MODULE 4:CSS AND CSS 3

Q1:WHAT ARE THE BENEFITS OF USING CSS?

CSS handles the look and eel part of a web page. Using CSS, you can control the color of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, etc.

The following are the advantages of CSS :

\*CSS saves timeY;ou can write CSS once and then reuse the same sheet in multiple HTML pages. You can define a style for each HTML element and apply it to as many Web pages as you want.

\*Easy maintenance :TO make a global change, simply change the style, and all elements in all the web pages will be updated automatically.

\*Global web standardsNo:HTML attributes are being deprecated and it is being recommended to use CSS. So it's a good idea to start using CSS in all the HTML pages to make them compatible with future browsers.

\*Platform Independence:The Script offer consistent platform independence and can support latest browsers as well.

\*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 effort are significantly reduced.

It helps to form spontaneous and consistent changes.

\*CSS changes are device friendly. With people employing a batch of various range 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

Q2: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.

\*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 non-developers and beginners.

Q3:WHAT IS THE DIFFERENT BETWEEN CSS2 AND CSS3?

\*CSS3 is split into many various documents known as Modules. each module adds new capability or extends options outlined in CSS2 over conserving backward compatibility. Work on CSS3 started around the time of publication of the initial CSS2 recommendation.

\*The CSS3 version supports more browsers than CSS2.

\*CSS3 introduces several new selectors. Those new selectors square measure largely in an exceeding type of pseudo-elements and pseudo-categories.

The new addition of General relation Combinator will be wont to match relation parts of a given part through diacritic (~) combinator.

\*CSS3 introduces several properties attended with new values and units. It facilitates styling of backgrounds, borders, boxes, etc…, that permits the USA to stay most of the styling at intervals the computer network and HTML standards and our document, while not a necessity for all those proprietary third-party package packages.

\*New values and new units square measure introduced to support all those new properties. for example, Angle units deg, grad, rad, and switch or Time units s and ms.

Q4:NAME A FEW CSS STYLE COMPONENTS?

ANS:

Styling in CSS. There are 3 distinct methods for styling in CSS, Local style, Page-Level style, and External Styles. Each level of styling is given a different hierarchical priority (when to apply) and is used for different reasons.

Properties: These are human-readable identifiers that indicate which stylistic features you want to modify. For example, font-size , width , background-color .

Values: Each property is assigned a value. This value indicates how to style the property.

Selector: class name, id name or element name that is target.

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

Q5:WHAT DO YOU UNDERSTAND BY CSS OPACITY?

ANS:When you’re designing a website, you may decide that you want an element on a web page to appear more transparent than other elements. For instance, you may be designing a web page with a number of images that you want to appear somewhat transparent.

That’s where the CSS opacity property comes in. The CSS opacity property is used to specify the transparency of a web element.

This tutorial will discuss, with reference to examples, how to use the opacity property to make elements transparent on a web page. By the end of reading this tutorial, you’ll be an expert at working with the opacity property in CSS.

The CSS opacity property makes elements see-through, or transparent.

The value of the opacity property ranges between 0 and 1. The lower the value of the opacity property, the more transparent an element will appear. So, a value of 0 would make an element fully opaque or fully transparent, and a value of 1 would make an element appear as normal.

Q6:HOW CAN THE BACKGOUND COLOR OF AN ELEMENT BE CHANGED?

ANS:The background-color property in CSS is used to set the background color of an element. It applies solid colors as the element's background. The background of an element covers the total size, including the padding and border, but excluding margin. It can be applied to all HTML elements.

element {

background-color: color\_name | transparent | initial | inherit;

}

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.

Example

In this example, we are defining the value of the background-color property by using the color name, hexadecimal value, rgb() value, and the hsl() value. There are four div elements on which we apply the background-color property.

Q7:HOW CAN IMAGE REPETITION OF THE BACKUP BE CONTROLLED?

ANS:In this article, we will see how an image repetition of the backup is controlled in CSS. This task can be achieved by using the background-repeat property that will help us to control the repetition of the image.

