### What are the benefits of using CSS?

- CSS Means Cascading Style Sheets.
- ➤ 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 efforts are significantly reduced.
- > It helps to form spontaneous and consistent changes.
- ➤ CSS changes are device friendly. With people employing a batch of various ranges 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.

### 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.
- ➤ 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 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 nondevelopers and beginners.

# • What is the difference between CSS2 and CSS3?

	CSS	CSS3
Year Released	1996	2005
Media Queries	Doesn't support	Supports responsive web design
Browser Support	No support for modern browsers, but it still works on older versions of Explorer or Chrome	Supported fully by all modern browsers
Compatibility Between Versions	Not compatible with CSS3	Backward compatible with CSS
Block Support	Supports single blocks only	Supports multi-column text blocks
Animation Use	It only allows basic animations and doesn't support transformation, text animation, transition, or 3D animations	It offers advanced animations and many customization options. It also supports text animation, transformation, and transition
Responsive Design	It doesn't support media queries, thus not ideal for making responsive designs	Works with media queries, thus allowing responsive web design
Module Use	It doesn't have modules	Can group CSS codes into convenient modules
Color Format	It uses an old standard color format	It offers different gradient colors and schemes like RGBA, HSLA, HSL, etc.
Performance	It provides average performance and requires high memory usage	It offers fast, excellent performance and doesn't use as much memory

### Name a few CSS style components?

- > There are three components In CSS.
- > 1) Selector: HTML element name, id name, class name.
  - 2) <u>Property</u>: It's like an attribute such as background color, font-size, position, text-align, color, borders, etc.
    - 3) Values: which defines property or values allocate for properties.

### What do you understand by CSS opacity?

- > The opacity property sets the opacity level for an element.
- ➤ The opacity-level describes the transparency-level, where 1 is not transparent at all, 0.5 is 50% see-through, and 0 is completely transparent.

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

➤ To add background color in HTML, use the CSS background-color property. Set it to the color name or code you want and place it inside a style attribute. Then add this style attribute to an HTML element, like a table, heading, div, or span tag.

#### > Element Changed :-

- 1.) Set a background color for a document: body. style. ...
- 2.) Set a background color of a specific <div> element: getElementById("myDiv"). style. ...
- 3.) Return the background color of a specific <div> element: let color = document. ...
- 4.) Return the background color of a document: let color = document.

#### 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.
- Repeat: The background image is repeated both vertically and horizontally. The last image will be clipped if it does not fit. This is default.
- > Repeat-x:- The background image is repeated only horizontally
- > Repeat-y:- The background image is repeated only vertically
- No-repeat:- The background-image is not repeated. The image will only be shown once
- Space: The background-image is repeated as much as possible without clipping. The first and last image is pinned to either side of the element, and whitespace is distributed evenly between the images
- Round:- The background-image is repeated and squished or stretched to fill the space (no gaps)
- Initial: Sets this property to its default value. Read about initial
- Inherit: Inherits this property from its parent element.

### We will make use of the repeat-y to repeat the image in the vertical direction.

- ➤ The background-position property sets the starting position of a background image. Tip: By default, a background-image is placed at the top-left corner of an element, and repeated both vertically and horizontally.
- ➤ We will make use of the repeat-y to repeat the image in the vertical direction.
- ➤ We will make use of the repeat-x to repeat the image in the horizontal direction.

### Which property controls the image scroll in the background?

- 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.
- ➤ Inherit:-Inherits this property from its parent element.

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

- There are two reasons behind this:-
- ➤ Style sheets become more legible -- both for humans and machines. The background property is already the most complex property in CSS1 and combining it with color would make it even more complex. Second, color inherits, but background doesn't and this would be a source of confusion.
- ➤ Color is an inherited property while the background is not. So this can make confusion further.

### • How to center block elements using CSS1?

- ➤ 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.

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

- CSS can be added to HTML documents in 3 ways:
  - 1.) Inline by using the style attribute inside HTML elements.
  - 2.) Internal by using a <style> element in the <head> section.
  - 3.) External by using a link> element to link to an external CSS file.

### How to maintain the CSS specifications?

- ➤ The CSS specifications are maintained by the World Wide Web Consortium (W3C).
- > There are three types of maintain CSS specifications.
  - 1.) Selectors
  - 2.) Property
  - 3.) Value

#### What is an embedded style sheet?

➤ Embedded style sheets allow you to define styles for the whole HTML document in one place. 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.

### 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.

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

### > Advantages :-

- ✓ Using them, the styles of multiple documents can be controlled from one file.
- ✓ Classes can be created for use on multiple HTML element types in many documents.
- ✓ In complex situations, selector and grouping methods can be used to apply styles.

### > Dis - Advantages :-

- ✓ In order to import style information for each document, an extra download is needed
- ✓ Until the external style sheet is loaded, it may not be possible to render the document.
- ✓ For small number of style definitions, it is not viable.

### What is the meaning of the CSS selector?

- ➤ A CSS selector is the first part of a CSS Rule. It is a pattern of elements and other terms that tell the browser which HTML elements should be selected to have the CSS property values inside the rule applied to them.
- ➤ There are several different types of selectors in CSS.
  - 1.) <u>CSS Element Selector</u> :- The element selector selects the HTML element by name.
  - 2.) <u>CSS Id Selector</u>: The id selector selects the id attribute of an HTML element to select a specific element. An id is always unique within the page so it is chosen to select a single, unique element.
  - 3.) <u>CSS Class Selector</u>: The class selector selects HTML elements with a specific class attribute. It is used with a period character. (Full stop symbol) followed by the class name.
  - 4.) <u>CSS Universal Selector</u>: The universal selector is used as a wildcard character. It selects all the elements on the pages.
  - 5.) CSS Group Selector: The grouping selector is used to select all the elements with the same style definitions. Grouping selector is used to minimize the code. Commas are used to separate each selector in grouping.

#### What is the rule set?

- ➤ A table of instructions used by a controlled interface to determine what data is allowable and how the data is handled between interconnected systems.
- ➤ A rule set is a grouping of code analysis rules that identify targeted issues and specific conditions for that project. For example, you can apply a rule set that's designed to scan code for publicly available APIs. You can also apply a rule set that includes all the available rules.
- Create Layouts

