

# Lesson:

# Background



# Topics

- Background color
- Background image
- Background repeat
- Background attachment
- Background position
- Background shorthand

In CSS, the background property is used to set one or more background properties for an element. It is a shorthand property that allows you to set multiple background properties in a single declaration.

The different properties of the CSS background property that can be used to style the background of an HTML element are -

## 1. Background color

CSS background-color is a property used to set the background color of an element on a webpage. It allows you to choose a specific color that will fill the background area behind the content of the element.

### Example

#### Index.html:

```
Unset
<p>This is a paragraph with a colored background.</p>
```

#### Style.css:

```
Unset
p {
    background-color : lightblue;
    padding : 10px; /* Just to create some space around the
    text for better visibility */
}
```

#### Browser output:

```
This is a paragraph with a colored background.
```

we apply the CSS background-color property to the p element and set the value to lightblue. As a result, the background behind the paragraph text will be filled with a light blue color.

## 2. Background image

CSS background-image is a property used to set an image as the background of an element on a webpage. It allows you to display a picture or graphic behind the content of the element.

**Style.css:**

```
Unset
Background-image : url(<image-url>);
```

<image-url> is the path to the image you want to use as the background. It can be a relative path (e.g., "images/my-background.jpg") or an absolute URL (e.g., "<https://picsum.photos/200/300>").

**Example**

**index.html**

```
Unset
<div class="my-div">
    <p>
        This is a div with a background image.
    </p>
</div>
```

**style.css**

```
Unset
.my-div {
    background-image: url("https://picsum.photos/500/300");
}
```

**Browser output:**



We apply the CSS background-image property to the div with the class "my-div" and set the value to the URL of the image we want to use as the background and also set the height 100px to "my-div" to see the background properly.

### 3. Background repeat

CSS background-repeat is a property used to control how a background image is repeated within an element when the image's size is smaller than the element's size. It allows you to decide whether the background image should repeat horizontally, vertically, both, or not at all.

#### Syntax

Unset

```
background-repeat: repeat | repeat-x | repeat-y | no-repeat;
```

**repeat:** This is the default value. It means the background image will be tiled and repeated both horizontally and vertically to cover the entire background area.

**repeat-x:** The background image will only repeat horizontally (left to right) to cover the width of the element.

**repeat-y:** The background image will only repeat vertically (top to bottom) to cover the height of the element.

**no-repeat:** The background image will not be repeated, and it will appear only once in the background.

#### Example

##### index.html

```
Unset
<div class="my-div">
    <p>
        This is a div with a background image.
    </p>
</div>
```

##### Example for repeat-x

##### style.css

```
Unset
.my-div {
    background-image: url("https://picsum.photos/200/300");
    background-repeat: repeat-x;
    height: 200px;
}
```

**Browser output:**

This is a div with a background image.

**Example for repeat-y****style.css**

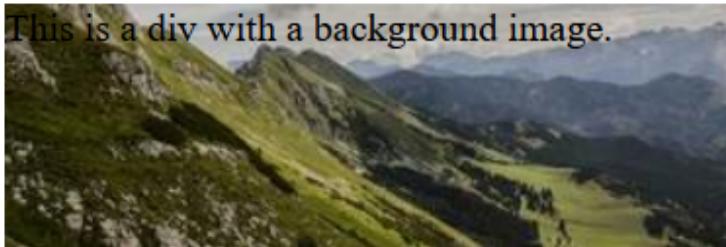
```
Unset  
.my-div {  
    background-image: url("https://picsum.photos/300/100");  
    background-repeat:repeat-y;  
    height: 200px;  
}
```

**Browser output:**

This is a div with a background image.

**Example for no-repeat****style.css**

```
Unset  
.my-div {  
    background-image: url("https://picsum.photos/300/100");  
    background-repeat:no-repeat;  
    height: 200px;  
}
```

**Browser output:**

## 4. Background attachment

CSS **background-attachment** is a property that controls whether a background image scrolls with the content or remains fixed in its position as the user scrolls the webpage. It determines whether the background image is attached to the viewport or to the element's content

### Syntax

```
Unset  
Background-attachment: scroll | fixed;
```

**scroll:** This is the default value. The background image will scroll along with the content as the user scrolls down or up the webpage. It will move relative to the element and will stay positioned behind the content.

**fixed:** The background image will remain fixed in its position within the viewport, regardless of the user's scrolling. It will appear as if the background is attached to the browser window rather than the element.