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;

This task can be achieved by using the background-repeat property that will help us to control the repetition of the image. 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.

Q8:WHAT IS THE USE OF THE OF THE BACKGROUND-POSITION PROPERTY?

ANS:The background-position property in CSS is mainly used to sets the initial position for the background image ie., it is used to set an image at a certain position. The position that is relative to the positioning layer, can be set by using the background-origin property.

Syntax:

background-position: value;

Property values:

background-position: left top: This property is used to set the image at the left top.

background-position: left center :This property is used to set the image at the left center.

background-position: left bottom; This property is used to set the image at the left bottom.

background-position: center top; This property is used to set the image at the center top position.

background-position: center center; This property is used to set the image at the center center position.

background-position: center bottom; This property is used to set the image at the center bottom position.

background-position: right top; This property is used to set the image at the right top position.

background-position: right center; This property is used to set the image at the right center position.

background-position: right bottom; This property is used to set the image at the right bottom position.

background-position: 25% 75%: This property is used to set the image at 25% from the left and 75% from the top.background-position: 30px 80px;: This property is used to set the image at the 30px from left and 80px from top.

Q9: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. 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;

Q10:WHY SHOULD BACKGOUND AND COLOR BE USED AS SEPARATE PROPERTIES?

The major difference between CSS background vs background-color property is that the background property is shorthand of all background properties. On the other hand, the background-color property is the subset of the background property used to set the background color. Moreover, our expert developers compare and describe the differences between these two properties in this article.

Q11:HOW TO CENTER BLOCK ELEMENTS USSING CSS1?

ANS: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.

Q12:HOW TO MAINTAIN THE CSS SPECIFICATIONS?

ANS:If you've followed this series from the beginning , we discussed about the HTML Specification which is sort of a rule book that tells browser vendors how to implement HTML Elements and Tags. The CSS Specification is no different but with a different approach with the advent of CSS3.

The Specification defines how CSS properties should be implemented by browser vendors along with detailed algorithms, code samples and tabular information.

The Specification also include:

\*The syntax and data types of the language

\*Detailed explanation on CSS Selectors

\*How you can assign values to properties

\*The Cascade (the "C" in CSS)

\*How inheritance works

\*The Box Model e.t.c

Explanation on some of these topic are short and easy to understand while others are explained in great detail.

The Specification also specify how stylesheets can be included in your web document and how to target specific media e.g print or screen.

The CSS Specification prior to CSS3 was a single Specification, CSS3 on the other hand is divided into Modules which are Independent Specifications that can be worked on by different author(s) at different paces, that's why we have Selector Level 3 Specification, CSS Color 4, CSS Backgrounds and so on. Some of these modules are revisions of CSS2.1, and some are newly created, but all fall under the banner of CSS3.

The Specification should be your guide if you need to understand how a specific property or feature works behind the scene and how it works with other CSS properties. And if you are comfortable reading algorithms you won't get bored reading the CSS Specification.

Q13:WHAT ARE THE WAYS TO INTEGRTE CSS AS A WEB PAGE?

ANS:There are 4 ways of adding CSS to a webpage: declare inline, embed into the head of your document, link to an external CSS file, import a CSS file.

\*Inline Styles

With inline styles, style sheet information is applied directly to the HTML element. Instead of defining the style once, then applying the style against all instances of an element (say the <p> tag), you add the style directly to the specific element you want the style to apply to.

Embedded Styles

You add all CSS information to one part of the document (usually the top). This allows you to style any element on the page from a single place. You do this by embedding the CSS information within <style> tags in the head of your document.

\*External Styles

External style sheets are the most common method of applying styles to a website. Most modern websites use an external stylesheet to apply site-wide styles to the whole website.

External styles refer to creating a separate file that contains all style information. This file is then linked to from as many HTML pages as you like. This will often be the whole website.

To add an external stylesheet to a web page, use the <link> tag, providing the URL of the style sheet in the href attribute, as well as rel="stylesheet".

For the following example, I've taken the styles from the above (embedded) example, moved them to an external style sheet, then linked to that file.

Import Styles

You can also use the CSS @import rule to import an external style sheet.

