

MODULE : 2

(CSS and CSS3)

(1) What are the benefits of using CSS?

- Faster Page Speed
- Better User Experience
- Quicker Development Time
- Easy Formatting Changes
- Compatibility Across Devices

(2) What are the disadvantages of CSS?

- Confusion due to many CSS levels

Beginners are more vulnerable to this issue. They might get confused while opting to learn CSS as there are many levels of CSS such as CSS2, CSS3, etc.

- Cross-Browser Issues

Different browsers work differently. So, you have to check that changes implemented in the website via CSS codes are reflected properly among all browsers.

- Security Issues

Security is important in today's world driven by technology and data. One of the major disadvantages of CSS is that it has limited security.

- Extra Work for Developers

Design services are required to consider and test all CSS codes across different browsers for compatibility. Due to developers testing compatibility for different browsers, their workload increases.

(3) What is the difference between CSS2 and CSS3?

- Unlike CSS2, which was comprised of a single document, CSS3 has its specifications divided into many individual modules, which makes CSS3 a whole lot easier to handle.
- With CSS3, the designers can now use special fonts, like those available in Google Fonts and Typecast. Earlier, with CSS and CSS2, designers could only use “web-safe fonts” for being 100% sure to use fonts that would always display the same on every machine.
- While CSS and CSS2 had ‘simple selectors’, CSS3 calls the components as ‘a sequence of simple selectors’.
- CSS3 came up with some key web design considerations like rounded borders that help in rounding up the borders without any hassle. This turned out to be a huge plus point for developers who were struggling with initial versions of CSS borders.
- 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.

(4) Name a few CSS style components

Selector: class name, id name or element name that is target

Attribute: name of the attribute you want to style for example border, color, background, position etc.

Value of Property: value that will be assigned to attribute.

(5) What do you understand by CSS Opacity?

- The opacity CSS property sets the opacity of an element. Opacity is the degree to which content behind an element is hidden, and is the opposite of transparency.
- The opacity-level describes the transparency-level, where 1 is not transparent at all, 0.5 is 50% see-through, and 0 is completely transparent. Note: When using the opacity property to add transparency to the background of an element, all of its child elements become transparent as well.

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

To add background color in HTML, use the CSS background-color property. Set it to the color name or code you want and place it inside a style attribute. Then add this style attribute to an HTML element, like a table, heading, div, or span tag.

Example :

```
body{  
    Background-color : black;  
}
```

(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 for the background-repeat property if you do not want to repeat an image, in this case, the image will display only once.

Example :

```
body{  
    Background-image: url("/css/images/css.jpg");
```

```
Background-repeat: no-repeat;  
}
```

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

The background-position property sets the starting position of a background image. Tip: By default, a background-image is placed at the top-left corner of an element, and repeated both vertically and horizontally.

Example :

```
body {  
    background-image: url('css.jpg');  
    background-repeat: no-repeat;  
    background-attachment: fixed;  
    background-position: center top;  
}
```

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

The **background-attachment** property sets whether a background image scrolls with the rest of the page, or is fixed.

Example :

```
body{  
    background-image: url('css.jpg');  
    background-attachment: fixed;  
}
```

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

There are two reasons behind this: It enhances the legibility of style sheets. The background property is a complex property in CSS, and if it is combined with color, the complexity will further increase.

(11) How to center block elements using CSS?

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.

Example :

```
.center {  
    margin: auto;  
    width: 50%;  
    border: 3px solid red;  
    padding: 10px;  
}
```

(12) How to maintain the CSS specifications?

The Specification defines how CSS properties should be implemented by browser vendors along with detailed algorithms, code samples and tabular information.

The Specification also include:

- The syntax and data types of the language
- Detailed explanation on CSS Selectors
- How you can assign values to properties
- The Cascade (the "C" in CSS)
- How inheritance works
- The Box Model e.t.c

The CSS Specification prior to CSS3 was a single Specification, CSS3 on the other hand is divided into Modules which are Independent Specifications that can be worked on by different author(s) at different

paces, that's why we have Selector Level 3 Specification, CSS Color 4, CSS Backgrounds and so on. Some of these modules are revisions of CSS2.1, and some are newly created, but all fall under the banner of CSS3.

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

CSS can be added to HTML documents in 3 ways:

- Inline - by using the style attribute inside HTML elements
- Internal - by using a <style> element in the <head> section
- External - by using a <link> element to link to an external CSS file

(14) What is embedded style sheets?

It allows you to define styles for a particular HTML document as a whole in one place. This is done by embedding the <style></style> tags containing the CSS properties in the head of your document.

(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.

Format :

```
<head>
```

```
<link rel="stylesheet" type="text/css" href="mystyle.css">
```

</head>

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

The advantages of External Style Sheets are as follows :

- With the help of External Style Sheets, the styles of numerous documents can be organized from one single file.
- In External Style Sheets, Classes can be made for use on numerous HTML element types in many forms of the site.
- In complex contexts, Methods like selector and grouping can be implemented to apply styles.

The disadvantages of External Style Sheets are as follows :

- An extra download is essential to import style information for each file.
- The execution of the file may be deferred till the external style sheet is loaded.
- While implementing style sheets, we need to test Web pages with multiple browsers in order to check compatibility issues.

(17) What is the meaning of the CSS selector?

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

- The CSS element Selector
- The CSS id Selector
- The CSS class Selector
- The CSS Universal Selector
- The CSS Grouping Selector
- The CSS Attribute Selector

(18) What are the media types allowed by CSS?

The media attribute specifies what media/device the CSS style is optimized for. This attribute is used to specify that the style is for special devices (like iPhone), speech or print media.

The media attribute specifies what media/device the CSS style is optimized for.

This attribute is used to specify that the style is for special devices (like iPhone), speech or print media.

(19) What is the rule set?

Rule set in HTML :

A rule or "rule set" is a **statement that tells browsers how to render particular elements on an HTML page**. A rule set consists of a selector followed by a declaration block.

Rule set in CSS :

Each (valid) declaration block is preceded by one or more comma-separated selectors, which are conditions for selecting some elements of the page. **A selector group and an associated declarations block, together, are called a ruleset, or often a rule.**

(20) Layout