

CSS AND CSS 3 – Assignment

1. What are the benefits of using CSS?

- It allows developers to style fonts, colours, spacing, borders, backgrounds, and more, making it possible to create visually appealing and consistent designs across multiple web pages.
- With the help of CSS, web developers can achieve responsive web design, consistent branding, improved user experience, and easier maintenance of their websites

2. What are the disadvantages of CSS?

- Different web browsers may interpret CSS rules differently, leading to inconsistent rendering and layout discrepancies across browsers. Ensuring cross-browser compatibility can be time-consuming and may require additional workarounds for specific browser issues.
- Implementing responsive designs with CSS can become complex, especially when dealing with multiple breakpoints and screen sizes

3. What is the difference between CSS2 and CSS3?

The CSS3 version supports more browsers than CSS2. CSS3 introduces several new selectors. Those new selectors square measure largely in an exceeding type of pseudo-elements and pseudo-categories.

- CSS2 introduced many new features compared to CSS1, including positioning, floats, z-index, and support for media types (print, screen, etc.).
- CSS3: CSS3 includes a vast array of new features and enhancements across multiple modules. Some notable features in CSS3 include rounded corners,

gradients, shadows, flexible box layouts, animations, transitions, and media queries for responsive design.

4. Name a few CSS style components

- 1 - Typography
- 2 - Colors and Backgrounds
- 3 - Media Queries
- 4 - Pseudo-classes and Pseudo-elements

5. What do you understand about CSS opacity?

opacity is a property that allows you to control the transparency or the degree of visibility of an element and its content. It is used to make an element partially transparent, giving it a see-through effect. The opacity property applies to all types of HTML elements, including text, images, backgrounds, and borders.

The opacity property is a value between 0 and 1, where 0 is completely transparent and 1 is fully opaque

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

To change the background color of an element using CSS, you can use the background-color property

Ex –

```
.element {  
    background-color: red;  
}
```

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

To control the repetition of the background image, you can use the `background-repeat` property in CSS.

This property allows you to specify how the background image should be displayed when it doesn't fully cover the background area.

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

The `background-position` property in CSS is used to control the placement or positioning of a background image within its containing element. It allows you to specify where the background image should be positioned in relation to the element's background area.

The `background-position` property accepts two values

- 1 - Horizontal Position
- 2 - Vertical Position

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

By default, the `background-attachment` property is set to `scroll`, so the background image scrolls with the content. To achieve a fixed background image effect, set the value to `fixed`.

```
.element {  
    background-image: url("path/to/image.png");  
    background-attachment: scroll;  
}  
.element {  
    background-image: url("path/to/image.png");  
    background-attachment: fixed;  
}
```

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

Using the background and color properties separately allows for more flexibility and control in styling HTML elements. The primary reason to use them separately is that they handle different aspects of the element's Appearance:

background property - The background property is used to set multiple background-related styles, such as background color, background image, background position

color property - The color property is specifically used to set the text color of an element.

11. How to centre block elements using CSS1?

```
.element {  
    width: 50%;  
    margin: 0 auto;  
    text-align: center ;  
}
```

12. How to maintain the CSS specifications?

Maintaining CSS specifications involves several best practices and strategies to ensure consistent, organised, and efficient CSS code

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

There are several ways to integrate CSS into a web page. Here are the most common methods:

- 1 - External CSS
- 2 - Internal CSS
- 3 - Inline CSS

14. What are embedded style sheets?

Embedded style sheets, also known as "internal style sheets," are a method of including CSS directly within an HTML document. In this approach, CSS rules are defined within the `<style>` element, which is placed in the `<head>` section of the HTML document. The CSS styles specified inside the `<style>` element apply only to the specific HTML document in which they are embedded.

15. What are the external style sheets?

External style sheets are separate CSS files containing styles and rules that are stored in separate files from the HTML documents. They allow you to define and organise CSS styles independently from the HTML content. By using external style sheets

To use an external style sheet, you create a `.css` file that contains your CSS rules and link it to your HTML documents using the `<link>` element in the `<head>` section of your HTML. The `<link>` element specifies the relationship between the HTML document and the external CSS file.

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

Advantages of using external style sheets:

Modularity - By keeping CSS rules in separate files, you can organise your styles into modules or components, making it easier to manage and maintain your codebase.

Reduced Page Size - By separating CSS from HTML, your HTML documents become smaller and more focused on content, improving page loading times and user experience.

Disadvantages of using external style sheets:

Dependency - If the external style sheet is missing or not loaded correctly, it can result in unstyled content or layout issues on the web page. Ensuring the correct path and file name for the CSS link is essential.

Overhead for Small Projects - For small projects with minimal styling needs, using an external style sheet may introduce unnecessary complexity. In such cases, inline or internal styles might be more straightforward.

17. What is the meaning of the CSS selector?

The CSS selector is a pattern that allows you to target and select specific HTML elements on a web page to apply styles or perform other operations.

CSS selectors are the foundation of CSS rules and determine which elements the styles will be applied to. Selectors define the scope or context in which CSS rules should be effective

18. What are the media types allowed by CSS?

CSS allows you to define different styles for different media types, enabling you to create styles tailored to specific devices or media.

- 1 - all - This is the default media type. Styles defined with the all media type apply to all devices.
- 2 - screen - Used for computer screens, tablets, smartphones, and similar devices.
- 3 - print - Used for print media, such as when the web page is being printed.
- 4 - Speech - Used for speech synthesisers or screen readers for users with Disabilities.

19. What is the rule set?

In CSS, a rule set is a collection of one or more CSS declarations that define the styles to be applied to one or more HTML elements.

It consists of a selector and a block of declarations enclosed in curly braces.

Here's an example of a CSS rule set:

```
h1 {  
    color: blue;  
    font-size: 24px;  
    margin-bottom: 20px;  
}
```