To do this, use the <style> tag.

Q14:WHAT IS EMBEDDED STYLE SHEETS?

ANS:Using embedded style sheets will allow you to begin unleashing the full power of CSS by enabling you to apply styles to all HTML elements of a particular type on an entire web page. Whereas an inline style will only allow you to address one HTML element at a time, an embedded style sheet will allow you to address multiple HTML elements at once. This is accomplished by using the style element and a list of CSS rule sets.

The style Element

The style element requires both start and end tags <style>...</style> which are inserted between the <head>...</head> tags (a.k.a., document head) of your web page. The type attribute defines the type of style sheet being used so we'll put text/css as the value. The entire contents of the style element should be wrapped in HTML comment tags to hide it from browsers not compatible with CSS.

Q15:WHAT ARE THE EXTERNAL STYLE SHEETS?

ANS:The external style sheet is generally used when you want to make changes on multiple pages. It is ideal for this condition because it facilitates you to change the look of the entire web site by changing just one file.

It uses the <link> tag on every pages and the <link> tag should be put inside the head section.

Example:

<head>

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

</head>

The external style sheet may be written in any text editor but must be saved with a .css extension. This file should not contain HTML elements.

Q16:WHAT ARE THE ADVANATAGES AND DISADVANTAGES OF USING EXTERNAL STYLE SHEETS?

ANS:

The advantages of External Style Sheets are as follows :

\*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 are as follows :

\*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.

Q17:WHAT IS THE MEANING OF THE CSS SELECTOR?

ANS:CSS selectors are used to select the content you want to style. Selectors are the part of CSS rule set. CSS selectors select HTML elements according to its id, class, types of selector.

There are several different types of selectors in CSS.

CSS Element Selector

CSS Id Selector

CSS Class Selector

CSS Universal Selector

CSS Group Selector

1) CSS Element Selector

The element selector selects the HTML element by name.

2) CSS Id Selector

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.

It is written with the hash character (#), followed by the id of the element.

3) CSS Class Selector

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) CSS Universal Selector

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.

Q18:WHAT ARE THE MADIA TYPES ALLOWED BY CSS?

ANS:One of the most important features of style sheets is that they specify how a document is to be presented on different media: on the screen, on paper, with a speech synthesizer, with a braille device, etc.

We have currently two ways to specify media dependencies for style sheets −

Specify the target medium from a style sheet with the @media or @import at-rules.

Specify the target medium within the document language.

Q19:WHAT IS THE RULE SET ?

ANS:A ruleset provides a unit of execution for rules and Decision Tables. In addition, rulesets provide a unit of sharing for rules; rules belong to a ruleset. Multiple rulesets can be executed in order. This is called rule flow.

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.

MODULE 4:CSS AND CSS 3

Q1:WHAT ARE THE BENEFITS OF USING CSS?

CSS handles the look and eel part of a web page. Using CSS, you can control the color of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, etc.

The following are the advantages of CSS :

\*CSS saves timeY;ou can write CSS once and then reuse the same sheet in multiple HTML pages. You can define a style for each HTML element and apply it to as many Web pages as you want.

\*Easy maintenance :TO make a global change, simply change the style, and all elements in all the web pages will be updated automatically.

\*Global web standardsNo:HTML attributes are being deprecated and it is being recommended to use CSS. So it's a good idea to start using CSS in all the HTML pages to make them compatible with future browsers.

\*Platform Independence:The Script offer consistent platform independence and can support latest browsers as well.

\*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 effort are significantly reduced.

It helps to form spontaneous and consistent changes.

\*CSS changes are device friendly. With people employing a batch of various range 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

Q2: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.

\*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 non-developers and beginners.

Q3:WHAT IS THE DIFFERENT BETWEEN CSS2 AND CSS3?

\*CSS3 is split into many various documents known as Modules. each module adds new capability or extends options outlined in CSS2 over conserving backward compatibility. Work on CSS3 started around the time of publication of the initial CSS2 recommendation.

\*The CSS3 version supports more browsers than CSS2.

