MODULE-2 CSS

1. What are the benefits of using CSS?

- Easier to maintain and update
- Greater consistency in design
- More formatting options
- Lightweight code
- Faster download times
- Search engine optimization benefits
- Ease of presenting different styles to different viewers
- Greater accessibility

2. What are the disadvantages of CSS?

1.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.

2. 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.

3. 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.

4. 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?

CSS2	CSS3
CSS splits up different sections of the code into modules,	Both CSS and HTML were put into a single file, there was no concept of modules before.
There are new ways you can write CSS rules with a bunch of CSS selectors	There were no new ways of writing the CSS rules.
There is no backward compatibility with CSS2	There is backward compatibility maintained with CSS 3
With CSS2 only web safe fonts can be used	With CSS3 special fonts can be used such as those in Google Fonts and TypeCast
With CSS2 the concept of simple selectors were present	With CSS3 the selectors were called as a sequence of simple seletors.com
Using CSS2, for rounded borders, coding the css styles were complex	With CSS3, there is provision for automatically assigning rounded borders to objects21
CSS 2, splitting text into multiple columns required complex coding because the standard was not equipped enough to break the text into columns so that it would fit into a box	CSS3 has the capability to split text into various columns so that each text block appears as a layout of the newspaper.
CSS 2 Doesn't support the Border-Box property	CSS3 supports the Border-Box property

4.Name a few CSS style components.

1.SELECTER:

HTML element name,id name, class name.

2.PROPERTY:

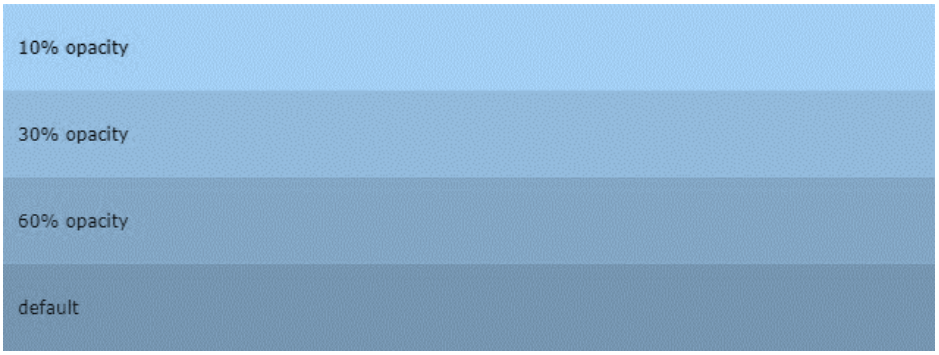
Its like an attribute such as background color, font-size,position,text-align,color,border etc.

3.VALUES:

Which defines property or values allocate for properties.

5. What do you understand by CSS opacity?

The opacity property sets the opacity level for an element. The opacity-level describe the transparency-level , where default is not transparent at all, 60% opacity is 10% opacity see through first opacity 0%



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

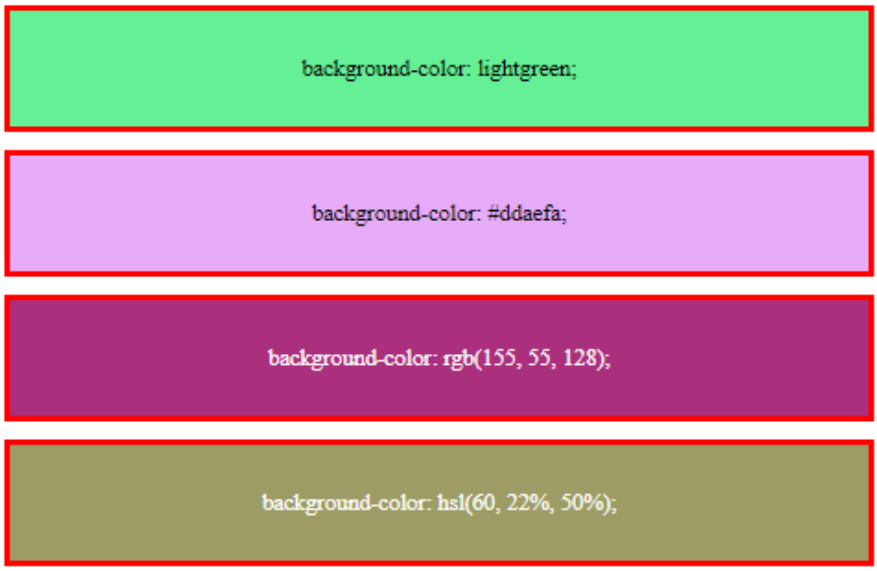
The color_name value of this property defines the value of background color

