

MODULE: 2 (CSS and CSS 3)

1. What are the benefits of using CSS?

Ans. **Some of the benefits of using CSS are:**

- 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?

Ans. **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 programming 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 stylesheets 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.

3. What is the difference between CSS2 and CSS3?

Ans.

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 selectors.com
Using CSS2, for rounded borders, coding the css styles were complex	With CSS3, there is provision for automatically assigning rounded borders to objects ²¹
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

Ans. 1)Selector: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.

5. What do you understand by CSS opacity

Ans. CSS Opacity Property The CSS opacity property makes elements see-through, or transparent. The value of the opacity property ranges between 0 and 1.

- CSS Opacity Property The CSS opacity property makes elements see-through, or transparent. The value of the opacity property ranges between 0 and 1. ...
- Creating a Transparent Image Suppose you are designing a website where you want an image to appear transparent. You could accomplish this goal using the opacity CSS property. ...
- Trigger Opacity on Hover ...
- Transparent Boxes ...
- RGBA Color Transparency ...
- Trigger Opacity on Hover ...
- Transparent Boxes ...
- RGBA Color Transparency ...

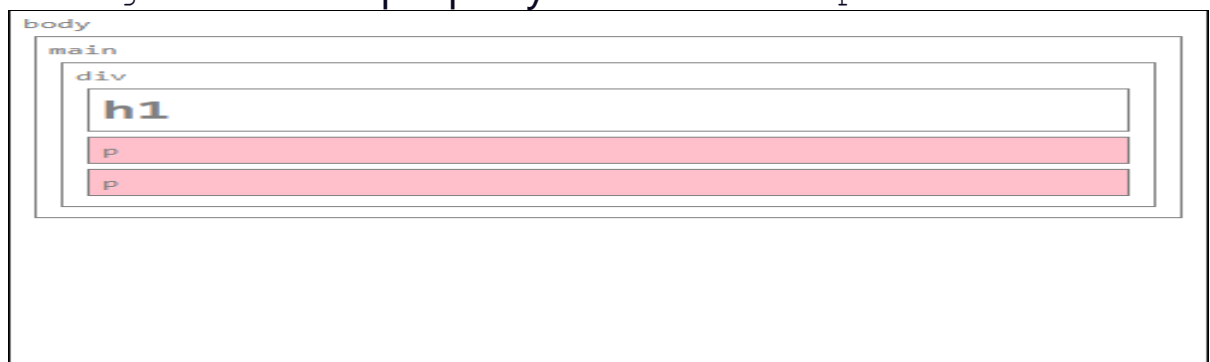
6. How can the background color of an element be changed?

Ans. You can change the background color of an HTML element using the `background-color` CSS property and giving it a value of a color.

```
p {  
  background-color: pink;  
}
```

With this code, the paragraphs are given a pink background.

For example, this code will make all paragraph elements in your HTML file have a pink background because the `background-color` property has a value of `pink`.



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

ans. 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.

Syntax:

```
background-repeat: repeat|repeat-x|repeat-y|no-repeat|initial|inherit;
```

Example 1: In the example, we will make use of the repeat-x to repeat the image in the horizontal direction.

```
<!DOCTYPE html>

<html>

<head>

    <title>background-repeat property</title>

    <style>

        body {

            margin-top: 40px;

            background-image: url(

"https://media.geeksforgeeks.org/wp-content/uploads/geeks-25.png");

            background-repeat: repeat-x;

            background-size: 150px 100px;

        }

        h1 {

            text-align: center}

    </style>

</head>

<body>

    <h1>GeeksforGeeks</h1>

</body>
```

</html>

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

Ans. The **background-position** property sets the starting position of a background image.

```
<!DOCTYPE html>

<html>

<head>

<style>

body {

    background-image: url('w3css.gif');

    background-repeat: no-repeat;

    background-attachment: fixed;

    background-position: center;

}

</style>

</head>

<body>

<h1>The background-position Property</h1>

<p>Here, the background image will be positioned in the center of the element (in this case, the body element).</p>

</body>

</html>
```

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

Ans. The **background-attachment** property in CSS is used to specify the kind of attachment of the background image with respect to its container. It can be set to scroll or make it remain fixed. It can be applied to all **HTML** elements.

