default we span 100% of the width of our parent element, and we are as tall
  as our child content. Our total width and height is our content + padding +
  border width/height.
</p>

<p>
  We are separated by our margins. Because of margin collapsing, we are
  separated by the width of one of our margins, not both.
</p>

<p>
  inline elements <span>like this one</span> and <span>this one</span> sit on
  the same line as one another, and adjacent text nodes, if there is space on
  the same line. Overflowing inline elements
  <span>wrap onto a new line if possible — like this one containing text</span>,
  or just go on to a new line if not, much like this image will do:
  <img src="long.jpg" />
</p>
```

CSS

CSS Play

```css
* {
  box-sizing: border-box;
}

body {
  width: 500px;
  margin: 0 auto;
}

p {
  background: aqua;
  border: 3px solid blue;
  padding: 10px;
  margin: 10px;
}

span {
  background: red;
  border: 1px solid black;
}

.positioned {
  position: absolute;
  background: yellow;
  top: 30px;
  left: 30px;
}
```

Result

Play

Fixed positioning

Fixed positioning is similar to absolute positioning, with the exception that the element's containing block is the initial containing block established by the *viewport*, unless any ancestor has `transform`, `perspective`, or `filter` property set to something other than `none` (see CSS Transforms Spec), which then causes that ancestor to take the place of the elements containing block. This can be used to create a "floating" element that stays in the same position regardless of scrolling. In the example below, box "One" is fixed at 80 pixels from the top of the page and 10 pixels from the left. Even after scrolling, it remains in the same place relative to the viewport. Also, when the `will-change` property is set to `transform`, a new containing block is established.

HTML

HTML Play

```html
<div class="outer">
  <p>
    Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nam congue tortor
    eget pulvinar lobortis. Vestibulum ante ipsum primis in faucibus orci luctus
    et ultrices posuere cubilia Curae; Nam ac dolor augue. Pellentesque mi mi,
    laoreet et dolor sit amet, ultrices varius risus. Nam vitae iaculis elit.
    Aliquam mollis interdum libero. Sed sodales placerat egestas. Vestibulum ut
    arcu aliquam purus viverra dictum vel sit amet mi. Duis nisl mauris, aliquam
    sit amet luctus eget, dapibus in enim. Sed velit augue, pretium a sem
    aliquam, congue porttitor tortor. Sed tempor nisl a lorem consequat, id
    maximus erat aliquet. Sed sagittis porta libero sed condimentum. Aliquam
    finibus lectus nec ante congue rutrum. Curabitur quam quam, accumsan id
    ultrices ultrices, tempor et tellus.
  </p>
  <p>
    Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nam congue tortor
    eget pulvinar lobortis. Vestibulum ante ipsum primis in faucibus orci luctus
    et ultrices posuere cubilia Curae; Nam ac dolor augue. Pellentesque mi mi,
    laoreet et dolor sit amet, ultrices varius risus. Nam vitae iaculis elit.
    Aliquam mollis interdum libero. Sed sodales placerat egestas. Vestibulum ut
    arcu aliquam purus viverra dictum vel sit amet mi. Duis nisl mauris, aliquam
    sit amet luctus eget, dapibus in enim. Sed velit augue, pretium a sem
    aliquam, congue porttitor tortor. Sed tempor nisl a lorem consequat, id
    maximus erat aliquet. Sed sagittis porta libero sed condimentum. Aliquam
    finibus lectus nec ante congue rutrum. Curabitur quam quam, accumsan id
    ultrices ultrices, tempor et tellus.
  </p>
  <div class="box" id="one">One</div>
</div>
```

CSS

CSS Play

```
* {
  box-sizing: border-box;
}

.box {
  width: 100px;
  height: 100px;
  background: red;
  color: white;
}

#one {
  position: fixed;
  top: 80px;
  left: 10px;
  background: blue;
}

.outer {
  width: 500px;
  height: 300px;
  overflow: scroll;
  padding-left: 150px;
}
```

Result

Play

Sticky positioning

Sticky positioning can be thought of as a hybrid of relative and fixed positioning when its nearest scrolling ancestor is the viewport. A stickily positioned element is treated as relatively positioned until it crosses a specified threshold, at which point it is treated as fixed until it reaches the boundary of its parent. For example:

CSS Play