\*CSS3 introduces several new selectors. Those new selectors square measure largely in an exceeding type of pseudo-elements and pseudo-categories.

The new addition of General relation Combinator will be wont to match relation parts of a given part through diacritic (~) combinator.

\*CSS3 introduces several properties attended with new values and units. It facilitates styling of backgrounds, borders, boxes, etc…, that permits the USA to stay most of the styling at intervals the computer network and HTML standards and our document, while not a necessity for all those proprietary third-party package packages.

\*New values and new units square measure introduced to support all those new properties. for example, Angle units deg, grad, rad, and switch or Time units s and ms.

Q4:NAME A FEW CSS STYLE COMPONENTS?

ANS:

Styling in CSS. There are 3 distinct methods for styling in CSS, Local style, Page-Level style, and External Styles. Each level of styling is given a different hierarchical priority (when to apply) and is used for different reasons.

Properties: These are human-readable identifiers that indicate which stylistic features you want to modify. For example, font-size , width , background-color .

Values: Each property is assigned a value. This value indicates how to style the property.

Selector: class name, id name or element name that is target.

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

Q5:WHAT DO YOU UNDERSTAND BY CSS OPACITY?

ANS:When you’re designing a website, you may decide that you want an element on a web page to appear more transparent than other elements. For instance, you may be designing a web page with a number of images that you want to appear somewhat transparent.

That’s where the CSS opacity property comes in. The CSS opacity property is used to specify the transparency of a web element.

This tutorial will discuss, with reference to examples, how to use the opacity property to make elements transparent on a web page. By the end of reading this tutorial, you’ll be an expert at working with the opacity property in CSS.

The CSS opacity property makes elements see-through, or transparent.

The value of the opacity property ranges between 0 and 1. The lower the value of the opacity property, the more transparent an element will appear. So, a value of 0 would make an element fully opaque or fully transparent, and a value of 1 would make an element appear as normal.

Q6:HOW CAN THE BACKGOUND COLOR OF AN ELEMENT BE CHANGED?

ANS:The background-color property in CSS is used to set the background color of an element. It applies solid colors as the element's background. The background of an element covers the total size, including the padding and border, but excluding margin. It can be applied to all HTML elements.

element {

background-color: color\_name | transparent | initial | inherit;

}

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.

Example

In this example, we are defining the value of the background-color property by using the color name, hexadecimal value, rgb() value, and the hsl() value. There are four div elements on which we apply the background-color property.

Q7:HOW CAN IMAGE REPETITION OF THE BACKUP BE CONTROLLED?

ANS:In this article, we will see how an image repetition of the backup is controlled in CSS. This task can be achieved by using the background-repeat property that will help us to control the repetition of the image.

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;

This task can be achieved by using the background-repeat property that will help us to control the repetition of the image. 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.

Q8:WHAT IS THE USE OF THE OF THE BACKGROUND-POSITION PROPERTY?

ANS:The background-position property in CSS is mainly used to sets the initial position for the background image ie., it is used to set an image at a certain position. The position that is relative to the positioning layer, can be set by using the background-origin property.

Syntax:

background-position: value;

Property values:

background-position: left top: This property is used to set the image at the left top.

background-position: left center :This property is used to set the image at the left center.

background-position: left bottom; This property is used to set the image at the left bottom.

background-position: center top; This property is used to set the image at the center top position.

background-position: center center; This property is used to set the image at the center center position.

background-position: center bottom; This property is used to set the image at the center bottom position.

background-position: right top; This property is used to set the image at the right top position.

background-position: right center; This property is used to set the image at the right center position.

background-position: right bottom; This property is used to set the image at the right bottom position.

background-position: 25% 75%: This property is used to set the image at 25% from the left and 75% from the top.background-position: 30px 80px;: This property is used to set the image at the 30px from left and 80px from top.

Q9: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. 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;

Q10:WHY SHOULD BACKGOUND AND COLOR BE USED AS SEPARATE PROPERTIES?

The major difference between CSS background vs background-color property is that the background property is shorthand of all background properties. On the other hand, the background-color property is the subset of the background property used to set the background color. Moreover, our expert developers compare and describe the differences between these two properties in this article.