Syntax:

```
background-attachment: scroll|fixed|local|initial|inherit;
```

Example 1: The following example demonstrates the “scroll” value for the *background-attachment* property of CSS. The *background-attachment* image also gets scrolled.

```
<!DOCTYPE html>
```

```
<html>

<head>

<style>

#example {background-image:

url("https://media.geeksforgeeks.org/wp-content/uploads/geeks-25.png");

        background-position: center;

        background-repeat: no-repeat;

        background-attachment: scroll;}

    </style>

</head>

    <body style="text-align:center">

    <h1 style="color:green">GeeksforGeeks</h1>

    <h2> background-attachment: scroll;</h2><br><br>

        <div id="example">

            <p>Prepare for the Recruitment drive of product

                based companies like Microsoft, Amazon,

                Adobe etc with a free online placement

                preparation course. The course focuses on

                various MCQ's & Coding question likely to

                be asked in the interviews & make your

                upcoming placement season efficient and

                successful.</p>

        <br>

            <p>This course is especially designed for the
```

Java apprentices who want to hone their skills in Java for Coding Interviews and Competitive Programming. No matter if you are a school student or college student, if you have the zeal of programming, this is the right time to start.

</p>

<p>Prepare for the Recruitment drive of product based companies like Microsoft, Amazon, Adobe etc with a free online placement preparation course. The course focuses on various MCQ's & Coding question likely to be asked in the interviews & make your upcoming placement season efficient and successful</p>

<p>This course is especially designed for the Java apprentices who want to hone their skills in Java for Coding Interviews and Competitive Programming. No matter if you are a school student or college student, if you have the zeal of programming, this is the right time to start.

</p>

<p>Prepare for the Recruitment drive of product based companies like Microsoft, Amazon, Adobe etc with a free online placement preparation course. The course focuses on various MCQ's & Coding question likely to be asked in the interviews & make your upcoming placement season efficient and successful </p>

</div>

</body>

</html>

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

Ans. The reasons for this are as follows: - **It increases the legibility of the style sheets.** The background property is a complex property in CSS. If it is combined with color, the complexity will further increase.

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.

The element will then take up the specified width, and the remaining space will be split equally between the two margins:

<!DOCTYPE html>

<html>

<head>


```

<style>
.center {
  margin: auto;
  width: 60%;
  border: 3px solid #73AD21;
  padding: 10px;}
</style>
</head>
<body>
<h2>Center Align Elements</h2>
<p>To horizontally center a block element (like div), use margin: auto;</p>
<div class="center">
  <p>Hello World!</p>
</div>
</body>
</html>

```

12.How to maintain the CSS specifications?

Ans. There are four categories which define the specificity level of a selector:

- **Inline styles** - Example: <h1 style="color: pink;">
- **IDs** - Example: #navbar
- **Classes, pseudo-classes, attribute selectors** - Example: .test, :hover, [href]
- **Elements and pseudo-elements** - Example: h1, :before

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

Ans. 1. First Way is <style> Tag (Embedding Styles):

this may be useful if you have only one HTML Page and you don't want to create a separate Stylesheet .

```

<html>
<head>

```

```
<style>
p{
color: green;
font-style: italic;
}
</style>
</head>
<body>
<p>This is just an Example</p>
</body>
</html>
```

2. Second way is **<link> Tag (Linking an External CSS File)**: This is the most common way of including an External Stylesheet. In this method you can keep all of your CSS rules in a single file saved with an Extension .css . This will be useful if you have number of HTML Pages. If you need to alter a style across all of your web pages you just have to edit only this CSS file, this will affect the pages wherever you included the CSS file with the tag below.

```
[code] <link href="style.css" rel="stylesheet" type="text/css" />
```

3. Third Way (Inline CSS):

Writing Inline CSS style is not recommended. But if you want to test quickly some styles in your webpage you can do this.