or specifies the color codes. It can be given by using the color name, rgb() value, or the hexadecimal value.

The transparent value of this property is the default value, which specifies the transparent background color.

```
<!DOCTYPE html>
<html>
<head>
<title>background-color property</title>
<style>
body {
text-align:center;
}
h1{
color: blue;
}
div{
font-size: 25px;
padding: 50px;
border: 5px solid red;
margin: 20px;
}
#one{
background-color: lightgreen;
}
#two{
background-color: #ddaefa;
}
#three{
background-color: rgb(155, 55, 128);
```

```
color: white;
}
#four{
background-color: hsl(60, 22%, 50%);
color: white;
}
</style>
</head>
<body>
<h1>Welcome to the javaTpoint.com</h1>
<div id = "one">
background-color: lightgreen;
</div>
<div id = "two">
background-color: #ddaefa;
</div>
<div id = "three">
background-color: rgb(155, 55, 128);
</div>
<div id = "four">
background-color: hsl(60, 22%, 50%);
</div>
</body>
</html>
```



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

The **background-repeat property** in CSS is used to repeat the background image both horizontally and vertically. It also decides whether the background image will be repeated or not.

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.

```
<html>
  <head>
    <style>
      body {
        background-image: url("/css/images/css.jpg");
        background-repeat: repeat;
      }
    </style>
  </head>
  <body>
    <p>Tutorials Point</p>
  </body>
</html>
```

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

The **background-position** CSS property sets the initial position for each background image. The position is relative to the position layer set by background-origin.

```
background-position: left top;
background-position: left center;
background-position: left bottom;
background-position: right top;
background-position: right center;
background-position: right bottom;
background-position: center top;
background-position: 10% 40%;
background-position: 50px 100px;
```

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

In this article, we will discuss the property that is used to control the scrolling of an image in the background. The *background-attachment* property in CSS is used to specify the kind of attachment of the background image with respect to its container.

Value	Description
scroll	The background image will scroll with the page. This is default
fixed	The background image will not scroll with the page
local	The background image will scroll with the element's contents

initial	Sets this property to its default value. Read about *initial*
inherit	Inherits this property from its parent element. Read about *inherit*

Example:

```
body {
  background-image: url("img_tree.gif");
  background-repeat: no-repeat;
  background-attachment: scroll;
}
```

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

11.How to center block elements using CSS1?

There are two ways of centering block level elements:

1. By setting the properties margin-left and margin-right to auto and width to some explicit value:

BODY {width: 30em; background: cyan;}
P {width: 22em; margin-left: auto; margin-right: auto}

In this case, the left and right margins will each be four ems wide, since they equally split up the eight ems left over from (30em - 22em). Note that it was not necessary to set an explicit width for the BODY element; it was done here to keep the math clean.

Another example:

TABLE {margin-left: auto; margin-right: auto; width: 400px;}
In most legacy browsers, a table's width is by default determined by its content. In CSS-conformant browsers, the complete width of any element (including tables) defaults to the full width of its parent element's content area. As browser becaome more conformant, authors will need to be aware of the potential impact on their designs.

12.How to maintain the CSS specifications?

STARTING FROM ZERO
LEARNING THE FOUNDATION

1. First, you might want to put all the specifications in context by reading the current CSS Snapshot. You may also want to read the CSS Design Principles.