Q11:HOW TO CENTER BLOCK ELEMENTS USSING CSS1?

ANS: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.

Q12:HOW TO MAINTAIN THE CSS SPECIFICATIONS?

ANS:If you've followed this series from the beginning , we discussed about the HTML Specification which is sort of a rule book that tells browser vendors how to implement HTML Elements and Tags. The CSS Specification is no different but with a different approach with the advent of CSS3.

The Specification defines how CSS properties should be implemented by browser vendors along with detailed algorithms, code samples and tabular information.

The Specification also include:

\*The syntax and data types of the language

\*Detailed explanation on CSS Selectors

\*How you can assign values to properties

\*The Cascade (the "C" in CSS)

\*How inheritance works

\*The Box Model e.t.c

Explanation on some of these topic are short and easy to understand while others are explained in great detail.

The Specification also specify how stylesheets can be included in your web document and how to target specific media e.g print or screen.

The CSS Specification prior to CSS3 was a single Specification, CSS3 on the other hand is divided into Modules which are Independent Specifications that can be worked on by different author(s) at different paces, that's why we have Selector Level 3 Specification, CSS Color 4, CSS Backgrounds and so on. Some of these modules are revisions of CSS2.1, and some are newly created, but all fall under the banner of CSS3.

The Specification should be your guide if you need to understand how a specific property or feature works behind the scene and how it works with other CSS properties. And if you are comfortable reading algorithms you won't get bored reading the CSS Specification.

Q13:WHAT ARE THE WAYS TO INTEGRTE CSS AS A WEB PAGE?

ANS:There are 4 ways of adding CSS to a webpage: declare inline, embed into the head of your document, link to an external CSS file, import a CSS file.

\*Inline Styles

With inline styles, style sheet information is applied directly to the HTML element. Instead of defining the style once, then applying the style against all instances of an element (say the <p> tag), you add the style directly to the specific element you want the style to apply to.

Embedded Styles

You add all CSS information to one part of the document (usually the top). This allows you to style any element on the page from a single place. You do this by embedding the CSS information within <style> tags in the head of your document.

\*External Styles

External style sheets are the most common method of applying styles to a website. Most modern websites use an external stylesheet to apply site-wide styles to the whole website.

External styles refer to creating a separate file that contains all style information. This file is then linked to from as many HTML pages as you like. This will often be the whole website.

To add an external stylesheet to a web page, use the <link> tag, providing the URL of the style sheet in the href attribute, as well as rel="stylesheet".

For the following example, I've taken the styles from the above (embedded) example, moved them to an external style sheet, then linked to that file.

Import Styles

You can also use the CSS @import rule to import an external style sheet.

To do this, use the <style> tag.

Q14:WHAT IS EMBEDDED STYLE SHEETS?

ANS:Using embedded style sheets will allow you to begin unleashing the full power of CSS by enabling you to apply styles to all HTML elements of a particular type on an entire web page. Whereas an inline style will only allow you to address one HTML element at a time, an embedded style sheet will allow you to address multiple HTML elements at once. This is accomplished by using the style element and a list of CSS rule sets.

The style Element

The style element requires both start and end tags <style>...</style> which are inserted between the <head>...</head> tags (a.k.a., document head) of your web page. The type attribute defines the type of style sheet being used so we'll put text/css as the value. The entire contents of the style element should be wrapped in HTML comment tags to hide it from browsers not compatible with CSS.

Q15:WHAT ARE THE EXTERNAL STYLE SHEETS?

ANS:The external style sheet is generally used when you want to make changes on multiple pages. It is ideal for this condition because it facilitates you to change the look of the entire web site by changing just one file.

It uses the <link> tag on every pages and the <link> tag should be put inside the head section.

Example:

<head>

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

</head>

The external style sheet may be written in any text editor but must be saved with a .css extension. This file should not contain HTML elements.

Q16:WHAT ARE THE ADVANATAGES AND DISADVANTAGES OF USING EXTERNAL STYLE SHEETS?

