Day 9 Color and Box shadow Properties

Colors

👉 Named Color Model

The Named Color Model in CSS allows you to use a set of predefined color names to specify colors in your stylesheets. These color names provide a convenient way to reference common colors without needing to remember or calculate their corresponding hexadecimal or RGB values.

Here are some examples of named colors in CSS:

- red: Represents the color red.
- green: Represents the color green.
- blue: Represents the color blue.
- yellow: Represents the color yellow.
- purple: Represents the color purple.
- pink: Represents the color pink.
- orange: Represents the color orange.

Using named colors is straightforward and helps improve the readability of your CSS code, especially when working with common colors. However, it's important to note that named colors are case-insensitive, so you can use either lowercase or uppercase letters. Named colors might not cover every shade or variation you need, so you might still need to use other color models like hexadecimal, RGB, or RGBA for more precise color choices.

👉 Hex values

The color coding scheme "#ff0000" represents a color in the RGB (Red-Green-Blue) color model. In this model, colors are created by combining different intensities of red, green, and blue light. Each component is represented by a hexadecimal (base-16) value ranging from 00 to FF, where 00 represents no intensity and FF represents full intensity.

Example : #FF0000

- The first two characters "ff" represent the intensity of red.
- The next two characters "00" represent the intensity of green.
- The last two characters "00" represent the intensity of blue.

This combination results in a vivid shade of red, which is commonly referred to as "pure red" or "hex red." The absence of green and blue intensity makes this color appear as a strong, vibrant red. In some color systems, this specific shade of red is often associated with warning signs, alerts, and attention-grabbing elements due to its eye-catching nature.

Example : #FF000080

if you want to add an opacity of, let's say, 50%, you can use the RGBA notation like this: "#ff000080".

- Red: Full intensity (ff)
- Red: Full intensity (ff)
- Blue: No intensity (00)
- Opacity: 50% (80)

This would result in a semi-transparent red color. Keep in mind that opacity values range from 00 (fully transparent) to FF (fully opaque), so you can adjust the opacity to achieve the desired level of transparency.

👉 rbga() Function

The rgba() function in CSS is used to define a color value using the RGBA (Red-Green-Blue-Alpha) color model. This model includes three color components (red, green, and blue) and an alpha component that represents opacity or transparency. The alpha component allows you to control how transparent or opaque the color is, with 0 representing fully transparent and 1 representing fully opaque.

The values for the red, green, and blue color components are integers ranging from 0 to 255 or percentages ranging from 0% to 100%. The alpha component that controls opacity. It's a decimal value between 0 (fully transparent) and 1 (fully opaque).

Example: rgba(255, 0, 0, 0.5);

In the example, color property of an element is set to a red color with 50% opacity, making the text somewhat transparent.

👉 hsla() Function

👉 Some Color Properties

- color: Sets the color of the text content within an element.
- background-color: Sets the background color of an element.
- border-color: Sets the color of the border around an element.
- box-shadow: Adds a shadow effect to an element, including the ability to specify the shadow's color.

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Shadow

The box-shadow property in CSS is used to create a shadow effect around an element's box, which includes the content, padding, border, and margin areas. It's a powerful property that can enhance the visual appearance of elements and provide depth in web design. The shadow effect can simulate a light source casting a shadow behind the element, giving it a three-dimensional quality.

The box-shadow property has the following syntax:

```
box-shadow: h-shadow v-shadow blur spread color inset;
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- h-shadow: This is the horizontal offset of the shadow from the element's box. Positive values move the shadow to the right, while negative values move it to the left.
- v-shadow: This is the vertical offset of the shadow from the element's box. Positive values move the shadow downwards, while negative values move it upwards.
- blur: This optional value defines the amount of blur applied to the shadow. A larger value creates a more diffuse and softer shadow. Use 0 for no blur.
- spread: This optional value defines the size of the shadow's spread. A positive value expands the shadow, while a negative value contracts it.
- This is the color of the shadow. You can use a named color, hexadecimal color code, RGB, or HSL value.
- inset: This is an optional keyword that changes the shadow to be an inner shado w (inside the element). When used, it creates the illusion of the element being pressed or sunk into the page..