### Example:

#### index.html

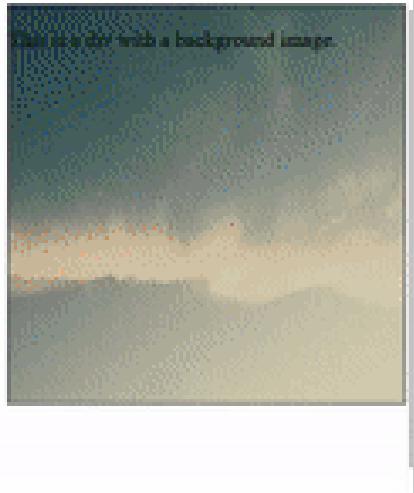
```
Unset  
<div class="my-div">  
  <p>This is a div with a fixed background image.</p>  
</div>
```

### Example for background-attachment: scroll;

#### style.css

```
Unset
.my-div {
  background-image: url("https://picsum.photos/300/300");
  background-repeat: no-repeat; /* The image will not repeat */
  background-attachment: scroll; /* The image will remain fixed
in the viewport */
  height: 300px;
  border: solid 1px;
}
```

#### Browser output:

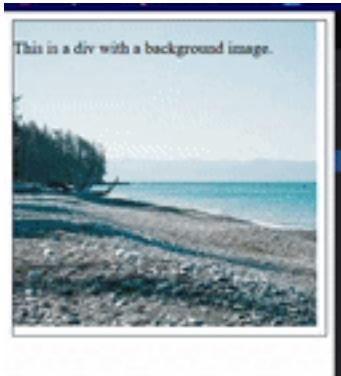


### Example for background-attachment: fixed;

#### style.css

```
Unset
.my-div {
  background-image: url("https://picsum.photos/300/300");
  background-repeat: no-repeat; /* The image will not repeat */
  background-attachment: fixed; /* The image will remain fixed in
the viewport */
  height: 300px;
  border: solid 1px;
}
```

## Browser output:



we apply the CSS background-attachment property to the div with the class "my-div" and set the value to fixed. As a result, the background image will stay in a fixed position as the user scrolls the webpage. And we also added height and border to "my-div" to understand this example properly. Note: we will learn about css border property in a later section in more detail.

## 4. Background attachment

CSS **background-attachment** is a property that controls whether a background image scrolls with the content or remains fixed in its position as the user scrolls the webpage. It determines whether the background image is attached to the viewport or to the element's content

### Syntax

Unset

```
Background-position: <position>;
```

**<position>** can be defined using different units and values to position the background image. It can use keywords such as **top, bottom, left, right, and center**, or it can use **specific length** or **percentage** values.

### Example:

#### index.html

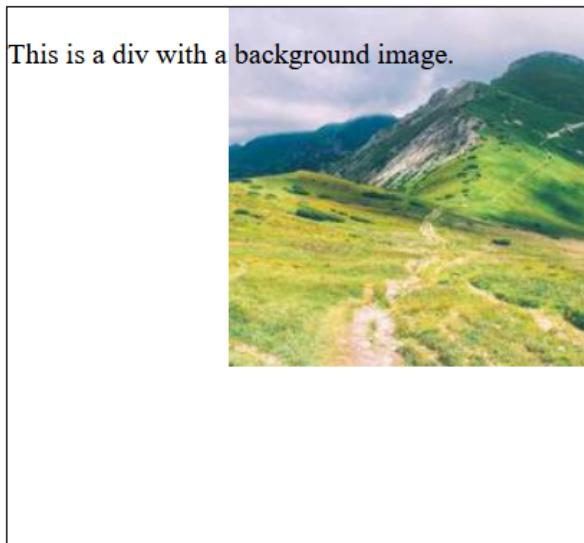
```
Unset
<div class="my-div">
  <p>This is a div with a positioned background image.</p>
</div>
```

#### Style.css

```
Unset
.my-div {
  background-image: url("https://picsum.photos/200/300");
  background-repeat: no-repeat; /* The image will not repeat */
```

```
background-position: top right; /* The image will be positioned
at the top right corner */
height: 300px;
border: solid 1px;
}
```

**Browser output:**



we apply the CSS background-position property to the div with the class "my-div" and set the value to top right. This will position the background image at the top right corner of the element

**Here are some examples of different background-position values:**

**1. Example for position bottom**

**Style.css**

```
Unset
.my-div {
  background-image: url("https://picsum.photos/200/300");
  background-repeat: no-repeat; /* The image will not repeat */
  background-position: bottom; /* The image will be positioned at
the top right corner */
  height: 300px;
  border: solid 1px;
}
```

**Browser output:**

This is a div with a background image.

**2. Example for percentage values****Style.css**

```
Unset
.my-div {
  background-image: url("https://picsum.photos/200/300");
  background-repeat: no-repeat; /* The image will not repeat */
  background-position: 50% 10%; /* The image will be positioned at
the top right corner */
  height: 300px;
  border: solid 1px;
}
```

**Browser output:**

This is a div with a background image.



## 6. Background shorthand

CSS background shorthand is a way to set multiple background-related properties in a single line of code. Instead of writing separate lines for each background property (like background-image, background-repeat, background-position, etc.), you can combine them into one concise declaration.

### Syntax

```
Unset
background: <background-color> <background-image>
<background-repeat> <background-attachment>
<background-position>;
```

### Example:

#### index.html

```
Unset
<div class="my-div">
  <p>This is a div with a background image using shorthand.</p>
</div>
```

#### index.html

```
Unset
.my-div {
  background: #f2f2f2 url("https://picsum.photos/200/300")
no-repeat top right;
  padding: 20px; /* Just to create some space around the content
for better visualization */
  color: black; /* Adding black text color to make it visible on
top of the background */
}
```

### Browser output:

