

How can the CSS `scroll()` function be used to create **parallax effects**?

**parallax effects**

# parallax effects

## Purpose

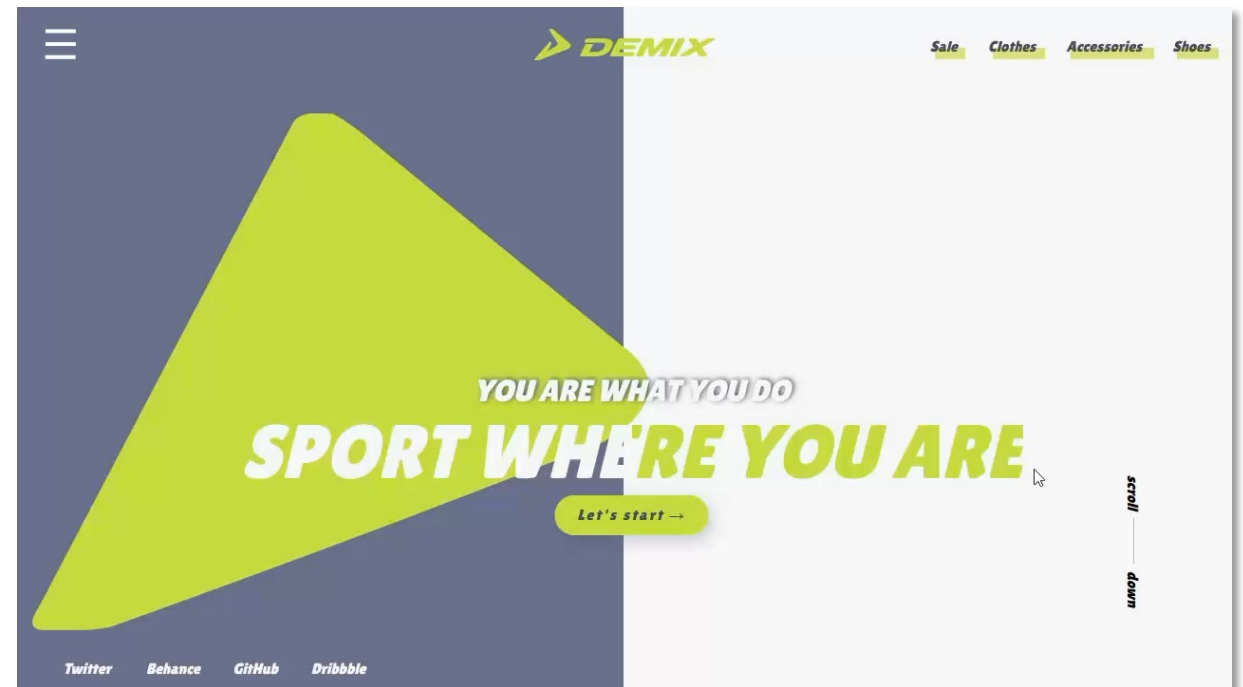
create an illusion of visual depth across different layers on the page when scrolling

## Parallel

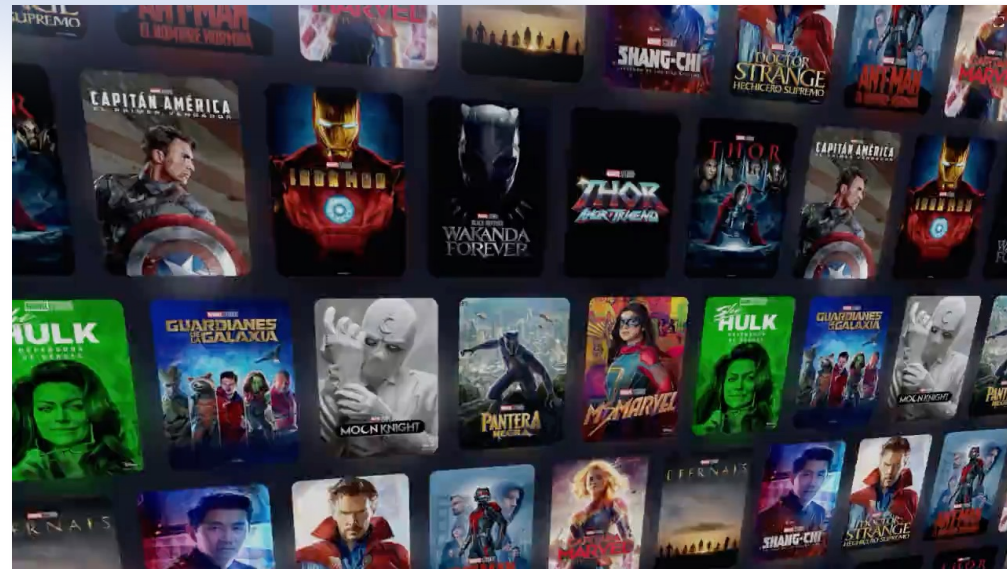
occurring or existing at the same time or in a similar way; corresponding.

