Module (CSS and CSS 3)

• What are the benefits of using CSS?

* CSS plays an important role, by using CSS you simply got to specify a repeated style for element once & use it multiple times as because CSS will automatically apply the required styles.
* The main advantage of CSS is that style is applied consistently across variety of sites. One instruction can control several areas which is advantageous.
* Web designers needs to use few lines of programming for every page improving site speed.
* Cascading sheet not only simplifies website development, but also simplifies the maintenance as a change of one line of code affects the whole web site and maintenance time.
* It is less complex therefore the effort are significantly reduced.
* It helps to form spontaneous and consistent changes.
* CSS changes are device friendly. With people employing a batch of various range of smart devices to access websites over the web, there’s a requirement for responsive web design.
* It has the power for re-positioning. It helps us to determine the changes within the position of web elements who are there on the page.
* These bandwidth savings are substantial figures of insignificant tags that are indistinct from a mess of pages.
* Easy for the user to customize the online page
* It reduces the file transfer size.

• What are the disadvantages of CSS?

* CSS, CSS 1 up to CSS3, result in creating of confusion among  web browsers.
* 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.
* There exists a scarcity of security.
* After making the changes we need to confirm the compatibility if they appear. The similar change affects on all the browsers.
* The programing language world is complicated for non-developers and beginners. Different levels of CSS i.e. CSS, CSS 2, CSS 3 are often quite confusing.
* Browser compatibility (some styles sheet are supported and some are not).
* CSS works differently on different browsers. IE and Opera supports CSS as different logic.
* There might be cross-browser issues while using CSS.
* There are multiple levels which creates confusion for non-developers and beginners.

• What is the difference between CSS2 and CSS3?

 CSS3 is split into many various documents known as Modules. each module adds new capability or extends options outlined in CSS2 over conserving backward compatibility. Work on CSS3 started around the time of publication of the initial CSS2 recommendation.

 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.

 The new addition of General relation Combinator will be wont to match relation parts of a given part through diacritic (~) combinator.

 CSS3 introduces several properties attended with new values and units. It facilitates styling of backgrounds, borders, boxes, etc…, that permits the USA to stay most of the styling at intervals the computer network and HTML standards and our document, while not a necessity for all those proprietary third-party package packages.

 New values and new units square measure introduced to support all those new properties. for example, Angle units deg, grad, rad, and switch or Time units s and ms.

• Name a few CSS style components

The components of css style are:  
1)Selecter:HTML element name, id name, class name.  
2)Property:It's like an attribute such as background color,font-size,position,text-align,color,border etc.  
3)Values:which defines property or values allocate for properties.

• What do you understand by CSS opacity?

The opacity property specifies the opacity/transparency of an element. The opacity property can take a value from 0.0 - 1.0. The lower the value, the more transparent.

• How can the background color of an element be changed?

Use selecter to find and select element you want to give background

Write selecter or element name and type as below

body {background-color: coral;}

here body is an element.

• 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.

• What is the use of the background-position property?

The background-position property sets the starting position of a background image. By default, a [background-image](https://www.w3schools.com/cssref/pr_background-image.php) is placed at the top-left corner of an element, and repeated both vertically and horizontally.

• 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..

body {  
  background-image: url("img\_tree.gif");  
  background-repeat: no-repeat;  
  background-attachment: fixed;  
}

• 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.
* Color is an inherited property while the background is not. So this can make confusion further.

• How to center block elements using CSS1?

**Approach:** There are two steps to center a block-level element –

**Step 1: Define the external width –** We need to define the external width. Block-level elements have the default width of 100% of the webpage, so for centering the block element, we need space around it. So for generating the space, we are giving it a width.

**Step 2: Set the left-margin and the right-margin of the element to auto –** Since we produced a remaining space by providing external width so now we need to align that space properly that’s why we should use margin property. Margin is a property that tells how to align a remaining space. So for centering the element you must set left-margin to auto and right-margin to auto.

• How to maintain the CSS specifications?

Save file with .css extension and write specifications in it.

• 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

• 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. Embedded style sheets are particularly useful for HTML documents that have unique style requirements from the rest of the documents in your project.

• What are the external style sheets?

To apply a rule to multiple pages, an external style sheet is used. 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.

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

• 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.

• What is the meaning of the CSS selector?

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

We can divide CSS selectors into five categories:

* Simple selectors (select elements based on name, id, class)
* [Combinator selectors](https://www.w3schools.com/css/css_combinators.asp) (select elements based on a specific relationship between them)
* [Pseudo-class selectors](https://www.w3schools.com/css/css_pseudo_classes.asp) (select elements based on a certain state)
* [Pseudo-elements selectors](https://www.w3schools.com/css/css_pseudo_elements.asp) (select and style a part of an element)
* [Attribute selectors](https://www.w3schools.com/css/css_attribute_selectors.asp) (select elements based on an attribute or attribute value)

• What are the media types allowed by CSS?

The names chosen for CSS media types reflect target devices for which the relevant properties make sense. They give a sense of what device the media type is meant to refer to. Given below is a list of various media types −

|  |  |
| --- | --- |
| **Sr.No.** | **Value & Description** |
| 1 | **all**  Suitable for all devices. |
| 2 | **aural**  Intended for speech synthesizers. |
| 3 | **braille**  Intended for braille tactile feedback devices. |
| 4 | **embossed**  Intended for paged braille printers. |
| 5 | **handheld**  Intended for handheld devices (typically small screen, monochrome, limited bandwidth). |
| 6 | **print**  Intended for paged, opaque material and for documents viewed on screen in print preview mode. Please consult the section on paged media. |
| 7 | **projection**  Intended for projected presentations, for example projectors or print to transparencies. Please consult the section on paged media. |
| 8 | **screen**  Intended primarily for color computer screens. |
| 9 | **tty**  Intended for media using a fixed-pitch character grid, such as teletypes, terminals, or portable devices with limited display capabilities. |
| 10 | **tv**  Intended for television-type devices. |

• What is the rule set?

A CSS rule set contains one or more selectors and one or more declarations. The selector(s), which in this example is h1, points to an HTML element. The declaration(s), which in this example are color: blue and text-align: center style the element with a property and value. The rule set is the main building block of a CSS sheet.

h1 {

color: blue;

text-align: center;

}

• Create Layouts

Ans: