

Module CSS & CSS-3

1. What are the benefits of using CSS?

- CSS plays an important role, by using CSS you simply got to specify a repeated style for element once & use it multiple times as because CSS will automatically apply the required styles.
- The main benefit of CSS is that style is applied consistently across variety of sites. One instruction can control several areas which is very easy.
- Web designers needs to use few lines of programming for every page improving site speed.
- Cascading sheet not only simplifies website development, but also simplifies the maintenance as a change of one line of code affects the whole web site and maintenance time.
- It is less complex therefore the effort are significantly reduced.
- It has the power for re-positioning. It helps us to determine the changes within the position of web elements who are there on the page.
- Easy for the user to customize the online page
- It reduces the file transfer size.

2. What are disadvantages of CSS?

- CSS, CSS 1 up to CSS3, result in creating of confusion among web browsers.
- With CSS, what works with one browser might not always work with another. The web developers need to test for compatibility, running the program across multiple browsers.
- There exists a scarcity of security.
- After making the changes we need to confirm the compatibility if they appear. The similar change affects on all the browsers.

- The programming language world is complicated for non-developers and beginners. Different levels of CSS i.e. CSS, CSS 2, CSS 3 are often quite confusing.
- Browser compatibility (some styles sheet are supported and some are not).
- CSS works differently on different browsers. IE and Opera supports CSS as different logic.
- There might be cross-browser issues while using CSS.
- There are multiple levels which creates confusion for non-developers and beginners.

3. What is the difference between CSS2 & CSS3?

- CSS2 introduced a new box model which include padding, borders, and margins. CSS3 introduced the flexible box layout module, which allows for more flexible layouts.
- CSS3 added features like rounded corners, shadows, and gradients directly in CSS, reducing the need for additional images or complex markup.
- With CSS3, the designers can now use special fonts, like those available in Google Fonts and Typecast. Earlier, with CSS2 designers could only use "web-safe fonts" for being 100% sure to use fonts that would always display the same on every machine.
- CSS3 has the capability to split text sections into multiple columns so that it can be read like a newspaper. In CSS2, the developers had difficulty because the standard was not equipped with automatically breaking the text so that it fits within a box.
- CSS3 is split into many various documents known as Modules. each module adds new capability or extends options outlined in CSS2 over conserving backward compatibility. Work on CSS3 started around the time of publication of the initial CSS2 recommendation.

- CSS2 does not support the border-box property, while CSS3 does support.

4. Name a few CSS style component.

- **Color**: CSS allows you to define colors for text, backgrounds, borders, and other elements using various methods like color names, hexadecimal values, RGB, HSL, etc.
- **Spacing**: CSS provides properties for controlling spacing between elements, margins, padding, and defining spacing within elements.
- **Background**: Properties for setting background images, colors, gradients, and other background-related styles.
- **Transforms**: CSS transforms allow you to modify the appearance of elements by translating, rotating, scaling, and skewing them in 2D or 3D space.
- **Transitions**: CSS transitions enable smooth transitions between different states of an element, such as changes in size, position, color, or opacity, over a specified duration.
- **Forms**: Styles for customizing the appearance of form elements such as input fields, checkboxes, radio buttons, dropdowns, and buttons, including properties for size, color, border, and focus states.

5. What do you understand by opacity?

- CSS opacity is a property that allows you to control the transparency of an element, making it partially or fully transparent. It affects the entire element, including its content and any child elements.
- It is expressed as a value between 0 and 1, where 0 represents complete transparency (the element is invisible) and 1 represents complete opacity (the element is fully visible).

- When you apply opacity to an element using CSS, it affects not only the element itself but also its children. This means that if you set the opacity of a parent element to a value less than 1, it will also affect the opacity of its child elements, making them semi-transparent as well.

6. How can the background color of an element be changed?

- The background color of an element in CSS can be changed by using the **background-color** property and specifying a color value. For example: `.ELEMENT {`

- **background-color: blue;**

- `}`

- This sets the background color to blue.

- This CSS rule will change the background color of an element with the class "element" to blue. You can replace "blue" with any other color value such as hexadecimal, RGB, RGBA, HSL, HSLA, or color names to achieve the desired background color.