## Parallax scrolling

- Background content (i.e. an image) moves at a different speed than the foreground content while scrolling.
- Background image will be held in place or move slowly while the images and text on the page scroll normally.



# parallax effects



# How to create parallax effect with CSS?

```
body, html {  
  height: 100%;  
}  
  
.parallax {  
  /* The image used */  
  background-image: url("img_parallax.jpg");  
  
  /*Makes the image fit the whole viewport*/  
  height: 100%;  
  
  /* Create the parallax scrolling effect */  
  background-attachment: fixed;  
  background-position: center;  
  background-repeat: no-repeat;  
  background-size: cover;  
}  
  
<!-- Container element -->  
<div class="parallax"></div>
```

1. Set the height of "body, html" to 100%
2. Place the background image in a container element
3. Set the height of the image to fit the whole viewport
4. Set the background image properties
5. Identify the container element

# How to create parallax effect with CSS?

```
body, html {  
  height: 100%;  
}  
  
.parallax {  
  /* The image used */  
  background-image: url("img_parallax.jpg");  
  
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  background-attachment: fixed;  
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}  
  
<!-- Container element -->  
<div class="parallax"></div>
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1. Set the height of "body, html" to 100%
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3. Set the height of the image to fit the whole viewport
4. Set the background image properties
5. Identify the container element

```
/* Create the parallax scrolling effect */
```

```
background-attachment: fixed;
```

```
background-position: center;  
background-repeat: no-repeat;  
background-size: cover;
```

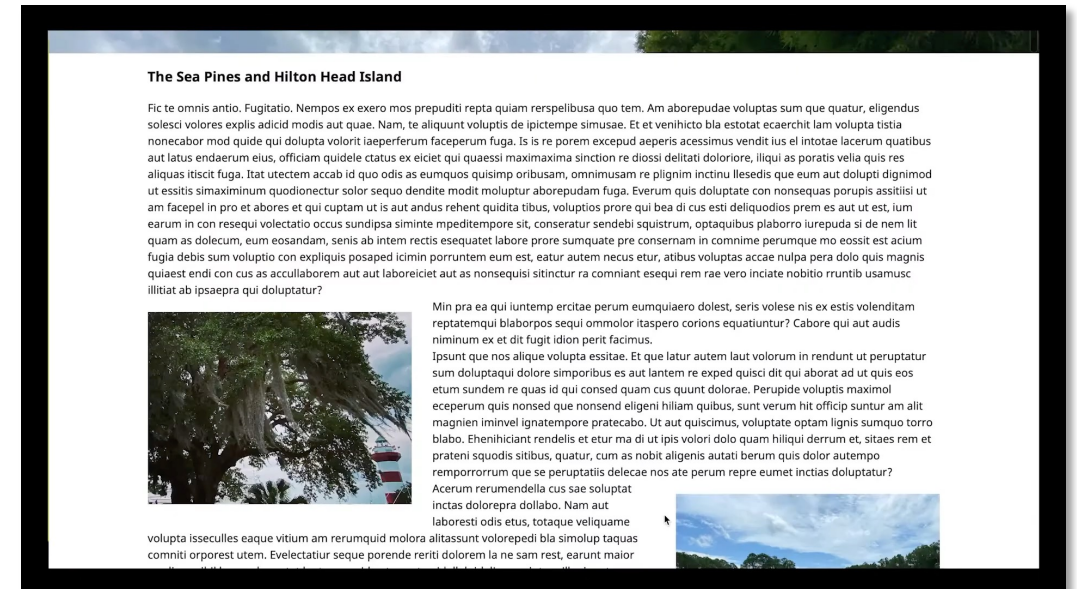
## How to create parallax effect with CSS?

Visible area within the browser window or on a device screen without scrolling.

**Purpose** Determines if a background image's position is fixed within the **viewport**, or scrolls with its containing block.

**Values** `background-attachment: scroll; /* Default */`

- Background image scrolls along with the content when the element is scrolled.
- Background image scrolls with viewport but not with container
- Background image will scroll with the page.
- Background image does not scroll with contents.