Just include a parameter "style" in any HTML Tag.

```
[code]
<p style="font-size: 12px; font-weight: bold">This is inline style example</p>
```

4. Fourth Way (importing CSS inside a CSS file):

Sometimes you may need to include one more External CSS file in all of your Web Pages. This will be difficult if you have 50 or 100 HTML Pages.

But you can do this easily by attaching within the present CSS file using the import rule.

```
[code]
```

```
@import "second.css";
```

So the above @import will import all css rules into the present CSS file.

14. What is embedded style sheets?

Ans. Embedded Style Sheets is a **style sheet where designers can embed information of the style sheet in an HTML document by making use of the <style> element**. This embedding of style sheet info within <style> </style> tags are done within head section of HTML.

15. What are the external style sheets?

Ans. External Style Sheet

- External Style Sheet is basically a CSS file containing list of declaration blocks.
- This (.css) file is linked to various web pages to apply similar styles.
- To link HTML and CSS files together we use link tags.

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

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

Ans. **Advantages And Disadvantages of External Style Sheets**

- 1) The style of a few documents can be controlled from the site by utilizing them.
- 2) Multiple HTML elements can have numerous documents, where classes can be made.
- 3) To assemble styles in complex circumstances, selector and grouping strategies are utilized.

17. What is the meaning of the CSS selector?

Ans. A CSS selector is the **part of a CSS style call that identifies what part of the web page should be styled**. The selector contains one or more properties that define how the selected HTML

18. What are the media types allowed by CSS?

Ans. **CSS defines the following media groups:**

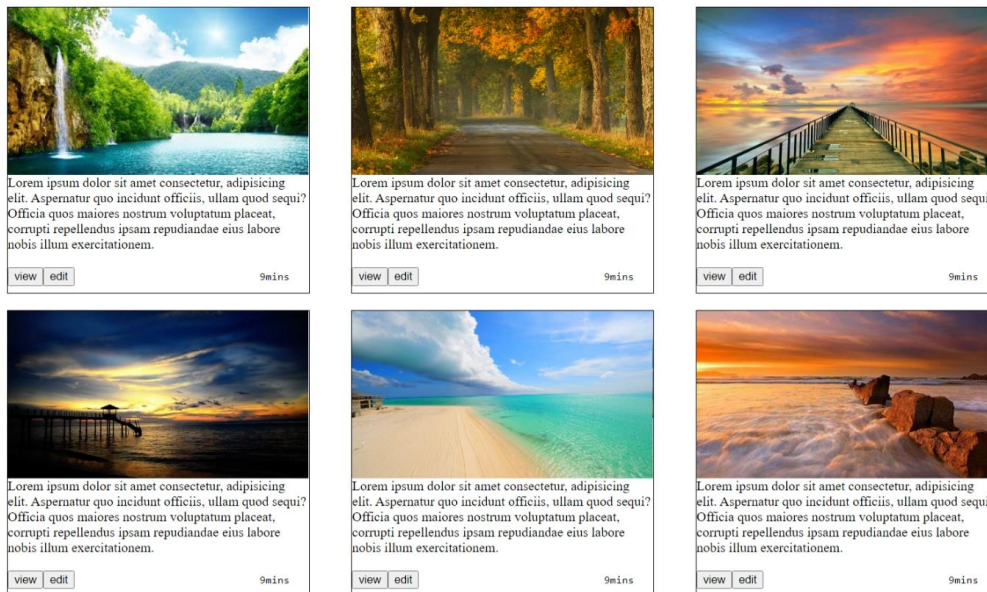
- continuous or paged .
- visual, audio, speech, or tactile .
- grid (for character grid devices), or bitmap .
- interactive (for devices that allow user interaction), or static (for those that do not).
- all (includes all media types)

19. What is the rule set?

Ans. A rule set is a **collection of one or more rules that you can associate with a realm authorization, factor assignment, command rule, or secure application role**. The rule set evaluates to true or false based on the evaluation of each rule it contains and the evaluation type (All True or Any True).

20.Create Layouts.

Ans.



