

Elements Styling and web page background with some properties in CSS

Discussion

1) What are the differences between the opacity property and alpha channel in rgba or hsla?

_ Opacity property: The opacity property is a single value that ranges from 0 to 1, where 0 represents completely transparent and 1 represents completely opaque. When applied to an element, it affects both the foreground and background of the element, as well as any child elements.

Ex: opacity: 0.7;

_ Alpha channel in rgba/hsla: The alpha channel in rgba (red, green, blue, alpha) or hsla (hue, saturation, lightness, alpha) is a separate value that determines the transparency of the color specified. The alpha channel value also ranges from 0 to 1, where 0 represents completely transparent and 1 represents completely opaque. This alpha channel only affects the color of the element, not the entire element or any child elements.

Ex: background-color: rgba (255, 99, 71, 0.8);

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2)What is the most effective method for setting CSS color properties?

- Color names / such as: red;
 - RGB / rgb (red, green, blue). Each of the three parameters (red, green, and blue) specifies the color's intensity, which ranges from 0 to 255. Such as: rgb (0,0,0);
 - RGBA / rgba (red, green, blue, alpha). The value of the alpha parameter ranges from 0.0 (complete transparency) to 1.0. (without transparency). Such as rgba (255, 99, 71, 0.8);
 - HSL / hsl (hue, saturation, lightness). Hue is a degree on the color wheel from 0 to 360. 0 is red, 120 is green, and 240 is blue, Saturation is a percentage value. 0% means a shade of gray, and 100% is the full color, and Lightness is also a percentage. 0% is black, 50% is neither light or dark, 100% is white. Such as: hsl (0, 100%, 50%);
 - HSLA / with alpha same as RGBA. Such as: hsla (0, 100%, 50%, 0.5);
 - HEX / #rrggbb. where the color names rr (red), gg (green), and bb (blue) correspond to hexadecimal values between 00 and ff (same as decimal 0-255). Such as: #3cb371;
- Also, we could use shorten of hex with #rgb, this will only be applied when each component's RR, GG, and BB values are equal. Such as: #f0f;
- Keyword values: CSS provides a list of predefined color keywords such as "red", "blue", "green", etc. These keywords are easy to read and remember, making them a popular choice for setting colors.