```
background-attachment: local;
```

```
background-attachment: fixed;
```

```
/* Create the parallax scrolling effect */
```

```
background-attachment: fixed;
```

```
background-position: center;  
background-repeat: no-repeat;  
background-size: cover;
```

## How to create parallax effect with CSS?

Visible area within the browser window or on a device screen without scrolling.

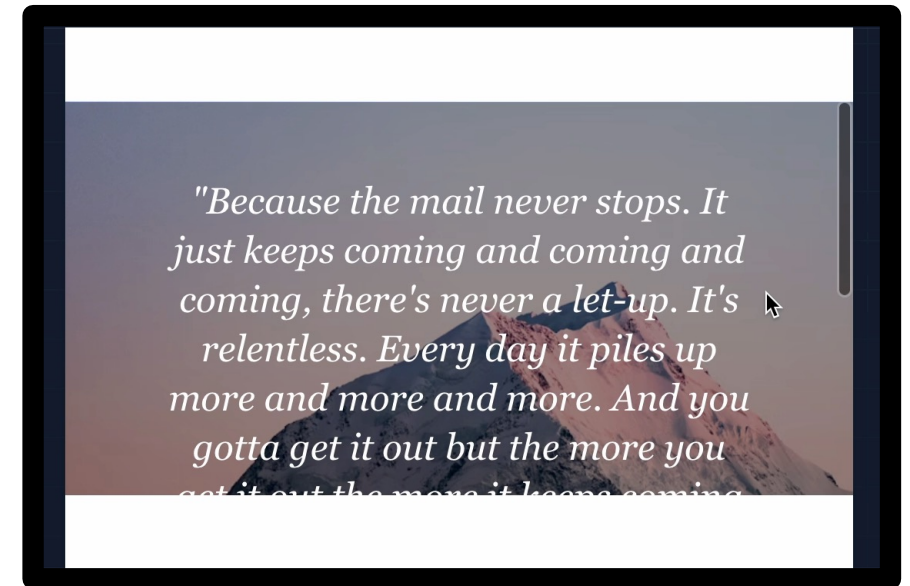
**Purpose** Determines if a background image's position is fixed within the **viewport**, or scrolls with its containing block.

## Values

```
background-attachment: scroll; /* Default */
```

```
background-attachment: local;
```

- Background image scrolls along with the content of the element, similar to scroll
- If the element has a scrolling mechanism (e.g., `overflow: auto`), the background scrolls with the element's contents instead of the viewport.
- This behaviour is not widely supported by all browsers.