ANS:

The advantages of External Style Sheets are as follows :

\*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 are as follows :

\*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.

Q17:WHAT IS THE MEANING OF THE CSS SELECTOR?

ANS:CSS selectors are used to select the content you want to style. Selectors are the part of CSS rule set. CSS selectors select HTML elements according to its id, class, types of selector.

There are several different types of selectors in CSS.

CSS Element Selector

CSS Id Selector

CSS Class Selector

CSS Universal Selector

CSS Group Selector

1) CSS Element Selector

The element selector selects the HTML element by name.

2) CSS Id Selector

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.

It is written with the hash character (#), followed by the id of the element.

3) CSS Class Selector

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) CSS Universal Selector

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.

Q18:WHAT ARE THE MADIA TYPES ALLOWED BY CSS?

ANS:One of the most important features of style sheets is that they specify how a document is to be presented on different media: on the screen, on paper, with a speech synthesizer, with a braille device, etc.

We have currently two ways to specify media dependencies for style sheets −

Specify the target medium from a style sheet with the @media or @import at-rules.

Specify the target medium within the document language.

Q19:WHAT IS THE RULE SET ?

ANS:A ruleset provides a unit of execution for rules and Decision Tables. In addition, rulesets provide a unit of sharing for rules; rules belong to a ruleset. Multiple rulesets can be executed in order. This is called rule flow.

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.

MODULE 4:CSS AND CSS 3

Q1:WHAT ARE THE BENEFITS OF USING CSS?

CSS handles the look and eel part of a web page. Using CSS, you can control the color of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, etc.

The following are the advantages of CSS :

\*CSS saves timeY;ou can write CSS once and then reuse the same sheet in multiple HTML pages. You can define a style for each HTML element and apply it to as many Web pages as you want.

\*Easy maintenance :TO make a global change, simply change the style, and all elements in all the web pages will be updated automatically.

\*Global web standardsNo:HTML attributes are being deprecated and it is being recommended to use CSS. So it's a good idea to start using CSS in all the HTML pages to make them compatible with future browsers.

\*Platform Independence:The Script offer consistent platform independence and can support latest browsers as well.

\*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 effort are significantly reduced.

It helps to form spontaneous and consistent changes.

\*CSS changes are device friendly. With people employing a batch of various range 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

Q2: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.

\*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 non-developers and beginners.

Q3:WHAT IS THE DIFFERENT BETWEEN CSS2 AND CSS3?

\*CSS3 is split into many various documents known as Modules. each module adds new capability or extends options outlined in CSS2 over conserving backward compatibility. Work on CSS3 started around the time of publication of the initial CSS2 recommendation.

\*The CSS3 version supports more browsers than CSS2.

\*CSS3 introduces several new selectors. Those new selectors square measure largely in an exceeding type of pseudo-elements and pseudo-categories.

The new addition of General relation Combinator will be wont to match relation parts of a given part through diacritic (~) combinator.

\*CSS3 introduces several properties attended with new values and units. It facilitates styling of backgrounds, borders, boxes, etc…, that permits the USA to stay most of the styling at intervals the computer network and HTML standards and our document, while not a necessity for all those proprietary third-party package packages.

\*New values and new units square measure introduced to support all those new properties. for example, Angle units deg, grad, rad, and switch or Time units s and ms.

Q4:NAME A FEW CSS STYLE COMPONENTS?

ANS:

Styling in CSS. There are 3 distinct methods for styling in CSS, Local style, Page-Level style, and External Styles. Each level of styling is given a different hierarchical priority (when to apply) and is used for different reasons.

Properties: These are human-readable identifiers that indicate which stylistic features you want to modify. For example, font-size , width , background-color .

Values: Each property is assigned a value. This value indicates how to style the property.

Selector: class name, id name or element name that is target.

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

Q5:WHAT DO YOU UNDERSTAND BY CSS OPACITY?

ANS:When you’re designing a website, you may decide that you want an element on a web page to appear more transparent than other elements. For instance, you may be designing a web page with a number of images that you want to appear somewhat transparent.

