FRONTEND ASSIGNMENT

MODULE: 2 (CSS&CSS3)

ANS 1

Benefits of CSS:

- Faster Page Speed. More code means slower page speed. ...
- Better User Experience. CSS not only makes web pages easy on the eye, it also allows for user-friendly formatting. ...
- Quicker Development Time. ...
- Easy Formatting Changes. ...
- Compatibility Across Devices.

ANS 2

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.

ANS 3

.No.	CSS2	CSS3
1	CSS is capable of positioning texts and objects.	On the other hand, CSS3 is capable of making the web page more attractive and takes less time to create. CSS3 is backward compatible with CSS.
2	Responsive designing is not supported in CSS	CSS3 is the latest version, hence it supports responsive design.
3	CSS cannot be split into modules.	Whereas CSS3 can be breakdown into modules.
4	Using CSS, we cannot build 3D animation and transformation.	But in CSS3 we can perform all kinds of animation and transformations as it supports animation and 3D transformations.
5	CSS is very slow as compared to CSS3	Whereas CSS3 is faster than CSS.
6	In CSS we have set of standard colors and it uses basic color schemes only.	Whereas CSS3 has a good collection of HSL RGBA, HSLA, and gradient colors.
7	In CSS we can only use single text blocks.	But in CSS3 we can use multi-column text blocks

ANS 4

- 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.

ANS 5

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**.

ANS 6

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.

ANS 7

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.

ANS 8

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.

ANS 9

The **background-attachment** property sets whether a background image scrolls with the rest of the page, or is fixed.

ANS 10

There are two reasons behind this: **It enhances the legibility of style sheets**. The background property is a complex property in CSS, and if it is combined with color, the complexity will further increase.

ANS 11

Center Align Elements
To horizontally center a block element (like), **use margin: auto**; Setting the width of the element will prevent it from stretching out to the edges of its container.

ANS 12

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.

ANS 13

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.

ANS 14

Embedded Stylesheet: **It allows you to define styles 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.

ANS 15

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.

ANS 16

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

ANS 17

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**.

ANS 18

- 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)

ANS 19

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.

ANS 20

CART LAYOUT

https://github.com/viraljamod2/assignment-task/tree/main/Flex%20task

MODULE -3-HTML5

ANS 1

List of all elements introduced in HTML5:

- **<article> tag:** The <article> tag is one of the new sectioning element in HTML5. The HTML <article> tag is used to represent an article. More specifically, the content within the <article> tag is independent of the other content of the site (even though it can be related).
- **<aside> tag:** The <aside> tag is used to describe the main object of the web page in a shorter way like a highlighter. It basically identifies the content that is related to the primary content of the web page but does not constitute the main intent of the primary page. The <aside> tag contains mainly author information, links, related content, and so on.
- **<audio> tag:** The <audio> tag is used to insert an audio into an HTML webpage.
- **<canvas> tag:** The <canvas> tag in HTML is used to draw graphics on a web page using JavaScript. It can be used to draw paths, boxes, texts, gradients, and add images. By default, it does not contain borders and text.
- **<command> tag:** The <command> tag define a command button, invoke as per user action. The <command> tag button is used in a special type of operation. The <command> tag is supported only by Internet Explorer.
- **<datalist> tag:** The <datalist> tag is used to provide autocomplete feature in the HTML files. It can be used with an input tag so that users can easily fill the data in the forms using select the data.
- **<details> tag:** The <details> tag is used for the content/information which is initially hidden but could be displayed if the user wishes to see it. This tag is used to create an interactive widget that the user can open or close. The content of the details tag is visible when opening the set

attributes. The <summary> tag is used with the <detail>s tag for specifying visible heading.

