**Module – 4**

**CSS and CSS3**

**• What are the benefits of using CSS?**

=> You can write CSS once and then reuse the same sheet in multiple HTML file.

=> You can define a style for each HTML element and apply it to as many web pages as you want.

=> To make a global change, simply change the style, and all element in all the web pages will be updated automatically.

=> Now HTML attributes are being deprecated and it is being recommended to use CSS. So it’s a good to start using CSS in all the HTML pages to make them compatible with future browser.

=> The CSS offers consistent platform Independence and can support latest browser as well.

• What are the disadvantages of CSS?

=> CSS might not always look the same across different web browsers. This can lead to inconsistencies in how your website appears to users.

=> Another hurdle is the learning curves. CSS can be complex especially if you’re just starting. You need to grasp things like selectors, properties, values, and the box model, which is quite difficult as a beginner.

=> There is some security issues in CSS.

=> There is limited layout control, It can be a bit tricky without workaround or turning to other technologies like flexbox or grid.

=> Some big files can make your web pages load slowly.

=> As websites grow and evolve, maintaining and reorganizing CSS can become quite complex and time consuming.

• What is the difference between CSS2 and CSS3?

=> CSS2 :

- CSS splits up different sections of the code into modules.

- There is no backward compatibility with CSS2.

- With CSS2 only web safe fonts can be used.

- CSS2 doesn’t support the border box property.

=> CSS3 :

- CSS and HTML were put into a single file, there was no concept of modules before.

- There is backward compatibility maintained with CSS3.

- With CSS3 special fonts can be used such as those Google Fonts and TypeCast.

- CSS3 supports the border box property.

• Name a few CSS style components.

=> Color : Defines the color of text and backgrounds using properties like “color” and “background-color”.

=> Font components : Control the font family, size, weight, style, and spacing properties like “font-family”, “font-size”, “font-weight”, “font-style”, “line-height”, “letter-spacing”.

=> Box model : Defines the spacing and dimensions of elements using properties like “margin”, “padding”, “width”, “height”.

=> Border : Style the borders of elements using properties like “border-width”, “border-style”, “border-color” and “border-radius”.

=> Background : Specifies the background properties of elements using properties like “background-image”, “background-repeat”, “background-position”, “background-size”.

• What do you understand by CSS opacity?

=> The CSS opacity property is used to specify the transparency of an element.

=> In simple word, you can say that it specifies the clarity of the image.

=> In technical terms, Opacity is defined as degree in which light is allowed to travel through an object.

=> Opacity value defines lower than 1, for example 0.5 value of opacity means 60%.

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

=> We can change the background color of elements using “background-color” proprerty.

=> element {

background-color : black;

}

• How can image repetition of the backup be controlled?

=> We can stop repetition of background image to set background no repeat.

=> element {

background-image : url(‘abc.jpg’);

background-repeat : no-repeat;

}

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

=> Using background-position property, we can set the position of background image.

=> For Ex. If we have to show image from the center position, so we can use “background-position : center;”.

=> element {

background-image : url(‘abc.jpg’);

background-position : center;

}

• Which property controls the image scroll in the background?

=> background-attachment property used to control the image scroll in background.

=> element {

background-attachment : fixed;

}

=> There are many other values like

=> scroll : background image scroll with page. By default.

=> local : background image scroll with the element’s content.

• Why should background and color be used as separate properties?

=> The main difference between background and background-color is we can set image in background, but we can’t set image in background-color. Background-color only allows to set background color.

• How to center block elements using CSS1?

=> In CSS1, we use ‘text-align: center’ property to center a block element.

=> element {

Text-align: center;

}

• How to maintain the CSS specifications?

=> There are some CSS specifications :

- Use clear and consistent name for classes and IDs.

- Use comments in your css file to avoid complexity.

- Keep your CSS file separate from the HTML file. This will give good look to your code.

- Implement responsive design to your website for the various of screens and devices.

- Use case-sensitiveness in your code.

- Syntax of CSS : selector { property : value; }

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

=> We can integrate CSS as a web page in 3 ways :

1. Inline CSS :

=> Inline CSS used within the tag.

=> Ex.

<p style=”color:red;”>Hello</p>

2. Internal CSS :

=> Internal CSS used within the head tag in the same file.

=> Ex.

<head>

<style>

p {

color: red;

}

</style>

</head>

<body>

<p>Hello</p>

</body>

3. External CSS :

=> External CSS is used as a separated file of css extenstion.

=> To use this file in HTML file, we have to link the css file in the HTML file.

=> To link the file :

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

• What is embedded style sheets?

=> Embedded style sheet known as internal style sheet.

=> It’s define within the <head> tag.

=> <head>

<style>

/\* CSS Code \*/

</style>

</head>

• What are the external style sheets?

=> External style sheet is a separate file from the HTML file.

=> This file takes .css extension.

=> For use this file we have to link the css file in the HTML file.

=> To link the file :

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

=> Main benefit of External CSS, We can use the css file in the multiple HTML file, so we don’t have to write the code multiple time.

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

=> Advantages :

- With the help of external style sheet, we can implement the css file in the multiple HTML file.

- Modifying the appearance of a website is straightforward with CSS.

- You can make changes quickly to fonts, colors, layouts etc.

=> Disadvantage :

- Sometimes browser takes time to load css file.

- If the external css file fails to load, the styling of your web page may break.

- Managing multiple external CSS files for a large website can become complex.

- Modern browser generally supports external CSS files without any issues, but some older browsers may have limitations.

• What is the meaning of the CSS selector?

=> CSS selector used to select the elements you want to style.

=> CSS selector are the part of CSS rule set.

=> CSS selectors select HTML elements according to its id, class, tag, etc.

=> Element selector (tag name)

=> ID selector (# sign)

=> Class selector (. Sign)

=> Universal selector (\* sign)

=> Group Selector (, sign)

=> There is many other selectors adjacent sibling selector, general sibling selector etc.