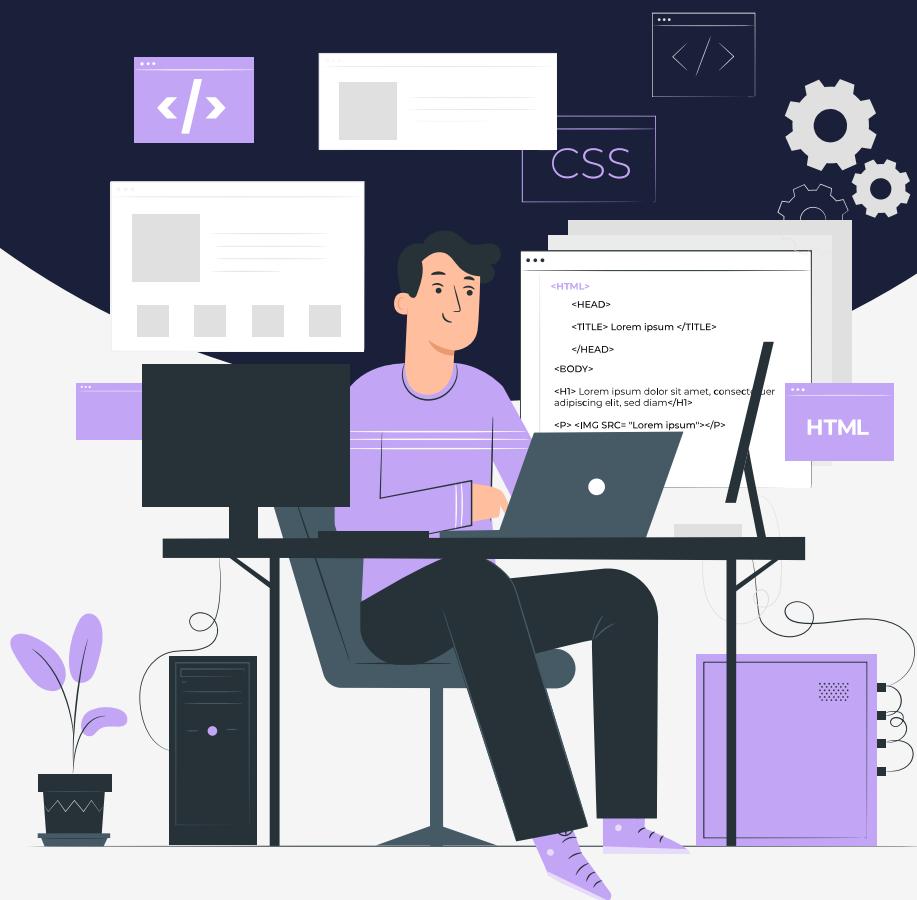


Lesson:

CSS Gradient



Topics Covered

- CSS gradient
- CSS linear gradient.
- CSS radial gradient.

CSS gradient:

A CSS gradient is a way to create a smooth transition between two or more colors on a web page. It is achieved by using a CSS property called "background-image" with the "linear-gradient" or "radial-gradient" function.

CSS linear gradient.

Syntax:

```
background-image: linear-gradient(direction, color-stop1, color-stop2, ...);
```

The "**direction**" parameter specifies the direction of the gradient. It can take values such as "**to right**", "**to left**", "**to top**", "**to bottom**", "**to top left**", "**to top right**", "**to bottom left**", or "**to bottom right**".

The "**color-stop**" parameters specify the colors and positions of the gradient stops. You can specify as many color stops as you like, separated by commas.

The linear gradient can be implemented in the following ways:

Index.html

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <link rel="stylesheet" href=".//style.css" />
    <title>linear gradient</title>
  </head>
  <body>
    <div class="box"></div>
  </body>
</html>
```

Note: We will use the same HTML code for all gradient examples.

Top to bottom:

Top to bottom The linear gradient is the default linear gradient. Let's take an example of a linear gradient that starts from the top. It starts pink and transitions to purple.

style.css

```
.box {  
    height: 50px;  
    background-image: linear-gradient(pink, purple);  
  
    // background-image: linear-gradient(to bottom, pink, purple);  
}
```

Browser output



Left to right:

The following example shows a linear gradient that starts from the left and goes to the right. It starts pink on the left side and transitions to purple.

style.css

```
.box {  
    height: 50px;  
    background-image: linear-gradient(to right, pink, purple);  
}
```

Browser output



Diagonal:

gradient that transitions smoothly between two or more colors diagonally instead of in a straight line. It can add an interesting visual effect to a web page and create a sense of depth.