Code: `<!DOCTYPE html>`

```
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    *{margin: 0%;}
    div.layout{height: 200px; width: 25%; padding-bottom: 140px ; margin-top: 20px; border: 1px solid black; float: left; margin-left: 50px; }
    div.layout img{height: 200px; width: 100%; background-color: gray; float: left; }

    div.layout1{height: 200px; width: 25%; padding-bottom: 140px ; margin-top: 20px; border: 1px solid black; float: left; margin-left: 50px;}
    div.layout1 img{height: 200px; width: 100%; background-color:gray; padding-left: 0px ; float: left; }

    div.layout2{height: 200px; width: 25%; padding-bottom: 140px ; margin-top: 20px; border: 1px solid black; float: left; margin-left: 50px;}
```

```

        div.layout2 img{height: 200px; width: 100%; background-color:gray;
padding-left: 0px ; float: left; }

        div.layout3{height: 200px; width: 25%; padding-bottom: 140px ; margin-
top: 20px; border: 1px solid black; float: left; margin-left: 50px;}
        div.layout3 img{height: 200px; width: 100%; background-color:gray;
padding-left: 0px ; float:left; }

        div.layout4{height: 200px; width: 25%; padding-bottom: 140px ; margin-
top: 20px; border: 1px solid black; float: left; margin-left: 50px;}
        div.layout4 img{height: 200px; width: 100%; background-color:gray;
padding-left: 0px ; float:left; }

        div.layout5{height: 200px; width: 25%; padding-bottom: 140px ; margin-
top: 20px; border: 1px solid black; float: left; margin-left: 50px;}
        div.layout5 img{height: 200px; width: 100%; background-color:gray;
padding-left: 0px ; float:left; }
    </style>
</head>
<body>
    <div class="layout"><br>Lorem ipsum dolor sit amet consectetur,
adipisicing elit. Aspernatur quo incidunt officiis, ullam quod sequi? Officia
quos maiores nostrum voluptatum placeat, corrupti repellendus ipsam
repudiandae eius labore nobis illum exercitationem. <br><br>
    <pre><button>view</button><button>edit</button>
9mins
    </div>

    <div class="layout1">Lorem ipsum dolor sit amet consectetur, adipisicing elit. Aspernatur quo
incidunt officiis, ullam quod sequi? Officia quos maiores nostrum voluptatum
placeat, corrupti repellendus ipsam repudiandae eius labore nobis illum
exercitationem.<br><br><pre><button>view</button><button>edit</button>
9mins</div>

    <div class="layout2">Lorem ipsum dolor sit amet consectetur, adipisicing elit. Aspernatur quo
incidunt officiis, ullam quod sequi? Officia quos maiores nostrum voluptatum
placeat, corrupti repellendus ipsam repudiandae eius labore nobis illum
exercitationem.<br><br><pre><button>view</button><button>edit</button>
9mins</div>

```

```
<div class="layout3">Lorem ipsum dolor
sit amet consectetur, adipisicing elit. Aspernatur quo incidunt officiis,
ullam quod sequi? Officia quos maiores nostrum voluptatum placeat, corrupti
repellendus ipsam repudiandae eius labore nobis illum
exercitationem.<br><br><pre><button>view</button><button>edit</button>
9mins</div>
```

```
<div class="layout4">Lorem ipsum dolor sit amet consectetur, adipisicing elit. Aspernatur
quo incidunt officiis, ullam quod sequi? Officia quos maiores nostrum
voluptatum placeat, corrupti repellendus ipsam repudiandae eius labore nobis
illum
exercitationem.<br><br><pre><button>view</button><button>edit</button>
9mins</div>
```

```
<div class="layout5">Lorem ipsum dolor sit amet consectetur, adipisicing elit. Aspernatur quo
incidunt officiis, ullam quod sequi? Officia quos maiores nostrum voluptatum
placeat, corrupti repellendus ipsam repudiandae eius labore nobis illum
exercitationem.<br><br><pre><button>view</button><button>edit</button>
9mins</div>
</body>
</html>
```