Module-4 CSS and CSS 3

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Sub:- Frontend Assignment

1] What are the benefits of using CSS?

- **Separation of Content and Design**: CSS separates the presentation layer (design) from the content layer (HTML), making it easier to maintain and update styles without affecting the content.
- Consistency: Ensures uniform styling across multiple web pages.
- **Reduced Code Duplication**: Styles can be reused across different pages or elements, minimizing redundancy.
- **Improved Load Times**: External CSS files are cached by browsers, which can speed up page loading times.
- **Responsive Design**: CSS allows for responsive design techniques, enabling web pages to adapt to different screen sizes and devices.

2] What are the disadvantages of CSS?

- **Browser Compatibility Issues**: Different browsers may interpret CSS rules differently, leading to inconsistent appearance.
- Complexity: Large CSS files can become complex and difficult to manage.
- **Specificity Conflicts**: Overly specific selectors or conflicting styles can make debugging challenging.

3] What is the difference between CSS2 and CSS3?

- **CSS2**: Introduced in 1998, CSS2 included features like positioning, z-index, media types, and a more refined box model.
- CSS3: CSS3, which started to be developed in the early 2000s, is divided into modules, each with its own specification. It introduced new features such as rounded corners, shadows, gradients, transitions, animations, and flexbox.

4] Name a few CSS style components

- **Selectors**: Define which HTML elements to style (e.g., .class, #id, element).
- **Properties**: Define the style (e.g., color, font-size, margin).
- Values: Specific values for properties (e.g., red, 16px, 10%)

5] What do you understand by CSS opacity?

➤ The opacity property in CSS controls the transparency level of an element. Values range from 0 (completely transparent) to 1 (completely opaque). For example, opacity: 0.5; makes the element 50% transparent.

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

➤ Use the background-color property in CSS. For example: element { background-color: #f0f0f0; }.

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

➤ Use the background-repeat property to control how background images are repeated. Values include repeat, no-repeat, repeat-x, and repeat-y. For example: background-repeat: no-repeat;.

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

➤ The background-position property sets the position of a background image within an element. It can use values such as top left, center center, or specific coordinates like 10px 20px.

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

➤ The background-attachment property controls the scrolling behavior of the background image. Values include scroll (the default), fixed (the image stays in place when the page scrolls), and local (the background scrolls with the element's content).

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

➤ Using background and color as separate properties allows for more granular control over the styling. color affects the text color, while background handles various background aspects like color, images, and positioning.

11] How to center block elements using CSS1?

To center a block element, you can set margin: auto; with a defined width. For example:

```
.centered {
  width: 50%;
  margin: 0 auto;
}
```

12] How to maintain the CSS specifications?

➤ To maintain CSS specifications, regularly check for updates from the W3C, use validated CSS, adhere to best practices, and keep up with new features and changes in CSS standards.

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

- Inline Styles: Apply styles directly within HTML elements using the style attribute.
- **Internal Styles**: Include CSS within the <style> tag inside the <head> section of the HTML document.
- External Styles: Link to an external CSS file using the <link> tag in the <head> section.

14] What is embedded style sheets?

Also known as internal styles, these are CSS rules placed within a <style> tag in the <head> section of an HTML document. They apply styles to that specific document.

15] What are the external style sheets?

External style sheets are separate CSS files linked to HTML documents using the k tag. They allow for consistent styling across multiple pages and are easier to maintain.

16] What are the advantages and disadvantages of using external style sheets?

> Advantages:

- Consistency: Ensures a uniform look across multiple pages.
- Maintainability: Easier to update styles in one place.
- Reduced File Size: Keeps HTML files smaller.

Disadvantages:

- **Initial Load Time**: External CSS files can increase the initial load time of the page.
- **Dependency**: The page relies on an external file, which must be available and properly linked.

17] What is the meaning of the CSS selector?

A CSS selector is a pattern used to select the HTML elements you want to style. Examples include element selectors (e.g., p), class selectors (e.g., .class), and ID selectors (e.g., #id).

18] What are the media types allowed by CSS?

> CSS media types include all, print, screen, speech, and others. These types allow for the application of different styles depending on the device or medium.

19] What is the rule set?

➤ A CSS rule set consists of a selector and a declaration block. The declaration block contains one or more property-value pairs. For example:

```
p {
  color: blue;
  font-size: 16px;
}
```

Here, p is the selector, and the { color: blue; font-size: 16px; } is the declaration block.