```
.box {
  height: 50px;
  /* from bottom left to top right */
  background-image: linear-gradient(to top right, pink, violet, purple);
}
```

We can also do “**to top left**”, “**to bottom left**”, “**to bottom right**”.

Browser output:



CSS radial gradient

Syntax:

```
background-image: radial-gradient(shape size at position,
start-color, ..., last-color);
```

The “**shape size**” parameter specifies the shape and size of the gradient. It can take values such as “**circle**”, “**ellipse**”, “**closest-side**”, “**closest-corner**”, “**farthest-side**”, or “**farthest-corner**”. You can also specify the size of the shape by using a length value or a percentage value.

The radial gradient can be implemented in the following ways:

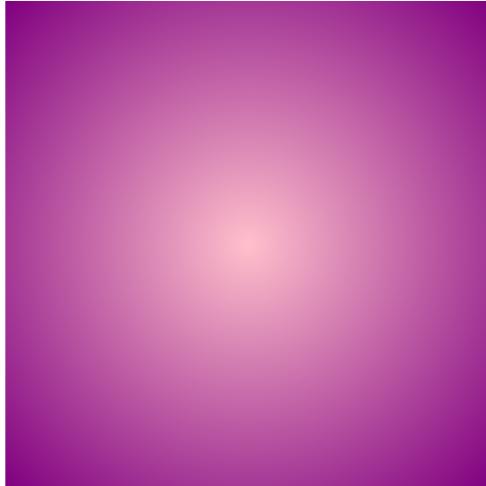
CSS radial-gradient (evenly spaced color stops):

Evenly spaced color stops mean the fade happens at an equal rate, by default, its shape is an ellipse.

style.css

```
.box {
  height: 100px;
  width: 100px;
  background-image: radial-gradient(pink, purple);
}
```

Browser output:



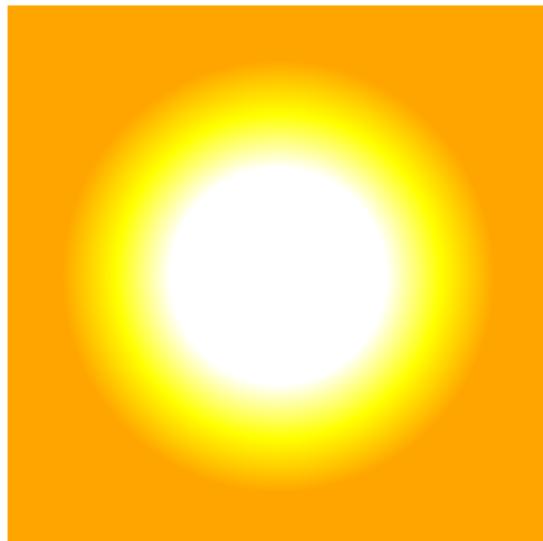
CSS radial-gradient (differently spaced color stops):

You can adjust the spacing between color stops in a CSS radial gradient by specifying position values for each color stop.

style.css

```
.box {  
    height: 100px;  
    width: 100px;  
  
    background-image: radial-gradient(white 20px, yellow 30px, orange 40px);  
  
    /* background-image: radial-gradient(white 20%, yellow 30%, orange 40%); */  
}
```

Browser output:



Set Shape:

The shape parameter defines the shape. The default value is an ellipse. Here are the different values you can use for the "shape size" parameter:

- **circle**: This value creates a circular shape for the gradient.
- **ellipse**: This value creates an elliptical shape for the gradient.
- **closest-side**: This value creates a shape that is a circle or ellipse, depending on the aspect ratio of the element, with its size set to the smallest side of the element.
- **closest-corner**: This value creates a shape that is a circle or ellipse, depending on the aspect ratio of the element, with its size set to the smallest distance from the center of the gradient to the corners of the element.
- **farthest-side**: This value creates a shape that is a circle or ellipse, depending on the aspect ratio of the element, with its size set to the largest side of the element.
- **farthest-corner**: This value creates a shape that is a circle or ellipse, depending on the aspect ratio of the element, with its size set to the largest distance from the center of the gradient to the corners of the element.

The following example shows a radial gradient with the shape of a circle:

style.css

