

Training Day 10 Report

8 July 2025

CSS Colors & Fonts

CSS COLORS:

CSS offers several ways to define and apply color to elements, allowing you to control the look of text, backgrounds, borders, and more.

1. Named Colors

- CSS has 147 predefined named colors.
- These are human-readable names like:

red, blue, green, black, white, yellow, orange, gray, navy, aqua, lime, etc.

Example:

```
h1 {  
  color: red;  
}
```

- Advantage: Easy to remember and write.
- Limitation: Limited to predefined names.

2. HEX Codes

- HEX (Hexadecimal) values represent the intensity of Red, Green, and Blue (RGB).
- Format: #RRGGBB, where each pair (RR, GG, BB) is a value from 00 to FF (0 to 255 in decimal).

Syntax:

```
selector {  
  color: #ff0000; /* Red */  
}
```

Common HEX Examples:

Color	HEX Code
White	#ffffff
Black	#000000
Red	#ff0000
Green	#00ff00
Blue	#0000ff

Short HEX: If all pairs are the same, it can be shortened.

#ffffff → #fff

#000000 → #000

3. RGB Values

- RGB stands for Red, Green, Blue.
- Values range from 0 (none) to 255 (full intensity).
- Offers precise control over color.

Syntax:

```
selector {  
  color: rgb(255, 0, 0); /* Red */  
}
```

Color	RGB Value
White	rgb(255, 255, 255)
Black	rgb(0, 0, 0)

RGB is useful when fine-tuning color shades.

4. RGBA (RGB + Alpha)

Adds transparency/opacity to RGB.

Alpha values range from 0.0 (fully transparent) to 1.0 (fully opaque).

Syntax:

```
selector {  
  background-color: rgba(255, 0, 0, 0.5); /* Semi-transparent red */  
}
```

Useful for overlays, backgrounds, and design effects.

CSS Font Styling

Font styling is essential for controlling the appearance of text and improving readability and aesthetics.

font-family:

- Specifies the font of the text.
- Always list multiple fonts for fallback.
- Fonts with spaces must be in quotes.

Syntax:

```
p {  
  font-family: "Arial", "Helvetica", sans-serif;  
}
```

Good practice to end with a generic font family (serif, sans-serif, monospace).

font-size:

Defines how big or small the text appears.

Units used:

- px: fixed pixel size
- em: relative to parent size
- rem: relative to root <html> font size
- %: relative to parent element

Syntax:

```
h1 {  
  font-size: 36px;  
}  
p {  
  font-size: 1.2em;  
}
```

font-weight:

-Determines how thick or thin the font is.

Value	Meaning
normal	Default thickness
bold	Makes text bold
lighter	Lighter than normal
100–900	Numeric scale of weight

Syntax:

```
strong {  
  font-weight: bold;  
}  
.light {  
  font-weight: 300;  
}
```

font-style:

Used to make text italic or oblique.

Values:

- normal
- italic
- oblique

Example:

```
em {  
  font-style: italic;  
}
```

Example (HTML + CSS):

```
<!DOCTYPE html>  
<html>  
<head>  
  <style>  
    body {  
      background-color: #f9f9f9;  
      font-family: "Segoe UI", Tahoma, Geneva, Verdana, sans-serif;  
      font-size: 16px;  
      color: #333;  
    }  
    h1 {  
      color: #ff4500;  
      font-size: 36px;  
      font-weight: bold;  
    }  
    p {  
      color: rgb(60, 60, 60);  
      font-size: 18px;  
    }  
  
    .highlight {  
      background-color: rgba(255, 255, 0, 0.3);  
      font-weight: lighter;  
    }  
  </style>  
</head>  
<body>
```

```
<h1>CSS Colors & Fonts Demo</h1>
<p>This paragraph uses default styles.</p>
<p class="highlight">This is a highlighted text using RGBA background and lighter
font.</p>
</body>
</html>
```

TABLE:

Feature	Property	Example
Text Color	color	color: red;, color: #fff;
Background	background-color	background-color: rgb(0,0,0);
Font Family	font-family	font-family: Arial, sans-serif;
Font Size	font-size	font-size: 20px;
Font Weight	font-weight	font-weight: bold;
Font Style	font-style	font-style: italic;