2. Next, read all of CSS 2.1 Chapter 1, which explains how the specifications are organized, and CSS 2.1 Section 3.1 (Definitions) which introduces some commonly-used terminology.
3. Read carefully the following CSS spec sections, since the concepts in these sections are crucial to understanding the rest of the specs:
    - CSS Cascading and Inheritance, particularly Value Processing and Defaulting (replaces CSS2 Chapter 6: Assigning property values, Cascading, and Inheritance).
    - CSS Values and Units: Value Definition Syntax
    - CSS Display: Introduction and CSS Display: Glossary
    - CSS Box Model Section 2: The CSS Box Model (replaces CSS2 Section 8.1: Box dimensions)
    - CSS2 Section 9.1.1: The viewport
    - CSS Sizing, particularly CSS Sizing: Terminology
    - CSS Writing Modes: Introduction and CSS Writing Modes: Abstract Box Terminology

    You may need to refer back to them as you decipher particularly cryptic parts of the standard.

AN IMPORTANT DETAIL

Some CSS specs, such as CSS 2.1, have *errata*, corrections made after the spec's publication. **When you are interpreting a spec, make sure you check the errata!** The specs are still changing as problems come up through testing and implementation.

DEEPENING YOUR UNDERSTANDING

Web Platform Tests Project

The WPT project maintains a shared test suite for the CSS specifications and other Web Platform technologies.

The Mozilla Project

The Mozilla Project maintains the Gecko layout engine, which forms the core of the Firefox web browser, among others.

The WebKit Project

The WebKit Project maintains the WebKit layout engine, which forms the core of Safari web browser.

The Chromium Project

The Chromium Project maintains the Blink layout engine, which forms the core of the Chrome, Edge, and Brave web browsers, among others.

ASKING QUESTIONS

If you've perused the specifications and something still doesn't make sense, you can ask on www-style.

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

There are three ways to integrate CSS into a Web page

1. **Inline:**
   HTML elements may have CSS applied to them via the STYLE attribute.

2. **Embedded:**
   By placing the code in a STYLE element within the HEAD element.

3. **Linked/ Imported:**
   Place the CSS in an external file and link it via a link element.

14.What is embedded style sheets?

Embedded style sheets refer to when you embed style sheet information into an HTML document using the `<style>` element. You do this by embedding the style sheet information within `<style></style>` tags in the head of your document.

SYNTAX

The CSS syntax for embedded style sheets is exactly the same as other CSS code.

