

MODULE: 2 (CSS and CSS 3)

1. What are the benefits of using CSS?

- CSS plays an important role, 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 efforts are significantly reduced.
- CSS are used to make a web page responsive.
- Easy for the user to customize the online page
- It reduces the file transfer size.

2. What are the disadvantages of using CSS?

- Beginners are confused while opening to learn CSS as there are many levels of CSS such as CSS2, CSS3, etc.
- 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 is important in today's world driven by technology and data. One of the major disadvantages of CSS is that it has limited security.

- 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?

Parameters	CSS2	CSS3
Released in	1998	1999
Specification	Single Document	Divided into individual modules.
Styling Option	More than CSS	Large along with the support for animations,
Fonts	Web safe Fonts	We can add external font from fontsquirrel and google font.
Selectors	Simple selector	A sequence of Simple selector
Rounded Borders	No	Yes
Split Text Feature	No	Yes
Grid System and Template Layout	No	Yes

4. Name a few CSS style components.

- The components of css styles are:
 - Selector: Class name, Id name or element name.
 - 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 value of the opacity of range between 0 to 1, when 0 is the low and 1 is high content visibility.
- Ex opacity:0; opacity:0.33; opacity:1;

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

- Using the background-color property we can change the background color of particular element

Ex

```
<!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>
    table{
      background-color: rebeccapurple;
    }
  </style>
</head>

<body>
  <table border="1">
    <thead>
      <tr>
        <th>Roll Number</th>
        <th>Name</th>
        <th>Class</th>
      </tr>
    </thead>
    <tbody>
      <tr>
        <td>1</td>
        <td>Abc</td>
        <td>10<sup>th</sup></td>
      </tr>
      <tr>
        <td>2</td>
        <td>xyz</td>
        <td>12<sup>th</sup></td>
      </tr>
      <tr>
        <td>3</td>
        <td>Pqr</td>
        <td>12<sup>th</sup></td>
      </tr>
    </tbody>
  </table>
</body>
</html>
```

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

- The image repetition of the backup property is controlled using background-repeat property in CSS.
- If you want to controlled the image repetition then use background-repeat: no-repeat.

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

- The background-position property is used to sets the stating position of a background image.

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

- Using the background-attachment: fixed to controls the background image scrolling.

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

- The background property is a complex property in CSS, and it is combined with color, the complexity will increase.
- Color is an inherited property while the background is not. So this can make confusion further.

11. How to center block element using CSS?

- Using margin property with the value of “auto” which will automatically set the margin such that our block element is placed in the center.

12. How to maintain the CSS specifications?

The CSS Specification is no different but with a different approach with the advent of CSS3.. The syntax and data types of the language.

- 1 .Detailed explanation on CSS Selectors.
- 2 . How you can assign values to properties.
- 3 . The Cascade (the "C" in CSS)
- 4 . How inheritance works.
- 5 . The Box Model e.t.c.

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

- There are three ways to integrate CSS as a web page.
 - I. Inline CSS
 - II. Internal CSS
 - III. External CSS

Inline CSS

- An Inline CSS is used to apply a unique style to a single HTML element.

- Ex. <h1 style="color:blue">Inline CSS</h1>

Internal CSS

- An Internal CSS used to define a style for single HTML page.
- An Internal CSS is defined in the <head> section of an HTML page, within a <style> element.

```
<!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>Internal CSS</title>
  <style>
    body{
      background-color: aqua;
    }
    h1{
      color: red;
      text-align: center;
    }
    p{
      color: blueviolet;
      text-align: center;
    }
  </style>
</head>
<body>
  <h1>Internal CSS</h1>
  <p>This is a paragraph tag.</p>
</body>
</html>
```

External CSS

- An external CSS used to define the CSS for many HTML pages.