```
background-attachment: fixed;
```



```
/* Create the parallax scrolling effect */
```

```
background-attachment: fixed;
```

```
background-position: center;  
background-repeat: no-repeat;  
background-size: cover;
```

## How to create parallax effect with CSS?

Visible area within the browser window or on a device screen without scrolling.

**Purpose** Determines if a background image's position is fixed within the **viewport**, or scrolls with its containing block.

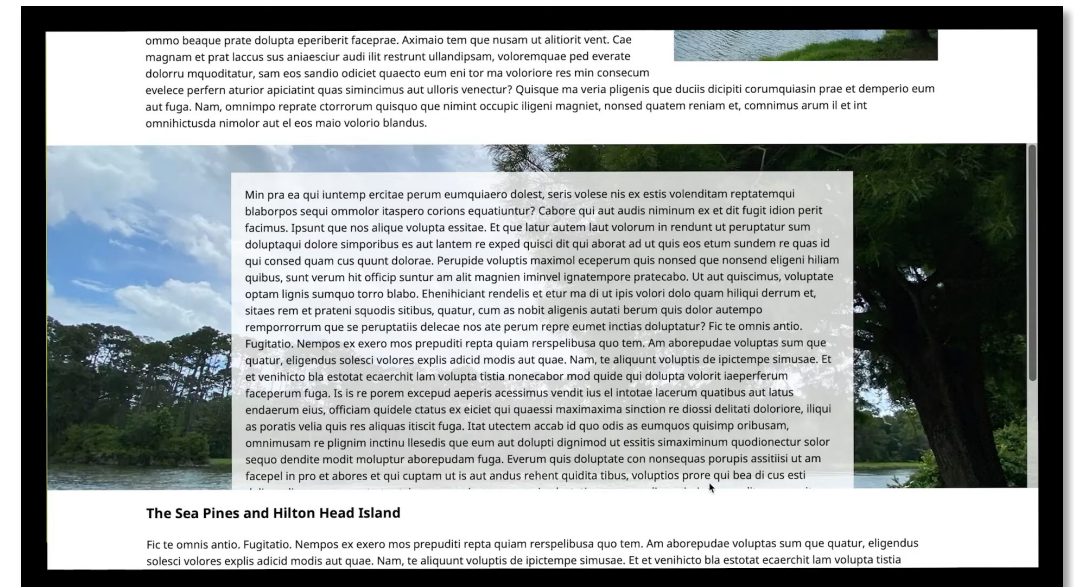
## Values

```
background-attachment: scroll; /* Default */
```

```
background-attachment: local;
```

```
background-attachment: fixed;
```

- Background image remains fixed in place relative to viewport
- Background image will not scroll with the page.
- Background image does not move with the element, even the element has a scrolling mechanism.



```
/* Create the parallax scrolling effect */
```

```
background-attachment: fixed;
```

```
background-position: center;
```

```
background-repeat: no-repeat;
```

```
background-size: cover;
```

## How to create parallax effect with CSS?

**Purpose** Defines an x/y coordinate, to place an item relative to the edges of an element's box.

### Values

```
background-position: top;
```

```
background-position: bottom;
```

```
background-position: left;
```

```
background-position: right;
```

```
background-position: center;
```

```
background-position: 10px 20px;
```

First value = x position and second = y position.

```
background-position: 10px;
```

Second value is assumed to be centre.

```
background-position: bottom 10px right 20px;
```

If three or four values are used, the length-percentage values are offsets for the preceding keyword value(s).

```
background-position: top right 10px;
```

```
/* Create the parallax scrolling effect */
```

```
background-attachment: fixed;
```

```
background-position: center;
```

```
background-repeat: no-repeat;
```

```
background-size: cover;
```

## How to create parallax effect with CSS?

### Purpose

To enable a background image to be repeated along the horizontal and vertical axes, or not repeated at all. By default, the repeated images are clipped to the size of the element.

### Values

```
background-repeat: repeat; /* Default */
```

- The image is repeated as much as needed to cover the whole background image painting area. The last image will be clipped if it doesn't fit.



```
background-repeat: repeat-x;
```

```
background-repeat: repeat-y;
```

```
background-repeat: space;
```

```
background-repeat: round;
```

```
background-repeat: no-repeat;
```

```
/* Create the parallax scrolling effect */
```

```
background-attachment: fixed;
```

```
background-position: center;
```

```
background-repeat: no-repeat;
```

```
background-size: cover;
```

## How to create parallax effect with CSS?

### Purpose

To enable a background image to be repeated along the horizontal and vertical axes, or not repeated at all. By default, the repeated images are clipped to the size of the element.

### Values

```
background-repeat: repeat; /* Default */
```

```
background-repeat: repeat-x;
```

- The image is repeated along the x-axis as much as needed to cover the whole horizontal image painting area.
- The last image will be clipped if it doesn't fit.