That’s where the CSS opacity property comes in. The CSS opacity property is used to specify the transparency of a web element.

This tutorial will discuss, with reference to examples, how to use the opacity property to make elements transparent on a web page. By the end of reading this tutorial, you’ll be an expert at working with the opacity property in CSS.

The CSS opacity property makes elements see-through, or transparent.

The value of the opacity property ranges between 0 and 1. The lower the value of the opacity property, the more transparent an element will appear. So, a value of 0 would make an element fully opaque or fully transparent, and a value of 1 would make an element appear as normal.

Q6:HOW CAN THE BACKGOUND COLOR OF AN ELEMENT BE CHANGED?

ANS:The background-color property in CSS is used to set the background color of an element. It applies solid colors as the element's background. The background of an element covers the total size, including the padding and border, but excluding margin. It can be applied to all HTML elements.

element {

background-color: color\_name | transparent | initial | inherit;

}

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.

Example

In this example, we are defining the value of the background-color property by using the color name, hexadecimal value, rgb() value, and the hsl() value. There are four div elements on which we apply the background-color property.

Q7:HOW CAN IMAGE REPETITION OF THE BACKUP BE CONTROLLED?

ANS:In this article, we will see how an image repetition of the backup is controlled in CSS. This task can be achieved by using the background-repeat property that will help us to control the repetition of the image.

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;

This task can be achieved by using the background-repeat property that will help us to control the repetition of the image. 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.

Q8:WHAT IS THE USE OF THE OF THE BACKGROUND-POSITION PROPERTY?

ANS:The background-position property in CSS is mainly used to sets the initial position for the background image ie., it is used to set an image at a certain position. The position that is relative to the positioning layer, can be set by using the background-origin property.

Syntax:

background-position: value;

Property values:

background-position: left top: This property is used to set the image at the left top.

background-position: left center :This property is used to set the image at the left center.

background-position: left bottom; This property is used to set the image at the left bottom.

background-position: center top; This property is used to set the image at the center top position.

background-position: center center; This property is used to set the image at the center center position.

background-position: center bottom; This property is used to set the image at the center bottom position.

background-position: right top; This property is used to set the image at the right top position.

background-position: right center; This property is used to set the image at the right center position.

background-position: right bottom; This property is used to set the image at the right bottom position.

background-position: 25% 75%: This property is used to set the image at 25% from the left and 75% from the top.background-position: 30px 80px;: This property is used to set the image at the 30px from left and 80px from top.

Q9: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. 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;

Q10:WHY SHOULD BACKGOUND AND COLOR BE USED AS SEPARATE PROPERTIES?

The major difference between CSS background vs background-color property is that the background property is shorthand of all background properties. On the other hand, the background-color property is the subset of the background property used to set the background color. Moreover, our expert developers compare and describe the differences between these two properties in this article.

Q11:HOW TO CENTER BLOCK ELEMENTS USSING CSS1?

ANS: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.

Q12:HOW TO MAINTAIN THE CSS SPECIFICATIONS?

ANS:If you've followed this series from the beginning , we discussed about the HTML Specification which is sort of a rule book that tells browser vendors how to implement HTML Elements and Tags. The CSS Specification is no different but with a different approach with the advent of CSS3.

The Specification defines how CSS properties should be implemented by browser vendors along with detailed algorithms, code samples and tabular information.

The Specification also include:

\*The syntax and data types of the language

\*Detailed explanation on CSS Selectors

\*How you can assign values to properties

\*The Cascade (the "C" in CSS)

\*How inheritance works

\*The Box Model e.t.c

Explanation on some of these topic are short and easy to understand while others are explained in great detail.

The Specification also specify how stylesheets can be included in your web document and how to target specific media e.g print or screen.

The CSS Specification prior to CSS3 was a single Specification, CSS3 on the other hand is divided into Modules which are Independent Specifications that can be worked on by different author(s) at different paces, that's why we have Selector Level 3 Specification, CSS Color 4, CSS Backgrounds and so on. Some of these modules are revisions of CSS2.1, and some are newly created, but all fall under the banner of CSS3.

