Module (CSS and CSS 3) -2

1. What are the benefits of using CSS?

Answer:-

* Separation of Concerns: CSS lets you keep the structure of your web page (HTML) separate from its appearance (CSS). This makes it easier to understand and change the design without affecting the underlying structure.
* Consistency and Efficiency: CSS allows you to define styles once and apply them to multiple elements or pages. This saves time and makes your code smaller and more efficient.
* Easy Maintenance: With CSS, you can update the visual look of your website by making changes in one place (the CSS file). The changes will automatically apply to all the elements that use those styles, making it easier to maintain and update your website.
* Flexible Layouts: CSS helps you create layouts that work well on different screen sizes and devices. It allows your website to adapt and look good on smartphones, tablets, and desktops.
* Extensibility and Reusability: CSS lets you create reusable styles that can be applied to different parts of your website. This makes your code more efficient and makes it easier to add new styles or elements.
* Browser Compatibility: CSS is supported by all modern web browsers, so you can be sure that your styles will work consistently across different browsers.
* Accessibility: CSS helps you create websites that are accessible to people with disabilities. By separating content from presentation, you can make sure that the content is clear and easy to read for everyone.
* Animation and Effects: CSS provides options to add animated and interactive effects to your website without needing extra tools. This makes your website more engaging and visually appealing.

1. What are the disadvantages of CSS?

Answer:-

* CSS is a powerful tool that can be used to create beautiful and responsive websites. However, it also has some disadvantages. Here are a few of the most common:
* Confusion due to many CSS levels. There are many different versions of CSS, each with its own set of features. This can be confusing for beginners, who may not know which version to use.
* Cross-browser issues. Different browsers sometimes implement CSS differently. This can lead to problems with the way websites look and behave across different browsers.
* Security issues. CSS is an open-source language, which means that anyone can view and modify the code. This can pose a security risk, as it could allow someone to steal data or inject malicious code into a website.
* Extra work for developers. CSS can be time-consuming to learn and use. This can add extra work for developers, who may have to spend time troubleshooting CSS issues.

1. What is the difference between CSS2 and CSS3?

Answer:-

* CSS2 and CSS3 are two versions of the Cascading Style Sheets (CSS) language. CSS is used to control the presentation of web pages. CSS2 was released in 1998, and CSS3 is still under development.
* Here are some of the key differences between CSS2 and CSS3:
* New features: CSS3 introduces a few new features, including:
* 3D effects: CSS3 allows you to create 3D effects on web pages, such as drop shadows and perspective.
* Animation: CSS3 allows you to animate elements on web pages, such as text and images.
* Media queries: CSS3 allows you to specify how a web page should be displayed on different devices, such as smartphones and tablets.
* Improved performance: CSS3 is designed to be more efficient than CSS2, which can lead to improved performance on web pages.
* Better browser support: CSS3 is supported by most modern web browsers. However, some older browsers may not support all the features of CSS3.
* Overall, CSS3 is a significant improvement over CSS2. It offers several new features and improvements that can make web pages more interactive and visually appealing.

1. Name a few CSS style components?

Answer:-

* Background: The background property controls the background of an element. You can use it to set the background colour, image, or gradient.
* Border: The border property controls the border of an element. You can use it to set the border width, style, and colour.
* Colour: The colour property controls the colour of an element's text.
* Font: The font property controls the font of an element's text. You can use it to set the font family, size, and weight.
* Margin: The margin property controls the spacing around an element.
* Padding: The padding property controls the spacing inside an element.
* Position: The position property controls the position of an element on the page.
* Size: The size property controls the size of an element. You can use it to set the width, height, and line-height.
* Text alignment: The text-align property controls the alignment of text within an element

1. What do you understand by CSS opacity?

* CSS opacity is a property that controls the transparency of an element. The opacity property can be used to make an element partially transparent, or to make it completely transparent.

The opacity property can be used to create a variety of effects, such as:

* Transparent backgrounds: You can use opacity to create transparent backgrounds for elements, such as images or text. This can be used to create a more visually appealing and engaging user experience.
* Drop shadows: You can use opacity to create drop shadows for elements. This can be used to make elements look more three-dimensional and realistic.
* Glass effects: You can use opacity to create glass effects for elements. This can be used to make elements look like they are made of glass, and to allow the user to see through them.
* The opacity property can be used to make any element partially or completely transparent. The value of the opacity property can range from 0 to 1, where 0 is completely transparent and 1 is completely opaque.