```
background-repeat: repeat-y;
```

```
background-repeat: space;
```

```
background-repeat: round;
```

```
background-repeat: no-repeat;
```

```
/* Create the parallax scrolling effect */
```

```
background-attachment: fixed;
```

```
background-position: center;
```

```
background-repeat: no-repeat;
```

```
background-size: cover;
```

## How to create parallax effect with CSS?

### Purpose

To enable a background image to be repeated along the horizontal and vertical axes, or not repeated at all. By default, the repeated images are clipped to the size of the element.

### Values

```
background-repeat: repeat; /* Default */
```

```
background-repeat: repeat-x;
```

```
background-repeat: repeat-y;
```

- The image is repeated along the y-axis as much as needed to cover the whole vertical image painting area.
- The last image will be clipped if it doesn't fit.



```
background-repeat: space;
```

```
background-repeat: round;
```

```
background-repeat: no-repeat;
```

```
/* Create the parallax scrolling effect */
```

```
background-attachment: fixed;
```

```
background-position: center;
```

```
background-repeat: no-repeat;
```

```
background-size: cover;
```

## How to create parallax effect with CSS?

### Purpose

To enable a background image to be repeated along the horizontal and vertical axes, or not repeated at all. By default, the repeated images are clipped to the size of the element.

### Values

```
background-repeat: repeat; /* Default */
```

```
background-repeat: repeat-x;
```

```
background-repeat: repeat-y;
```

```
background-repeat: space;
```

- The image is repeated as much as possible without clipping.
- The first and last images are pinned to either side of the element, and whitespace is distributed evenly between the images.
- The background-position property is ignored unless only one image can be displayed without clipping.



```
background-repeat: round;
```

```
background-repeat: no-repeat;
```

```
/* Create the parallax scrolling effect */
```

```
background-attachment: fixed;
```

```
background-position: center;
```

```
background-repeat: no-repeat;
```

```
background-size: cover;
```

## How to create parallax effect with CSS?

### Purpose

To enable a background image to be repeated along the horizontal and vertical axes, or not repeated at all. By default, the repeated images are clipped to the size of the element.

### Values

```
background-repeat: repeat; /* Default */
```

```
background-repeat: repeat-x;
```

```
background-repeat: repeat-y;
```

```
background-repeat: space;
```

```
background-repeat: round;
```

- As the allowed space increases in size, the repeated images will stretch (leaving no gaps) until there is room (space remaining  $\geq$  half of the image width) for another one image to be added.
- When the next image is added, all of the current ones compress to allow room.



```
background-repeat: no-repeat;
```

```
/* Create the parallax scrolling effect */
```

```
background-attachment: fixed;
```

```
background-position: center;
```

```
background-repeat: no-repeat;
```

```
background-size: cover;
```

## How to create parallax effect with CSS?

### Purpose

To enable a background image to be repeated along the horizontal and vertical axes, or not repeated at all. By default, the repeated images are clipped to the size of the element.

### Values

```
background-repeat: repeat; /* Default */
```

v

```
background-repeat: repeat-x;
```

v

```
background-repeat: repeat-y;
```

v

```
background-repeat: space;
```

v

```
background-repeat: round;
```

v

```
background-repeat: no-repeat;
```

^

- The image is not repeated (and hence the background image painting area will not necessarily be entirely covered).
- The position of the non-repeated background image is defined by the background-position CSS property.





```
background-attachment: fixed;  
background-position: center;  
background-repeat: no-repeat;
```

```
background-size: cover;
```

## How to create parallax effect with CSS?

**Purpose** Determines the size of a background image's relative to its containing block.

### Values

```
background-size: auto; /* Default */
```

- Background image will be used at its intrinsic proportions are maintained.
- If the background image is smaller than the element's dimensions, it will be repeated to fill the background area by default



```
background-size: cover;
```

```
background-size: contain;
```

```
background-attachment: fixed;  
background-position: center;  
background-repeat: no-repeat;
```

```
background-size: cover;
```

## How to create parallax effect with CSS?

**Purpose** Determines the size of a background image's relative to its containing block.

### Values

```
background-size: auto; /* Default */
```

```
background-size: cover;
```

- Scales the image (while preserving its ratio) to the smallest possible size to fill the container (that is: both its height and width completely cover the container), leaving no empty space.
- If the proportions of the background differ from the element, the image is cropped either vertically or horizontally.