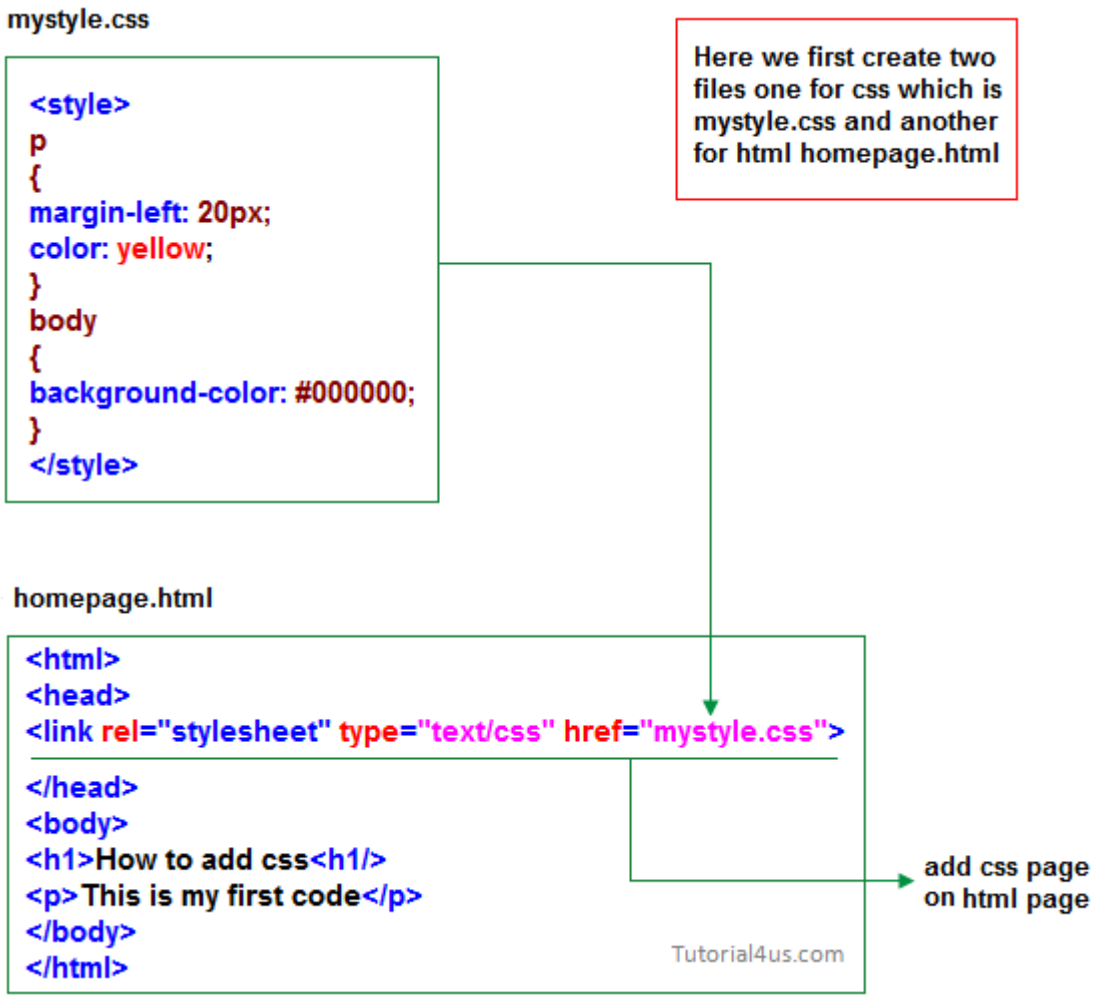
For example, to use the following code, simply place it between the `<head></head>` tags of your HTML document:

```
<style>
  p {
      font-family: georgia, serif;
      font-size: x-small;
   }
  hr {
      color: #ff9900;
      height: 1px;
   }
  a:hover {
      color: #ff0000;
      text-decoration: none;
   }
</style>
```

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.



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

The advantages of External Style Sheets :

- 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 :

- 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.

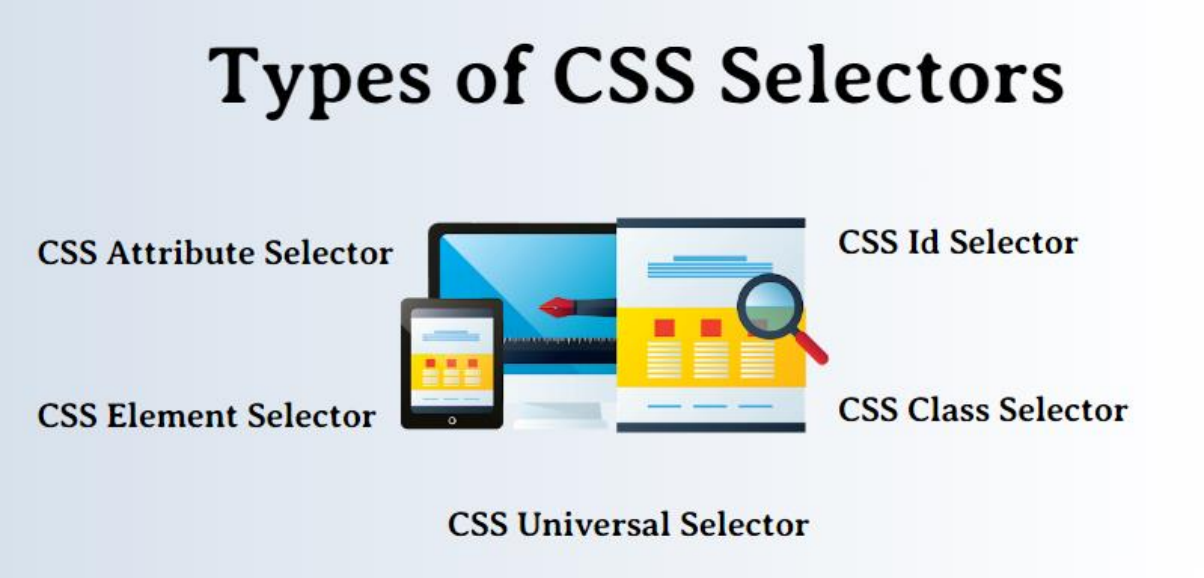
17.What is the meaning of the CSS selector?

