

CHAPTER TWELVE I

12.1.0 CSS Backgrounds

The CSS background properties are used to add background effects for elements.

In these chapters, you will learn about the following CSS background properties:

- ⇒ `background-color`
- ⇒ `background-image`
- ⇒ `background-repeat`
- ⇒ `background-attachment`
- ⇒ `background-position`
- ⇒ `background` (shorthand property)

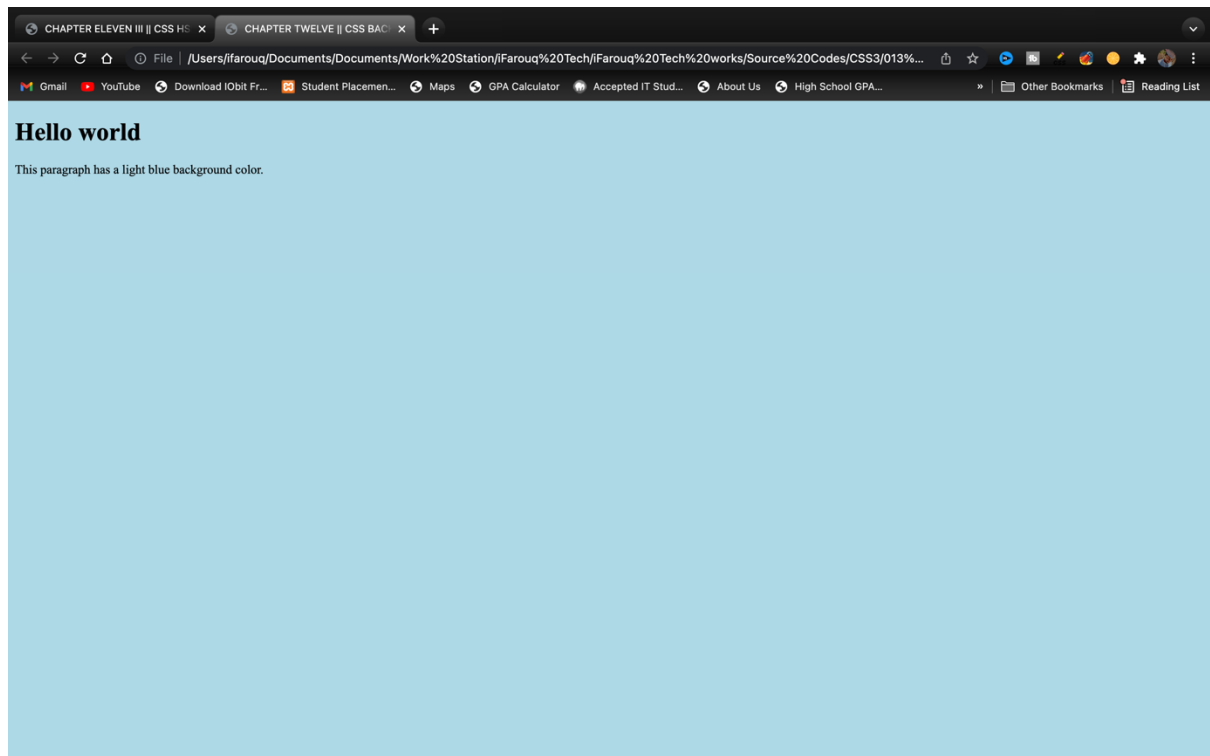
12.1.1 CSS background-color

The `background-color` property specifies the background color of an element.

Example:

The background color of a page is set like this:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      body {
        background-color: lightblue;
      }
    </style>
  </head>
  <body>
    <h1>Hello World! </h1>
    <p>This page has a light blue background color! </p>
  </body>
</html>
```



With CSS, a color is most often specified by:

- ⇒ a valid color name - like "*red*"
- ⇒ a HEX value - like "*#ff0000*"
- ⇒ an RGB value - like "*rgb(255,0,0)*"

Other Elements

You can set the background color for any HTML elements:

Example

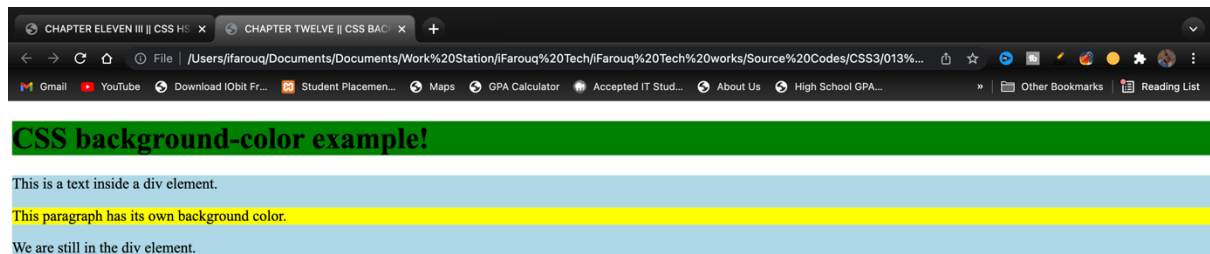
Here, the `<h1>`, `<p>`, and `<div>` elements will have different background colors:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      h1 {
        background-color: green;
      }
```

```

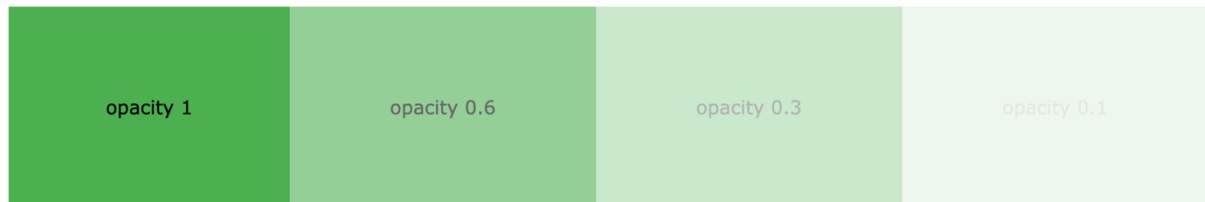
        div {
            background-color: lightblue;
        }
        p {
            background-color: yellow;
        }
    </style>
</head>
<body>
    <h1>CSS background-color example!</h1>
    <div>
        This is a text inside a div element.
    <p>This paragraph has its own background color.</p>
        We are still in the div element.
    </div>
</body>
</html>

```



12.1.2 Opacity / Transparency

The `opacity` property specifies the opacity/transparency of an element. It can take a value from 0.0 - 1.0. The lower value, the more transparent:



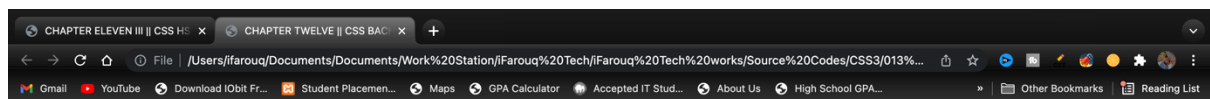
```
<!DOCTYPE html>
<html>
  <head>
    <style>
      div {
        background-color: green;
      }
      div.first {
        opacity: 0.1;
      }
      div.second {
        opacity: 0.3;
      }
      div.third {
        opacity: 0.6;
      }
    </style>
  </head>
  <body>
    <h1>Transparent Boxes</h1>
```

<p>When using the `opacity` property to add transparency to the background of an element, all of its child elements become transparent as well. This can make the text inside a fully transparent element hard to read:</p>

```

<div class="first">
  <h1>opacity 0.1</h1>
</div>
<div class="second">
  <h1>opacity 0.3</h1>
</div>
<div class="third">
  <h1>opacity 0.6</h1>
</div>
<div>
  <h1>opacity 1 (default)</h1>
</div>
</body>
</html>

```



Transparent Boxes

When using the property to add transparency to the background of an element, all of its child elements become transparent as well. this can make the text inside a full transparent element hard to read:



Note: When using the **opacity** property to add transparency to the background of an element, all of its child elements inherit the same transparency. This can make the text inside a fully transparent element hard to read.

12.1.3 Transparency using RGBA

If you do not want to apply opacity to child elements, like in our example above, use **RGBA** color values. The following example sets the opacity for the background color and not the text:



You learned from our CSS Colors Chapter, that you can use RGB as a color value. In addition to RGB, you can use an RGB color value with an **alpha** channel (RGBA) - which specifies the opacity for a color.

An RGBA color value is specified with: `rgba(red, green, blue, alpha)`. The *alpha* parameter is a number between 0.0 (fully transparent) and 1.0 (fully opaque).

Tip: You will learn more about RGBA Colors in our CSS Colors Chapter.

```
<!DOCTYPE html>

<html>

  <head>

    <style>

      div {

        background: rgb(0, 128, 0);

      }

      div.first {

        background: rgba(0, 128, 0, 0.1);

      }

      div.second {
```

```
        background: rgba(0, 128, 0, 0.3);
    }

    div.third {
        background: rgba(0, 128, 0, 0.6);
    }
</style>
</head>
<body>

    <h1>Transparent Boxes 2</h1>

    <p>Result with opacity:</p>

    <div style="opacity:0.1;">

        <h1>10% opacity</h1>

    </div>

    <div style="opacity:0.3;">

        <h1>30% opacity</h1>

    </div>

    <div style="opacity:0.6;">

        <h1>60% opacity</h1>

    </div>

    <div>

        <h1>opacity 1</h1>

    </div>

    <p>Result with rgba():</p>

    <div class="first">

        <h1>10% opacity</h1>
```

```
</div>
```

```
<div class="second">
```

```
    <h1>30% opacity</h1>
```

```
</div>
```

```
<div class="third">
```

```
    <h1>60% opacity</h1>
```

```
</div>
```

```
<div>
```

```
    <h1>default</h1>
```

```
</div>
```

```
<p>Notice how the text gets transparent as well as the background  
color when using the opacity property.</p>
```

```
</body>
```

```
</html>
```