Font.html

```
<!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>
  <link rel="stylesheet" href="font.css">
</head>
<body>
  <h3>Font Family</h3>
  <p class="changeFont">Lorem ipsum dolor sit amet consectetur adipisicing elit. Fuga odit excepturi beatae culpa minima porro aspernatur nihil illum voluptas quasi, quisquam sed incidunt laboriosam eum delectus doloribus consequatur recusandae commodi?</p>
  <div class="font-size-percent">Font Percent</div>
  <div class="font-size-em">Font em</div>
  <div class="font-size-rem">Font rem</div>
  <div class="font-size-px">Font px</div>
  <div class="font-size-ch">Font ch</div>
  <div class="font-size-cm">Font cm</div>
  <div class="font-size-ex">Font ex</div>
  <div class="font-size-fr">Font fr</div>
  <div class="font-size-in">Font in</div>
  <div class="font-size-mm">Font mm</div>
```

```

<div class="font-size-pc">Font pc</div>
<div class="font-size-pt">Font pt</div>
<div class="font-size-vh">Font vh</div>
<div class="font-size-vmax">Font vmax</div>
<div class="font-size-vmin">Font vmin</div>
<div class="font-size-vw">Font vw</div>
<div class="font-style-italic">font-style-italic </div>
<div class="font-style-normal">font-style-normal </div>
<div class="font-style-oblique">font-style-oblique </div>
<div class="font-variant-normal">font-variant-normal </div>
<div class="font-variant-small-caps">font-variant-small-caps </div>
<div class="font-bold">font-bold</div>
<div class="font-bolder">font-bolder</div>
<div class="font-lighter">font-lighter </div>
<div class="font-1000">font-1000</div>
<div class="line-height">line-height </div>
<div class="line-height">Lorem ipsum dolor sit, amet consectetur adipisicing elit. Mollitia fugiat a inventore animi eius
dolor illo veniam consectetur dolore placeat provident tempora enim, iusto rerum alias eaque, repellat ad vel! Lorem ipsum
dolor, sit amet consectetur adipisicing elit. Mollitia minima iusto eaque? Corrupti recusandae quod id aut ab ipsam porro iste
aliquid, perferendis modi eaque, nihil praesentium itaque nesciunt fuga. Lorem ipsum dolor sit amet consectetur adipisicing
elit. Ratione optio accusamus veniam aliquid, ipsum at molestias totam quasi amet animi eveniet minus earum deserunt aut iure
temporibus illo praesentium velit? </div>
</body>
</html>

```

font.css

```

.changeFont{
    font-family:'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
}

.font-size-percent{font-size: 200%;}
.font-size-em{font-size: 2em;}
.font-size-rem{font-size: 2rem;}
.font-size-px{font-size: 35px;}
.font-size-ch{font-size: 2ch;}
.font-size-cm{font-size: 2cm;}
.font-size-ex{font-size: 4ex;}
.font-size-fr{font-size: 10fr;}
.font-size-in{font-size: 1in;}
.font-size-mm{font-size: 10mm;}
.font-size-pc{font-size: 10pc;}
.font-size-pt{font-size: 30pt;}
.font-size-vh{font-size: 5vh;}
.font-size-vmax{font-size: 5vmax;}
.font-size-vmin{font-size: 5vmin;}
.font-size-vw{font-size: 2vw;}

.font-style-italic{ font-style:italic }
.font-style-normal{ font-style:normal }
.font-style-oblique{ font-style:oblique }
.font-variant-normal{ font-variant:normal }
.font-variant-small-caps{ font-variant:all-small-caps }
.font-bold{ font-weight:bold }
.font-bolder{ font-weight:bolder }
.font-lighter{ font-weight:lighter }
.font-1000{ font-weight:1000 }
.line-height{ line-height:50px }

```

14. What is an embedded style sheets?

- Embedded style sheets allow you to define style 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.

15. What are the external style sheets?

- External style sheet is a separate file that can be accessed by creating a link within the head section of the webpage.
- If we want to access the style sheet then we use link to every html page whichever want to access the style sheet.
- Ex

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

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

Advantages

- 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.

Disadvantages

- 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?

- A CSS selector is a first part of a CSS rule.
- Whenever we want to give CSS of a particular element then we use selector and give the CSS.

➤ Types of CSS:

- I. Universal Selector
- II. Element Selector
- III. Id Selector
- IV. Class Selector
- V. Descendant Selector
- VI. Child Selector
- VII. Adjacent Sibling Selector
- VIII. General Sibling Selector
- IX. Grouping Selector

18. What are the media types allowed by CSS?

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

19. What is the rule set?

- Basically the rule set is the structure of a CSS.

1. Rule set
 - a. selector
 - b. declaration block
 - i. declarations
 1. property
 2. value

- ```
h1 {
 width: 100%;
 height: 100px;
 background-color: red;
}
```