```
background-size: contain;
```

```
background-attachment: fixed;  
background-position: center;  
background-repeat: no-repeat;
```

```
background-size: cover;
```

## How to create parallax effect with CSS?

**Purpose** Determines the size of a background image's relative to its containing block.

### Values

```
background-size: auto; /* Default */
```

```
background-size: cover;
```

```
background-size: contain;
```

- Scales the image as large as possible within its container without cropping or stretching the image.
- If the container is larger than the image, this will result in image tiling, unless the background-repeat property is set to no-repeat.



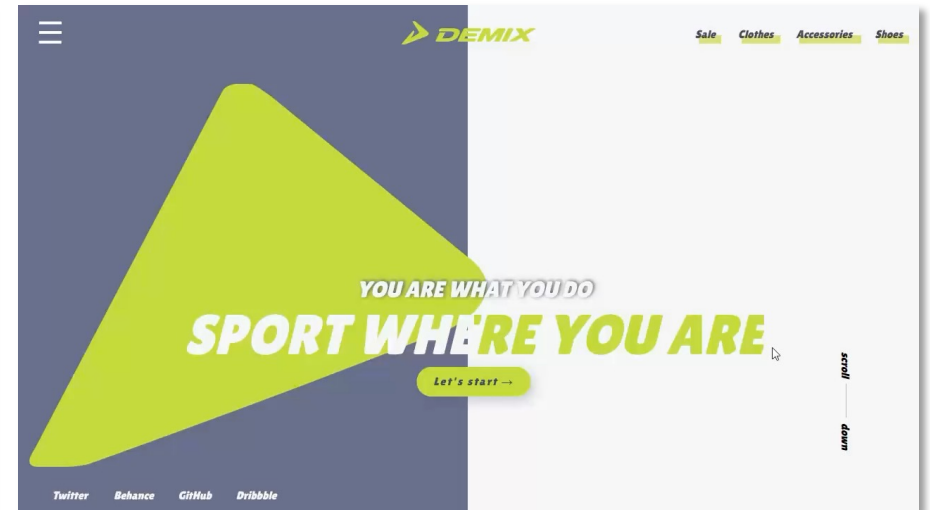
```
/* Create the parallax scrolling effect */
```

```
background-attachment: fixed;  
background-position: center;  
background-repeat: no-repeat;  
background-size: cover;
```

In today's world, few desserts evoke the same sense of delight and nostalgia as a scoop of creamy, flavorful ice cream. Whether enjoyed in a cone on a hot summer day or as a decadent treat after dinner, ice cream holds a special place in the hearts of people around the globe. But how did this beloved frozen dessert come to be? Let's take a journey through time to uncover the sweet story of ice cream.

The origins of ice cream can be traced back thousands of years to ancient civilizations such as China, Persia, and Rome. While the exact origins are shrouded in mystery, historical records suggest that these early cultures enjoyed frozen desserts made from snow, ice, and various flavorings. In China, for example, emperors are said to have enjoyed a frozen mixture of milk and rice as early as 200 BCE.

## How to create parallax effect with CSS?



```
/* Create the parallax scrolling effect */
```

```
background-attachment: fixed;  
background-position: center;  
background-repeat: no-repeat;  
background-size: cover;
```

It was during the Middle Ages that frozen desserts began to gain popularity in Europe, where recipes for flavored ices and sorbets became common among the nobility. However, it wasn't until the Renaissance period in Italy that something resembling modern ice cream began to emerge. Italian chefs developed recipes for "cream ice," which consisted of milk, cream, sugar, and flavorings like fruit or nuts. These frozen delicacies quickly became a favorite among the wealthy elite.

As trade routes expanded and global exploration flourished, ice cream began to spread to other parts of Europe and eventually to the American colonies. In the 18th century, ice cream became more widely available thanks to advancements in refrigeration techniques and the establishment of ice houses. Ice cream parlors and vendors

## How to create parallax effect with CSS?