The Specification should be your guide if you need to understand how a specific property or feature works behind the scene and how it works with other CSS properties. And if you are comfortable reading algorithms you won't get bored reading the CSS Specification.

Q13:WHAT ARE THE WAYS TO INTEGRTE CSS AS A WEB PAGE?

ANS:There are 4 ways of adding CSS to a webpage: declare inline, embed into the head of your document, link to an external CSS file, import a CSS file.

\*Inline Styles

With inline styles, style sheet information is applied directly to the HTML element. Instead of defining the style once, then applying the style against all instances of an element (say the <p> tag), you add the style directly to the specific element you want the style to apply to.

Embedded Styles

You add all CSS information to one part of the document (usually the top). This allows you to style any element on the page from a single place. You do this by embedding the CSS information within <style> tags in the head of your document.

\*External Styles

External style sheets are the most common method of applying styles to a website. Most modern websites use an external stylesheet to apply site-wide styles to the whole website.

External styles refer to creating a separate file that contains all style information. This file is then linked to from as many HTML pages as you like. This will often be the whole website.

To add an external stylesheet to a web page, use the <link> tag, providing the URL of the style sheet in the href attribute, as well as rel="stylesheet".

For the following example, I've taken the styles from the above (embedded) example, moved them to an external style sheet, then linked to that file.

Import Styles

You can also use the CSS @import rule to import an external style sheet.

To do this, use the <style> tag.

Q14:WHAT IS EMBEDDED STYLE SHEETS?

ANS:Using embedded style sheets will allow you to begin unleashing the full power of CSS by enabling you to apply styles to all HTML elements of a particular type on an entire web page. Whereas an inline style will only allow you to address one HTML element at a time, an embedded style sheet will allow you to address multiple HTML elements at once. This is accomplished by using the style element and a list of CSS rule sets.

The style Element

The style element requires both start and end tags <style>...</style> which are inserted between the <head>...</head> tags (a.k.a., document head) of your web page. The type attribute defines the type of style sheet being used so we'll put text/css as the value. The entire contents of the style element should be wrapped in HTML comment tags to hide it from browsers not compatible with CSS.

Q15:WHAT ARE THE EXTERNAL STYLE SHEETS?

ANS:The external style sheet is generally used when you want to make changes on multiple pages. It is ideal for this condition because it facilitates you to change the look of the entire web site by changing just one file.

It uses the <link> tag on every pages and the <link> tag should be put inside the head section.

Example:

<head>

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

</head>

The external style sheet may be written in any text editor but must be saved with a .css extension. This file should not contain HTML elements.

Q16:WHAT ARE THE ADVANATAGES AND DISADVANTAGES OF USING EXTERNAL STYLE SHEETS?

ANS:

The advantages of External Style Sheets are as follows :

\*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 are as follows :

\*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.

Q17:WHAT IS THE MEANING OF THE CSS SELECTOR?

ANS:CSS selectors are used to select the content you want to style. Selectors are the part of CSS rule set. CSS selectors select HTML elements according to its id, class, types of selector.

There are several different types of selectors in CSS.

CSS Element Selector

CSS Id Selector

CSS Class Selector

CSS Universal Selector

CSS Group Selector

1) CSS Element Selector

The element selector selects the HTML element by name.

2) CSS Id Selector

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.

It is written with the hash character (#), followed by the id of the element.

3) CSS Class Selector

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) CSS Universal Selector

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.

Q18:WHAT ARE THE MADIA TYPES ALLOWED BY CSS?

ANS:One of the most important features of style sheets is that they specify how a document is to be presented on different media: on the screen, on paper, with a speech synthesizer, with a braille device, etc.

We have currently two ways to specify media dependencies for style sheets −

Specify the target medium from a style sheet with the @media or @import at-rules.

Specify the target medium within the document language.

Q19:WHAT IS THE RULE SET ?

ANS:A ruleset provides a unit of execution for rules and Decision Tables. In addition, rulesets provide a unit of sharing for rules; rules belong to a ruleset. Multiple rulesets can be executed in order. This is called rule flow.

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.