CSS selectors are used to define the elements you want to style with CSS. There are many different types of CSS selectors, each with their own unique syntax. These tell the browser which elements to apply CSS property values to.

How to Use Selectors in CSS

There are two major ways you can use selectors in CSS. If you have your HTML and CSS in one doc, then you simply have to add CSS selectors into the <head> section of your webpage. You'll see this method in the examples below.

However, you can also keep your HTML and CSS in separate documents. In that case, you might have an HTML document labelled index.html and a CSS file labelled style.css. The index.html file must include a line of code referencing the CSS file so that these styles are rendered on your webpage.



18.What are the media types allowed by CSS?

One of the most important features of style sheets is that, you can specify separate style sheets for different media types. This is one of the best ways to build printer friendly Web pages — Just assign a different style sheet for the "print" media type.

defines the following media groups:

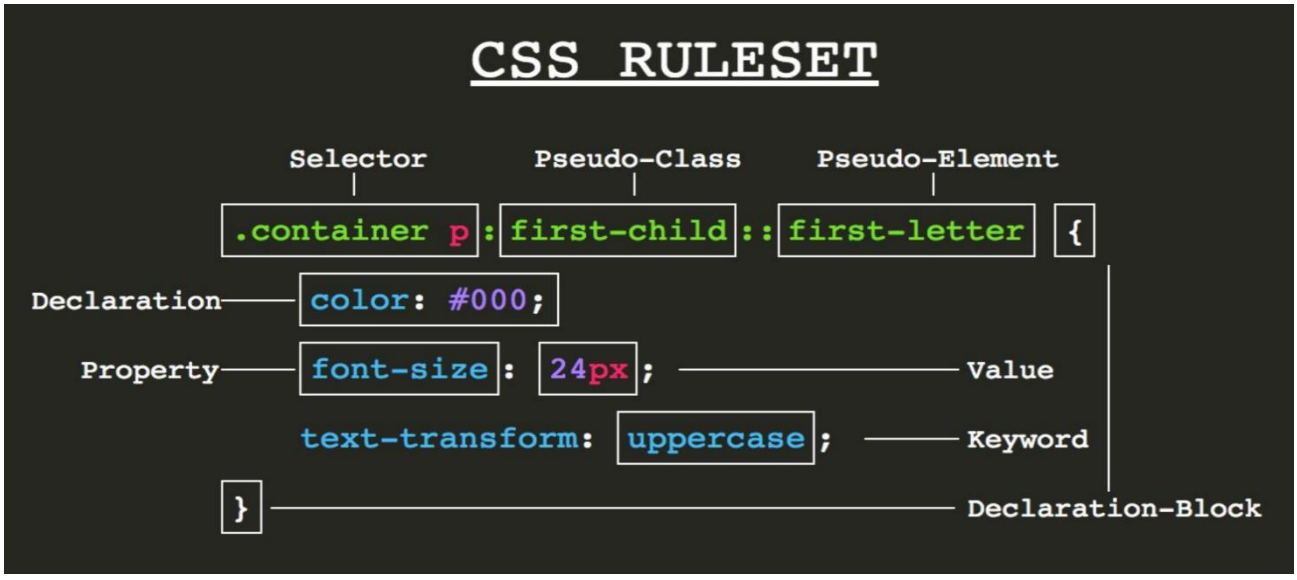
- continuous or paged.
- visual, audio, speech, or tactile.
- grid (for character grid devices), or bitmap.

- interactive (for devices that allow user interaction), or static (for those that do not).
- all (includes all media types)

Value	Description
all	Used for all media type devices(default)
print	Used for printers.
screen	Used for smartphones, computer screens, tablets, etc.
speech	Used for screen readers.

19.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.



20.Create Layouts.

https://github.com/HemaliMs12/PRACTICE/blob/main/LAYOUT.html