1. How can the background colour of an element be changed?

Answer:-

* The background-color CSS property can be used to change the background color of an element.

To change the background color of an element, you can use the following syntax:

Code:

element {

background-color: color;

}

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

Answer:-

* Image repetition of the backup can be controlled by using the background-repeat CSS property. The background-repeat property can be used to specify how an image should be repeated in the background of an element.
* There are four possible values for the background-repeat property:
* repeat: The image will be repeated both horizontally and vertically.
* repeat-x: The image will be repeated horizontally, but not vertically.
* repeat-y: The image will be repeated vertically, but not horizontally.
* no-repeat: The image will not be repeated.

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

* The background-position CSS property is used to control the position of a background image on an element.
* The background-position property can be used to specify the horizontal and vertical position of the background image. The horizontal position is specified by the x value, and the vertical position is specified by the y value.
* The x and y values can be specified in several ways:
* Length: The x and y values can be specified as lengths, such as pixels or ems.
* Percentage: The x and y values can be specified as percentages, which are relative to the width and height of the element's container.
* Keyword: The x and y values can be specified as keywords, such as left, centre, and right.

For example, the following code would position the background image at the top-left corner of the element:

Code:

element {

background-image: url(image.png);

background-position: 0 0;

}

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

Answer:-

* The background-attachment CSS property controls whether a background image scrolls with the rest of the page, or is fixed.
* There are three possible values for the background-attachment property:
* scroll: The image will scroll with the rest of the page.
* fixed: The image will not scroll with the rest of the page.
* local: The image will scroll with the rest of the page, but will not scroll when the element is resized.

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

Answer:-

* Background and color should be used as separate properties because they control different aspects of an element's appearance. The background property controls the background of an element, such as an image or gradient, while the color property controls the color of an element's text
* It makes your code more readable: When you use separate properties for background and color, your code is easier to read and understand. This is because you can easily see which property controls which aspect of an element's appearance.
* It gives you more flexibility: When you use separate properties for background and color, you have more flexibility in how you style your elements. This is because you can combine different values for the background and color properties to create a variety of effects.
* It makes your code more maintainable: When you use separate properties for background and color, your code is easier to maintain. This is because if you need to change the background or color of an element, you only need to change the value of the appropriate property.

Overall, using background and color as separate properties is a good practice that will make your code more readable, flexible, and maintainable.

1. How to centre block elements using CSS1?

Answer:-

* There are two ways to centre block elements using CSS1:
* Using the margin property: To centre a block element using the margin property, you can set the margin-left and margin-right properties to auto. This will tell the browser to automatically centre the element within its container.
* Using the text-align property: To centre a block element using the text-align property, you can set the text-align property of the element's parent container to centre. This will tell the browser to centre all text within the container, including the block element.

1. How to maintain the CSS specifications?

Answer:-

* Here are some of the ways that the CSS specifications are maintained:
* Review and revision: The CSS specifications are reviewed and revised on a regular basis. This ensures that they are up-to-date with the latest web technologies.
* Public review: The CSS specifications are open for public review. This allows anyone to comment on the specifications and help to improve them.
* Technical expertise: The CSS specifications are maintained by a team of experts with a deep understanding of web technologies. This ensures that the specifications are accurate and reliable.
* Collaboration: The CSS specifications are maintained through a collaborative process. This ensures that the specifications are comprehensive and meet the needs of all stakeholders.

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

Answer:-

There are three main ways to integrate CSS as a web page:

* Inline CSS: Inline CSS is the simplest way to integrate CSS. It is written directly in the HTML code, within the element that you want to style. For example, the following code would set the font-size of the h1 element to 24px:

Code

<h1 style="font-size: 24px;">This is a heading</h1>

* Internal CSS: Internal CSS is a more organized way to integrate CSS. It is written in a separate style element within the head section of the HTML code. For example, the following code would set the font-size of all h1 elements to 24px:

Code

<head>

<style>

h1 {

font-size: 24px;

}

</style>

</head>

* External CSS: External CSS is the most flexible way to integrate CSS. It is written in a separate CSS file, which is then linked to the HTML code using the link element. For example, the following code would link to the CSS file style.css:

Code

<head>

<link href="style.css" rel="stylesheet">

</head>

* The CSS file would then contain all the CSS code for the web page. For example, the following code would set the font-size of all h1 elements to 24px:

Code

h1 {

font-size: 24px;

}

1. What is embedded style sheets?

Answer:-

* Embedded style sheets, also known as internal style sheets, are CSS (Cascading Style Sheet) code that is embedded in the HTML code of a web page. Embedded style sheets are enclosed in the style element and are placed in the head section of the HTML code.
* Here is an example of an embedded style sheet:

Code

<head>

<title>My Page</title>

<style>

h1 {

color: red;

font-size: 24px;

}

</style>

</head>

1. What are the external style sheets?

Answer:-

* External style sheets, also known as linked style sheets, are CSS (Cascading Style Sheet) code that is saved in a separate file. External style sheets are linked to the HTML code of a web page using the link element.

Here is an example of an external style sheet:

Code

<link href="style.css" rel="stylesheet">

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

Answer:-

Advantages of using external style sheets:

* Reusability: External style sheets can be reused across multiple web pages, which can save time and effort.
* Flexibility: External style sheets can be easily updated or modified without having to change the HTML code.
* Performance: External style sheets can be cached by the browser, which can improve the performance of the web page.
* Maintainability: External style sheets are easier to maintain than inline or internal style sheets because they are stored in a separate file.

Disadvantages of using external style sheets:

* Increased download time: External style sheets must be downloaded by the browser before they can be used, which can increase the loading time of the web page.
* Increased complexity: External style sheets can make the code more complex and difficult to debug.
* Limited control: External style sheets can be overridden by inline or internal style sheets, which can limit the control that the web developer has over the appearance of the web page.
* Portability: External style sheets cannot be used to style web pages that are saved as static files.

Overall, external style sheets offer several advantages over inline or internal style sheets, but they also have some disadvantages. The decision of whether to use external style sheets should be made on a case-by-case basis, considering the specific needs of the web page.

1. What is the meaning of the CSS selector?

Answer:-

* A CSS selector is a pattern that is used to select HTML elements. CSS selectors are used to apply CSS styles to HTML elements.
* There are many different types of CSS selectors, each with its own unique syntax. Some of the most common types of CSS selectors include:
* Type selectors: Type selectors select elements by their type. For example, the h1 selector selects all h1 elements.
* Class selectors: Class selectors select elements by their class. For example, the .myclass selector selects all elements that have the myclass class.
* ID selectors: ID selectors select elements by their ID. For example, the #myid selector selects the element with the ID myid.
* Attribute selectors: Attribute selectors select elements by their attributes. For example, the [href] selector selects all elements that have an href attribute.
* Universal selector: The universal selector (\*) selects all elements.

1. What are the media types allowed by CSS?

Answer:-

CSS supports the following media types:

* all: This media type applies to all devices.
* screen: This media type applies to devices with screens, such as computers, laptops, and tablets.
* print: This media type applies to devices that print documents, such as printers and plotters.
* projection: This media type applies to devices that project images, such as projectors and TVs.
* handheld: This media type applies to devices that are held in the hand, such as smartphones and tablets.
* tv: This media type applies to televisions.
* aural: This media type applies to devices that output audio, such as speakers and headphones.
* braille: This media type applies to devices that output braille, such as braille displays.

1. What is the rule set?

Answer:-

* In CSS, a rule set is a collection of CSS declarations that are applied to a specific element or group of elements. A rule set is made up of a selector and a declaration block.
* The selector is a pattern that is used to select the elements that the rule set will be applied to. The declaration block contains the CSS declarations that will be applied to the selected elements.
* A CSS declaration is a key-value pair that sets a CSS property and its value. The property is the name of the CSS property that you want to set, and the value is the value that you want to set for the property.

1. Create Layout?

Answer: -

Websites often display content in multiple columns (like a magazine or a newspaper).

HTML has several semantic elements that define the different parts of a web page:

<header> - Defines a header for a document or a section

<nav> - Defines a set of navigation links

<section> - Defines a section in a document

<article> - Defines an independent, self-contained content

<aside> - Defines content aside from the content (like a sidebar)

<footer> - Defines a footer for a document or a section

<details> - Defines additional details that the user can open and close on demand

<summary> - Defines a heading for the <details> element.

There are four different techniques to create multicolumn layouts. Each technique has its pros and cons:

CSS framework

CSS float property

CSS flexbox

CSS grid