- **<embed> tag:** The <embed> tag in HTML is used for embedding external applications which are generally multimedia content like audio or video into an HTML document. It is used as a container for embedding plug-ins such as flash animations. This tag is a new tag in HTML 5, and it requires only starting tag.
- **<figure> tag:** The <figure> tag in HTML is used to add self-contained content like illustrations, diagrams, photos, or codes listing in a document. It is related to the main flow, but it can be used in any position of a document and the figure goes with the flow of the document and if remove it then it should not affect the flow of the document. This tag is new in HTML5.
- **<footer> tag:** The <footer> tag in HTML is used to define a footer of HTML document. This section contains the footer information (author information, copyright information, carriers, etc). The footer tag is used within the body tag. The <footer> tag is new in the HTML5. The footer elements require a start tag as well as an end tag.
- **<header> tag:** The <header> tag contains information related to the title and heading of the related content. The <header> element is intended to usually contain the section's heading (an h1-h6 element or an <hgroup> element), but this is not required.The <header> element can also be used to wrap a section's table of contents, a search form, or any relevant logos. The <header> tag is a new tag in HTML5 and it requires a starting tag as well as an end tag. There can be several <header> elements in one document. A <header> tag cannot be placed within a <footer>, <address> or another <header> element.
- **<hgroup> tag:** The <hgroup> tag in HTML stands for heading group and is used to group the heading elements. The <hgroup> tag in HTML is used to wrap one or more heading elements from <h1> to <h6>, such as the headings and sub-headings. The <hgroup> tag requires the starting tag as well as ending tag.
- **<keygen> tag:** The <keygen> tag in HTML is used to specify a key-pair generator field in a form. The purpose of the<keygen> element is to provide a secure way to authenticate users. When a form is submitted then two keys are generated, private key and public key. The private key

is stored locally, and the public key is sent to the server. The public key is used to generate a client certificate to authenticate a user for the future.

- **<mark> tag:** The <mark> tag in HTML is used to define the marked text. It is used to highlight the part of the text in a paragraph. The <mark> tag is new in HTML5.
- **<meter> tag:** It is used to define the scale for measurement in a well-defined range and also supports a fractional value. It is also known as a gauge. It is used in Disk use, relevance query result, etc.
- **<nav> tag:** The <nav> tag is used for declaring the navigational section in HTML documents. Websites typically have sections dedicated to navigational links, which enables users to navigate the site. These links can be placed inside a nav tag. In other words, the nav element represents a section of the page whose purpose is to provide navigational links, either in the current document or to another document. The links in the nav element may point to other web pages or to different sections of the same webpage. It is a semantic element. Common examples of the nav elements are menus, tables, contents, and indexes.
- **<output> tag:** The <output> tag in HTML is used to represent the result of a calculation performed by the client-side script such as JavaScript. The <output> tag is a new tag in HTML5, and it requires a starting and ends tag.
- **<progress> tag:** It is used to represent the progress of a task. It is also defined how much work is done and how much is left to download a thing. It is not used to represent the disk space or relevant query.
- **<ruby> tag:** The <ruby> tag in HTML is used to specify the ruby annotation which is a small text, attached with the main text to specify the meaning of the main text. This kind of annotation is used in Japanese publications.
- **<section> tag:** The **<**section> tag defines the section of documents such as chapters, headers, footers, or any other sections. The section tag divides the content into sections and subsections. The section tag is used when requirements of two headers or footers or any other section of documents are needed. The <section> tag grouped the generic block of related contents. The main advantage of the section tag is, it is a semantic element, which describes its meaning to both browser and developer.

- **<time> tag:** The <time> tag is used to display the human-readable date/time. It can also be used to encode dates and times in a machine-readable form. The main advantage for users is that they can offer to add birthday reminders or scheduled events in their calendar's and search engines can produce smarter search results.
- **<wbr> tag:** The <wbr> tag in HTML stands for word break opportunity and is used to define the position within the text which is treated as a line break by the browser. It is mostly used when the used word is too long and there are chances that the browser may break lines at the wrong place for fitting the text.
- **<video> tag:** The <video> tag is used to embed video content in a document, such as a movie clip or other video streams.

ANS 2

To embed audio in HTML, we **use the <audio> tag**. Before HTML5, audio cannot be added to web pages in the Internet Explorer era. To play audio, we used web plugins like Flash

ANS 3

- <article>
- <aside>
- <details>
- <figcaption>
- <figure>
- <footer>
- <header>
- <main>
- <mark>
- <nav>
- <section>

- <summary>
- <time>

ANS 4

SVG Tags

The <svg> tag **defines a container for SVG graphics**. SVG has several methods for drawing paths, boxes, circles, text, and graphic images. To learn more about SVG, please read our SVG Tutorial.

Canva Tags

The <canvas> tag in HTML is used to draw graphics on a web page using JavaScript. It can be used to draw paths, boxes, texts, gradients, and adding images. By default, it does not contain borders and text.

Note: The <canvas> tag is new in HTML5.