```css
#one {
  position: sticky;
  top: 10px;
}
```

The above CSS rule would position the element with id *one* relatively until the viewport was scrolled such that the element would be less than 10 pixels from the top. Beyond that threshold, the element would be fixed to 10 pixels from the top.

A common use for sticky positioning is for the headings in an alphabetized list. The "B" heading will appear just below the items that begin with "A" until they are scrolled offscreen. Rather than sliding offscreen with the rest of the content, the "B" heading will then remain fixed to the top of the viewport until all the "B" items have scrolled offscreen, at which point it will be covered up by the "C" heading, and so on.

You must specify a threshold with at least one of `top`, `right`, `bottom`, or `left` for sticky positioning to behave as expected. Otherwise, it will be indistinguishable from relative positioning.

HTML

HTML Play

```html
<dl>
  <div>
```

```
    <dt>A</dt>
    <dd>Andrew W.K.</dd>
    <dd>Apparat</dd>
    <dd>Arcade Fire</dd>
    <dd>At The Drive-In</dd>
    <dd>Aziz Ansari</dd>
  </div>
  <div>
    <dt>C</dt>
    <dd>Chromeo</dd>
    <dd>Common</dd>
    <dd>Converge</dd>
    <dd>Crystal Castles</dd>
    <dd>Cursive</dd>
  </div>
  <div>
    <dt>E</dt>
    <dd>Explosions In The Sky</dd>
  </div>
  <div>
    <dt>T</dt>
    <dd>Ted Leo &amp; The Pharmacists</dd>
    <dd>T-Pain</dd>
    <dd>Thrice</dd>
    <dd>TV On The Radio</dd>
    <dd>Two Gallants</dd>
  </div>
</dl>
```

CSS

CSS Play

```css
* {
  box-sizing: border-box;
}

dl > div {
  background: #fff;
  padding: 24px 0 0 0;
}

dt {
  background: #b8c1c8;
  border-bottom: 1px solid #989ea4;
  border-top: 1px solid #717d85;
  color: #fff;
  font:
    bold 18px/21px Helvetica,
    Arial,
    sans-serif;
  margin: 0;
  padding: 2px 0 0 12px;
  position: -webkit-sticky;
  position: sticky;
  top: -1px;
}

dd {
  font:
    bold 20px/45px Helvetica,
    Arial,
    sans-serif;
  margin: 0;
  padding: 0 0 0 12px;
  white-space: nowrap;
}

dd + dd {
  border-top: 1px solid #ccc;
}
```

Result

Play

Specifications

Specification
[CSS Positioned Layout Module Level 3](#) [# position-property](#)

Browser compatibility

[Report problems with this compatibility data on GitHub](#)

	Chrome	Edge	Firefox	Opera	Safari	Chrome Android	Firefox for Android	Opera Android	Safari on iOS	Samsung Internet	WebView Android
`position`	1	12	1	4	1	18	4	14	1	1.0	4.4
`absolute`	1	12	1	15	1	18	4	14	1	1.0	4.4
Absolutely-positioned flex children	52	12	52	39	11	52	52	41	11	6.0	52
`fixed`	1	12	1	4	1	18	4	14	1	1.0	4.4
Table elements as `sticky` positioning containers	56	16	59	43	8	56	59	43	8	6.0	56
`relative`	1	12	1	15	1	18	4	14	1	1.0	4.4
`static`	1	12	1	15	1	18	4	14	1	1.0	4.4
`sticky`	56	16	32	43	13	56	32	43	13	6.0	56

Tip: you can click/tap on a cell for more information.

Full support See implementation notes. Requires a vendor prefix or different name for use.

Has more compatibility info.

See also

- [Learn CSS: Positioning]

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