

1) What are the benefits of using CSS?

Ans:

- Using CSS, you can control the color of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, etc.
- CSS saves time — You can write CSS once and then reuse the same sheet in multiple HTML pages
- CSS plays a crucial role in creating responsive designs that adapt to different screen sizes and devices. This is essential in the era of mobile browsing.

2) What are the disadvantages of CSS?

Ans:

- One of the biggest challenges is ensuring consistent rendering across different web browsers. Some browsers may interpret CSS rules differently, leading to cross-browser compatibility issues.
- 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.
- After making the changes we need to confirm the compatibility if they appear. The similar change affects on all the browsers.

3) What is the difference between CSS2 and CSS3?

Ans:

- With CSS3, the designers can now use special fonts, like those available in Google Fonts and Typecast.

- CSS3 introduces several new selectors that provide more powerful ways to target elements. Examples include attribute selectors, nth-child selectors, and more.
- Flexbox is a layout model introduced in CSS3 that simplifies the design of complex layouts. It allows for the creation of flexible and responsive layouts with less reliance on floats and positioning.
- While media queries were introduced in CSS2, CSS3 extends and refines them. Media queries in CSS3 are crucial for creating responsive designs that adapt to different devices and screen sizes.
- CSS3 includes features like viewport units, which are useful for creating responsive designs that adapt to the size of the viewport.

4) Name a few CSS style components?

Ans:

- Selector: HTML element name, id name, class name.
- Property: It's like an attribute such as background color, font-size, position, text-align, color, border etc
- The box model is fundamental to layout in CSS. It includes properties like **width**, **height**, **margin**, **padding**, and **border** to define the size and spacing of elements.

5) What do you understand by CSS opacity?

Ans:

- In CSS, opacity refers to the degree of transparency of an element. It determines how much the content of an element is visible or hidden. The opacity property in CSS allows you to control the transparency of an element and its children.

- The **opacity** property accepts values between 0.0 and 1.

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

Ans:

- To change the background color of an element in CSS, you can use the **background-color** property. This property allows you to set the color of an element's background. You can specify the color using various formats, including named colors, hexadecimal values, RGB values, or HSL values.

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

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

Ans:

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

```
⇒.background-example-no-repeat {  
    background-image: url('example-image.jpg');  
    background-repeat: no-repeat;  
}
```

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

Ans:

- 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 will be placed relative to the element's box.
- The property can use keywords such as **top**, **bottom**, **left**, **right**, and **center** to position the background image.

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

Ans:

- Background attachment property controls the image scroll in the background.

```
⇒.example {
    background-image: url('example-image.jpg');
    background-attachment: scroll ;
}
```

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

Ans:

- Using **background** and **color** as separate properties in CSS allows for more flexibility and control over the styling of elements. These properties serve different purposes.

⇒

background Property:

- The **background** property is a shorthand property that combines various background-related properties into a

single declaration. It includes properties such as **background-color**, **background-image**, **background-repeat**, **background-position**, and **background-size**.

- **color Property:**

The color property is used specifically to set the text color of an element's content.

It does not handle background images or other background-related properties.

11) How to center block elements using CSS1?

Ans:

- 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.

12) How to maintain the CSS specifications?

Ans:

- Maintaining CSS specifications involves keeping your stylesheets organized, following best practices, and staying informed about updates and new features.

1. Organize Your Stylesheets:

- Use consistent naming conventions for classes and IDs to make your CSS more readable and maintainable.

2. Comment Your Code:

- Add comments to explain sections of your CSS. This helps you and other developers understand the purpose of specific rules.

3. Version Control:

- Use version control systems like Git to track changes in your CSS files. This allows you to roll back to previous versions if needed.

4. Responsive Design:

- Design and maintain your stylesheets with responsiveness in mind. Use media queries to adapt styles for different screen sizes and devices.

5. Document Your Styles:

- Maintain documentation for your styles, especially if you're working on a team. This documentation can include information about design principles, coding conventions, and component usage.

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

Ans:

⇒ CSS can be added to HTML documents in 3 ways:

- 1)Inline - by using the style attribute inside HTML element
- 2)Internal - by using a section
- 3)External - by using a element to link to an external CSS file

14)What is embedded style sheets?

Ans:

- Embedded style sheets refer to a method of including CSS (Cascading Style Sheets) directly within the HTML document. Instead of creating a separate external stylesheet file, the styles are placed directly within the `<style>` element in the HTML document's `<head>` section.

15)What are the external style sheets?

Ans:

- External style sheets in CSS refer to separate files containing styles that are linked to HTML documents. Instead of embedding styles directly within the HTML file, the styles are stored in external files with style.css extension.

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

Ans:

Advantages:

1)Separation of Concerns:

- External style sheets allow for a clear separation between HTML (structure/content) and CSS (presentation). This enhances the maintainability and organization of your code.

2)Reusability:

- Styles defined in an external CSS file can be reused across multiple HTML documents. This promotes consistency in design and reduces redundancy.

3)Caching:

- External style sheets are cached by browsers. Once a user visits a page, the CSS file is downloaded and cached. Subsequent page loads may be faster as the browser reuses the cached stylesheet.

4)Faster Page Loading

5)Consistency Across the Site

Disadvantages:

1)Additional HTTP Request:

- Each external style sheet requires an additional HTTP request. While this may not be a significant concern for small websites, it could impact performance on larger projects.

2)Rendering Blocking:

- The browser may wait to render the page until the external style sheet is downloaded and applied. This can lead to a delay in rendering, especially if the stylesheet is large.

3)Dependency on External File:

- If the external CSS file fails to load for any reason (e.g., server issues, network problems), it can affect the appearance of the entire site.

4)Limited Browser Compatibility:

- While rare, there can be instances where certain browsers or devices do not support external style sheets correctly. However, these issues are minimal in modern browsers.

17)What is the meaning of the CSS selector?

Ans:

CSS selectors are used to "find" (or select) the HTML elements you want to style.

- We can divide CSS selectors into categories:

Simple selectors (select elements based on name, id, class.)

Pseudo-class selectors (select elements based on a certain state)

Pseudo-elements selectors (select and style a part of an element)

Attribute selectors (select elements based on an attribute or attribute value)

18)What are the media types allowed by CSS?

Ans:

CSS (Cascading Style Sheets) allows you to specify different styles for different media types. The **@media** rule is used for this purpose, and it allows you to apply styles based on factors such as the device's screen size, resolution, or print vs. screen. Here are some common media types allowed by CSS.

1)**all:**

- The default media type. Styles specified under **@media all** apply to all devices.

2)**print**

3)**screen:**

- Styles specified under **@media screen** apply to devices with a screen, such as desktops, laptops, tablets, and smartphones.

4)**speech:**

- Styles specified under **@media speech** apply to speech synthesizers. This is used for screen readers and other speech-based accessibility technologies.

5)**Custom Media Types:**

- You can define custom media types to target specific devices or environments.

19) What is the rule set?

Ans:

- In CSS (Cascading Style Sheets), a rule set is a combination of selectors and declarations that define how a specific set of HTML elements should be styled.

