Web designing Assignment

Module 2 :- CSS AND CSS 3

Q1. What are the benefits of using CSS?

Ans:- Separation of Concerns, Consistency, improved maintainability, Enhanced design, responsive design, reduced file size, better user experience, accessibility, faster development.

Q2. What are the disadvantages of CSS?

Ans:- Cross-browser compatibility, complexity in large project, learning curve, performance issues, debugging difficulties, dependency on Browser support, over specificity, maintainance overhead.

Q3. What is the difference between CSS2 and CSS3?

Ans:- CSS 2 finalized in 1998 where CSS 3 finalized by the 2010s.

Css 2 have Basic selectors, box model, positioning, table styling, and basic pseudo-classes where CSS 3 have Advanced selectors, new layout modules (Flexbox, Grid), transitions, animations, media queries, and improved typography.

CSS 2 have Limited layout capabilities, no native support for animations or responsive design where CSS 3 have Greater design flexibility, responsive design support, and enhanced styling capabilities.

Q4. Name a few CSS style components.

Ans:- Sure! Here are a few key CSS style components:

1. Selectors:

- Example: h1, .class-name, #id-name, p > span

2. Properties:

- Example: color, font-size, background-color, margin, padding

3. Values:

- Example: red, 16px, 10%, url(image.jpg)

5. Pseudo-classes: Apply styles based on the state of elements.

- Example: :hover, :focus, :nth-child()

6. Pseudo-elements:

- Example: ::before, ::after, ::first-line

7. Media Queries:

- Example: @media (max-width: 600px) { ... }

8. Animations: Define keyframes and transitions for animated effects.

- Example: @keyframes, transition, animation

9. Flexbox: A layout model for creating flexible and responsive designs.

- Example: display: flex, justify-content, align-items

10. Grid:

- Example: display: grid, grid-template-columns, grid-area.

Q5. What do you understand by CSS opacity?

Ans:- In CSS, the opacity property controls the transparency level of an element. It determines how see-through the element is, with values ranging from 0 to 1:

* **opacity: 0**: The element is fully transparent (invisible).
* **opacity: 1**: The element is fully opaque (completely visible).
* **Values between 0 and 1**: Partial transparency. For example, opacity: 0.5 makes the element 50% transparent.

Q6. How can the background color of an element be changed?

* Using color Names
* Using hexadecimal values
* Using RGB values
* Using RGBA values
* Using HSL Values
* Using HSLA Values

Q7. How can image repetition of the backup be controlled?

Ans:- In CSS, you can control the repetition of a background image using the background-repeat property. This property specifies how a background image should be repeated within its container.

Q8. What is the use of the background-position property?

Ans:- The background-position property in CSS is used to specify the position of a background image within an element. It controls where the image is placed relative to the element's background area.

It uses keywords like TOP, BOTTOM, LEFT, RIGHT, CENTER etc., Length values in pixels, Percentage values etc.

Q9. Which property controls the image scroll in the background?

Ans:- The property that controls how a background image scrolls with the content in CSS is the background-attachment property. This property specifies whether the background image should scroll with the content or remain fixed in place.

It’s values are SCROLL Background, FIXED Background, LOCAL Background.

Q10. Why should background and color be used as separate properties?

* Distinct Responsibilities
* Flexibility and Clarity
* Simplified Debugging
* Enhanced Readability
* Advanced Background Features
* Shorthand Property

Q11. How to center block elements using CSS1?

Ans:- To center a block element horizontally, you can use the margin property with auto values. This method requires that the element has a defined width. The browser will then distribute equal margin space on both sides of the element, centering it within its container.

CSS1 does not have a straightforward way to center block elements vertically. Instead, you might have to use workarounds. One common approach is to use position: relative on the parent and position: absolute on the child with a combination of top, bottom, left, and right properties. This method is limited and can be cumbersome.

Q12. How to maintain the CSS specifications?

Ans:- Maintaining CSS specifications involves ensuring that your CSS adheres to best practices and standards to ensure consistency, performance, and compatibility.

* 1. Adhere to Standards
  2. Maintain Code Quality
  3. Optimize Performance
  4. Use CSS Preprocessors
  5. Ensure Cross-Browser Compatibility
  6. Embrace Responsive Design
  7. Documentation and Version Control
  8. Stay Updated

Q13. What are the ways to integrate CSS as a web page?

Ans:- There are 6 ways to integrate CSS as a web page:-

1. Inline CSS
2. Internal CSS
3. External CSS
4. CSS-in-JS
5. CSS Frameworks
6. Importing CSS

Q14. What is embedded style sheets?

Ans:- Embedded style sheets in CSS refer to CSS rules that are defined within the HTML document itself using the <style> tag. This method of styling allows you to include CSS directly within the HTML file rather than linking to an external stylesheet or using inline styles. To use embedded style sheets, you place CSS rules inside a <style> tag within the <head> section of your HTML document.

Q15. What are the external style sheets?

Ans:- External style sheets in CSS are separate CSS files that are linked to an HTML document using the <link> tag. This method allows you to define styles in a standalone file and apply them to multiple HTML documents, making it an effective way to manage and maintain styles across a website.

To use an external style sheet, you create a separate CSS file and link it to your HTML document using the <link> tag in the <head> section.

Q16. What are the advantages and disadvantages of using external style sheets?

Ans:- **Advantages of External Style Sheets**

1. **Separation of Concerns**: External style sheets help separate HTML content from CSS styling, leading to cleaner and more manageable code. This separation makes it easier to maintain and update styles independently of the HTML structure.
2. **Reusability**: By linking the same external CSS file to multiple HTML documents, you can ensure a consistent look and feel across a website. This promotes reusability and reduces redundancy.
3. **Improved Performance**: External style sheets are cached by browsers after the first load, which can improve page load times for subsequent visits. This reduces the need to download the same styles repeatedly.
4. **Easier Maintenance**: Managing styles in a single CSS file is generally more efficient than having styles scattered across multiple HTML files. Changes to the style can be made in one place and will be reflected across all linked pages.

**Disadvantages of External Style Sheets**

1. **Additional HTTP Request**: Each external CSS file requires an additional HTTP request, which can impact performance if not optimized properly. However, browsers typically cache external CSS files, mitigating this issue.
2. **Complexity for Small Projects**: For very small projects or single-page applications, using external style sheets might add unnecessary complexity compared to inline or embedded styles.

Q17. What is the meaning of the CSS selector?

Ans:- In CSS (Cascading Style Sheets), a **selector** is a pattern used to select and apply styles to elements within an HTML document. Selectors are fundamental to CSS as they determine which elements will be styled according to the CSS rules defined in the stylesheet.

Types of CSS Selectors

1. Universal Selector
2. Type Selector
3. Class Selector
4. ID Selector
5. Attribute Selector
6. Pseudo-class Selector
7. Pseudo-element Selector

Q18. What are the media types allowed by CSS?

Ans:- Common Media Types in CSS

1. ALL
2. SCREEN
3. PRINT
4. SPEECH

Q19. What is the rule set?

Ans:- In CSS (Cascading Style Sheets), a **rule set** (or **CSS rule** or **style rule**) is a fundamental building block that defines how elements in an HTML document should be styled. A rule set consists of a **selector** and a **declaration block**.

Components of a CSS Rule Set

1. Selector
2. Declaration block