7. How can image repetition of the backup be controlled?

- To control the repetition of an image in the background, use the **background-repeat** property. You can use **no-repeat** value in the background repeat for the background-repeat property if you do not want to repeat an image, in this case, the image will display only once.

8. What is the use of the background-position property?

- The **background-position** property in CSS is used to specify the initial position of a background image within its containing element. It determines where the background image starts in relation to the padding box of the element.
- This property is commonly used in conjunction with the **background-image** property to control the placement and

alignment of background images on web pages. It allows web developers to create visually appealing layouts by precisely positioning background images within elements.

9. Which property controls the image scroll in the background?

- The property that controls the image scroll in the background is background-attachment.
- By default, background images scroll along with the content of the webpage. However, the background-attachment property allows you to control whether the background image scrolls with the content (scroll), remains fixed as the content scrolls (fixed), or scrolls only within the padding box of the element (local).

10. Why should background and color be used as separate properties?

- Separating background and color properties in CSS provides clarity, flexibility, and ease of maintenance in styling elements. It also allows for better layering, accessibility, and browser compatibility.
- By separating both properties the text can be read easily as it is not in the background and seems like highlighted text.

11. How to center block elements using CSS1?

- To horizontally center a block element (like <div>), use margin: auto;
- Setting the width of the element will prevent it from stretching out to the edges of its container.
- The element will then take up the specified width, and the remaining space will be split equally between the two margins.

12. How to maintain the CSS specifications?

13. What are the ways to integrate CSS as a web page?

- There are 3 ways to integrate css in a web page :
 1. **Inline CSS**: Styles are directly applied to HTML elements using the **style** attribute within the element's tag. This method is suitable for applying quick, specific styles to individual elements.
 2. **Internal CSS**: CSS styles are defined within the **<style>** element in the **<head>** section of the HTML document. This method allows you to apply styles to elements within the same HTML file.
 3. **External CSS**: CSS styles are stored in separate CSS files with a **.css** extension. These CSS files are linked to the HTML document using the **<link>** element in the **<head>** section.

14. What is embedded style sheets?

- An embedded style sheet is declared within the **<head>** element of an html document. It applies to the whole document, rather than just one element. Each style declaration (or CSS rule) gets applied to everything in the document that matches that rule.
- Using embedded style sheets allows developers to define CSS rules that apply specifically to elements within the same HTML file. This method is useful for small to medium-sized projects where the amount of CSS code is manageable and does not need to be shared across multiple pages.

15. What are the external style sheets?

- An external style sheet is a separate css file that can be accessed by creating a link within the head section of the webpage. Multiple webpages can use the same link to access the stylesheet. The link

to an external style sheet is placed within the head section of the page.

- External style sheets are CSS files that contain sets of CSS rules and styles. Unlike embedded styles or inline styles, external style sheets are stored separately from HTML documents. These CSS files typically have a .css extension and are linked to HTML documents using the <link> element in the <head> section.

17. What is the meaning of the CSS selector?

- A CSS selector is the first part of a CSS Rule. It is a pattern of elements and other terms that tell the browser which HTML elements should be selected to have the CSS property values inside the rule applied to them. The element or elements which are selected by the selector are referred to as the *subject of the selector*.
- Selects HTML elements based on their tag name. For example, `p` selects all `<p>` elements.
- Selects elements with a specific class attribute. Class selectors start with a period (.) followed by the class name. For example, `.btn` selects all elements with `class="btn"`.

18. What are the media types allowed by css ?

- CSS allows for styling based on different media types. The commonly used media types in CSS are:
- all: This is the default media type and applies to all devices.
- print: Styles applied when the document is printed.
- screen: Styles applied to devices with a screen (such as a computer monitor, tablet, or smartphone).
- speech: Styles applied to speech synthesizers or screen readers.
- These media types can be specified using the @media rule in CSS to target specific media types and adjust styles accordingly.

19. What is the rule set?

- A rule set in CSS consists of a selector or group of selectors followed by a declaration block. The selector(s) determine which HTML element(s) the styles will be applied to, while the declaration block contains one or more property-value pairs specifying the styles to be applied.
- Rule set in CSS defines the styling instructions for one or more HTML elements. It consists of selectors that target specific elements and declaration blocks that contain the styling properties and their corresponding values. These rule sets collectively define the appearance and layout of a web page.

20. Create layout.

- https://github.com/kush1221/assignment_css2