```
.box {  
    height: 100px;  
    width: 100px;  
    background-image: radial-gradient(circle, pink, violet, purple);  
}
```

Browser output:

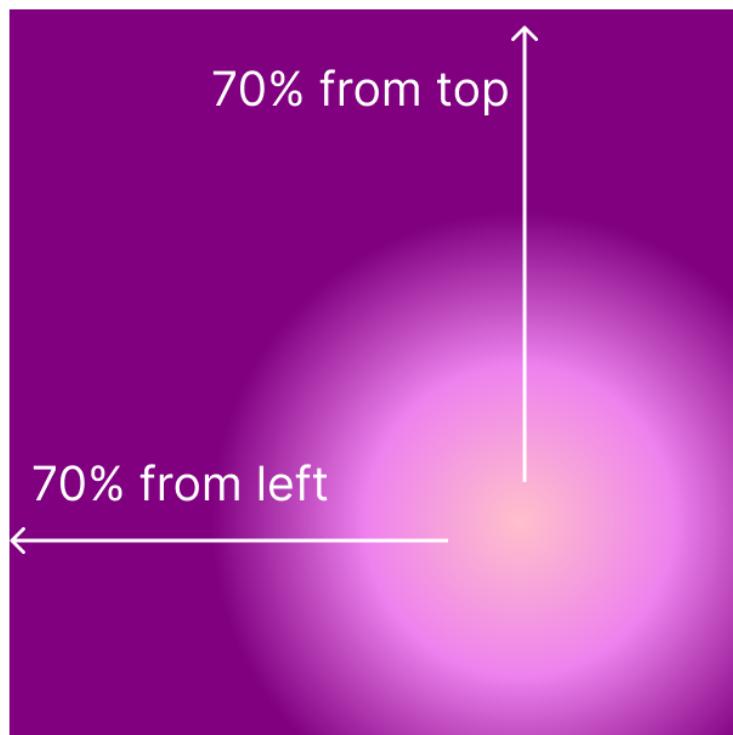


Example of a radial gradient **closest circle**:

style.css

```
.box {
    height: 100px;
    width: 100px;
    background-image: radial-gradient(closest-corner at 70% 55%, pink, violet,
purple);
}
```

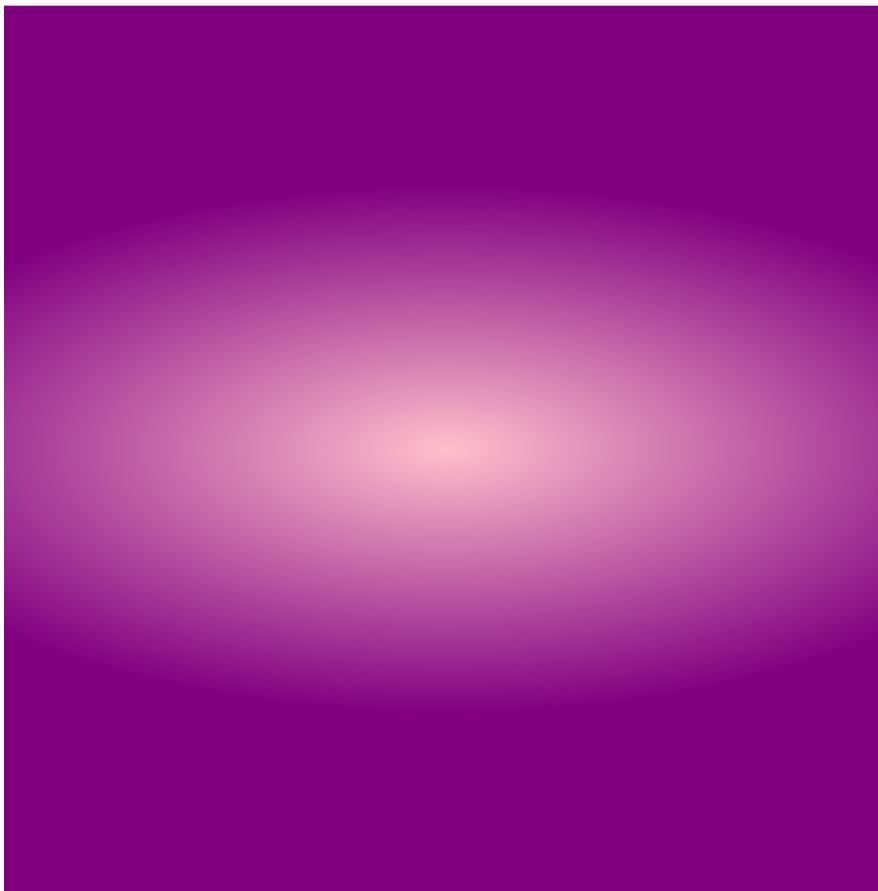
Browser output:



Set the **size of the shape** by using a length or percentage value.

For example

```
.box {
    height: 100px;
    width: 100px;
    background-image: radial-gradient(70% 30%, pink, purple);
/*
    background-image: radial-gradient(70px 30px, pink, purple);
*/
}
```

Browser output:

By adjusting the shape and size of the gradient, you can create a variety of different effects and visual styles.