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Backgrounds & Gradients

AIM Code School
By: Vanessa Kasun

Importance & Overview

It's quite obvious why backgrounds have a significant impact of the design and feel of a website. Creating a website that looks good and feels good has a considerable effect on your websites audience.

In today's lesson we are going to look at how to assign different types of backgrounds, including gradients, to elements. Well also practice with a handful of CSS3 properties specific to backgrounds.

Adding Background Color

- The fastest method to applying a background to an element is to add a single-color background using the background or background-color property.
- colors and images in shorthand form.

Background-color is used strictly for setting solid background colors.

The **background** property accepts

```
div {
        background-color: #b2b2b2;
3
```



Adding Background Images

In addition to adding background colors to elements, it is also possible to make the background an actual image. We can do that by using the background property with the value being the image src path wrapped inside the identifier, url() function.

```
div {
    background-image: url("alert.png");
}
```



Background-Image properties

Adding a background image solely using a url value can provide undesirable results, as by default the background image will repeat horizontally and vertically from the top left of the given element to fill up the element's background. Thankfully we can use the background-repeat and background-position properties to control how or even whether the image repeats.

background -repeat Background-position background-attachment

Background Repeat

This property sets if/how a background image will be repeated. By default, a background-image is repeated both vertically and horizontally.

</html>

TIP: The background image is placed according to the background-position property. If no background-position is specified, the image is always placed at the element's top left corner.

Property Values for background repeat are:

Repeat space

Repeat-x round

Repeat-y initial

No-repeat inherit

```
<!DOCTYPE html>
<h+m1>
                                      The background-repeat
<head>
<style>
                                      Property
body {
 background-image:
url("paper.gif");
                                      Here, the background image is repeated only vertically.
 background-repeat: repeat-y;
</style>
</head>
<body>
<h1>The background-repeat
Property</h1>
Here, the background image is
repeated only vertically.
</body>
```

Background Position

By default, background images are positioned at the left top corner of an element. However, by using the background-position property, we can control exactly where the background image is placed relative to that corner

To set a background-position value, we can use the top, right, bottom, left, and center keywords, pixels, percentages, or any length measurement. Keywords and percentages work very similarly. The keyword value left top is identical to the percentage value 0 0, which will keep an image positioned at the left top corner of the element. The keyword value right bottom is identical to the percentage value 100% 100%, which will position an image in the right bottom corner of the element.

Using pixels for a background-position value is also common, as pixels give us precise control over where our background will be positioned.

```
background-position: 25% 75%;
```

```
0 0 100% 0 left top right top
```

```
0 100% 100% 100% right bottom
```

Background Attachment

The background attachment css property sets whether a background images position is fixed within the viewport, or scroll with its containing block. The different values this property accepts are:

- 1. Scroll- The background is fixed relative to the element itself and does not scroll with its contents. (It is effectively attached to the element's border.)
- 2. Fixed- The background is fixed relative to the viewport. Even if an element has a scrolling mechanism, the background doesn't move with the element. (This is not compatible with background-clip: text.)
- 3. Local- The background is fixed relative to the element's contents. If the element has a scrolling mechanism, the background scrolls with the element's contents, and the background painting area and background positioning area are relative to the scrollable area of the element rather than to the border framing them.

Example of a fixed background-attachment

Background-image practice

Please take note that there is both a relative value and an absolute value within the background-position value. The first value, 20 pixels, is the horizontal value, positioning the background-image 20 pixels from the left of the element. The second value, 50%, is the vertical value, which vertically centers the background-image.

Let's practice in codepen!

Multiple Background Images

CSS allows you to add multiple background images through the **background-image** property.

The different background images are separated by commas, and the images are stacked on top of each other, where the first image is closest in the viewer.

The following example has two background images, the first image is a flower (aligned to the bottom and right) and the second image is a paper background (aligned to the top-left corner):

```
#example1 {
  background-image: url(img_flwr.gif), url(paper.gif);
  background-position: right bottom, left top;
  background-repeat: no-repeat, repeat;
}
```

A few more background properties

- 1. Background-size
- 2. Background-clip
- 3. Background-origin

The *background-size* property lets us change the size of the background image. The *background-clip* and *background-origin* properties let us control where the background image is cropped and where a background image is contained within the element. However, the background-origin will be ignored if we set the background-attachment to fixed.

Let's go to codepen and practice with an example. See Speaker Notes for instructions.

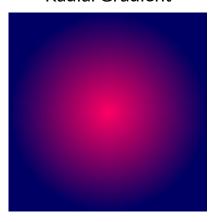
Designing Gradient Backgrounds

Gradient Background in css lets you display a smooth transition between two or more specified color. There are two types of gradients one being Linear Gradient which goes down/up/left/right/diagonally. The second being Radial Gradients which are defined by their center.

Linear Gradient



Radial Gradient



<u>Defining Linear & Radial property values in css</u>

Linear Gradient

```
div {
  background: #466368;
  background: -webkit-linear-gradient(#648880, #293f50);
  background:
                 -moz-linear-gradient(#648880, #293f50);
  background:
                      linear-gradient(#648880, #293f50);
```

Radial Gradient

```
div [
  background: #466368;
  background: radial-gradient(#648880, #293f50);
```

If you want to change the direction the code will be slightly different

```
div {
 background: #466368;
 background: linear-gradient(to right bottom, #648880, #293f50);
```

Radial Gradient is a little more in depth that this but we are just going to cover the basics. To find more information on radial gradients visit:

Radial Gradient In Depth

One more things about Linear Gradients

Linear Gradients will transition more than just two colors. We can add multiple colors and the browser will transition between all of them. By default the browser will space the colors evenly unless you specify differently.

```
div {
    background: #648880;
    background: linear-gradient(to right, #f6f1d3, #648880, #293f50);

div {
    background: #648880;
    background: linear-gradient(to right, #f6f1d3, #648880 85%, #293f50);
}
```

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The End

Let's apply our knowledge to our website!