Web Designing Assignment

MODULE: 2 (CSS & CSS3)

Q1. • What are the benefits of using CSS?
Ans.
CSS saves time − You 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 standards − Now 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.

Responsive Design -- CSS enables the creation of responsive designs, making your web pages adaptable to different screen sizes and devices. This is crucial for providing a seamless experience on desktops, tablets, and smartphones.

Load Time -- CSS files can be cached by browsers, reducing the load time for subsequent visits. This improves the overall performance and speed of your website.

Web Designing Assignment

Q2. What are the disadvantages of CSS?
Ans.
Security Issues − In today's technologically and data-driven society, security is crucial. CSS has a restricted level of security, which is one of its main drawbacks.

Cross-Browser Issues − We can observe that the functionality of different browsers varies. In order to ensure that modifications made to the website using CSS codes are properly displayed across all browsers, need to be checked.

Confusion due to many CSS levels − This problem is particularly effects for beginners. Since CSS has numerous levels, including CSS2, CSS3, and others, they could become confused while choosing to study it.
Over Specificity -- Over Specificity is an issue in CSS where the selectors are defined as having a lot of levels. In the case of nested selectors or over-specified selectors, the code is not quite readable and it is difficult to make changes.

File Size -- If the web page and its styling are very large, it can hamper the performance of the website. A large sized file can degrade the loading time of the website.

Q3. What is the difference between CSS2 and CSS3?
Ans.
> **Release Time:**
> CSS2: Published in 1998.

Web Designing Assignment

CSS3: Introduced as a modularized version, with modules evolving over time. Different modules have different release dates, starting around the late 2000s.

Modules:

CSS2: A monolithic specification with a single large document.

CSS3: Introduced a modular approach, with different modules addressing specific features like animations, transitions, and responsive design.

New Features:

CSS2: Laid the foundation for basic styling properties and features.

CSS3: Introduces a wide range of new features, including rounded corners, gradients, animations, and more advanced layout options.

Browser Support:

CSS2: Widely supported by all major browsers.

CSS3: Support for individual features varies across browsers, and vendor prefixes were initially used for experimental features.

Development Approach:

CSS2: Focused on basic styling and layout.

CSS3: Emphasizes more advanced and modern design capabilities, including animations, transitions, and 3D transformations.

Media Queries:

CSS2: Did not have Media Queries.

Web Designing Assignment

CSS3: Introduced Media Queries, enabling responsive design by allowing styles to be applied based on characteristics of the device or viewport.

Selectors:
CSS2: Basic selectors.
CSS3: Introduces more complex and powerful selectors, allowing for more precise targeting of elements.

Q4. Name a few CSS style components.
Ans.

1. **Selectors:** These define which elements in the HTML document the styles should be applied to. Selectors can target elements by type, class, ID, attribute, or relationship with other elements.
2. **Properties:** These define the visual appearance of the selected elements. Properties include things like color, font-size, margin, padding, etc.
3. **Properties:** These define the visual appearance of the selected elements. Properties include things like color, font-size, margin, padding, etc.
4. **Classes and IDs:** These are used in selectors to target specific HTML elements.
5. **Box Model:** The box model is a fundamental concept in CSS that defines the layout of elements. It consists of content, padding, border, and margin.
6. **Flexbox and Grid:** These are layout models that allow for more complex and responsive designs.

Q5. What do you understand by CSS opacity?
Ans.

Web Designing Assignment

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 applies to the element as a whole, including its contents, even though the value is not inherited by child elements. Thus, the element and its children all have the same opacity relative to the element's background, even if they have different opacities relative to one another.

Q6. How can the background color of an element be changed?
Ans.

- 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.
  Ex.
  ```
  .myElement {
    background-color: #3498db;
  }
  ```

Q7. How can image repetition of the backup be controlled?
Ans.

- 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.

- we will make use of the repeat-x to repeat the image in the horizontal direction.
- we will make use of the repeat-y to repeat the image in the vertical direction.

Syntax:

```
{
    background-repeat:repeat|
    repeat-x | repeat-y | no-repeat;
}
```

Q8. What is the use of the background-position property?
Ans.

The background-position property sets the starting position of a background image.

By default, a background-image is placed at the top-left corner of an element, and repeated both vertically and horizontally.

The background-position property can take various values, specifying the horizontal and vertical positions. The values can be expressed in pixels, percentages, or keywords.

the background-image property sets the image that you want to use as the background, and background-position:

Web Designing Assignment

center center; centers the background image both horizontally and vertically within the element.

Here are some common values for the background-position property:

center: Centers the background image.

top, bottom, left, right: Aligns the background image to the respective edge.

Length Values:

You can use pixel values (e.g., 10px, 20px) to specify the position.

Percentage Values:

You can use percentage values (e.g., 50% 25%) to specify the position as a percentage of the background area.

Q9. Which property controls the image scroll in the background?
Ans.

he backgroundattachment property sets or returns whether a background image should scroll with the content, or be fixed.

scroll: The default value. The background image scrolls with the content.

fixed: The background image remains fixed in the viewport as the content scrolls. It doesn't move with the scrolling of the page.

Q10. Why should background and color be used as separate properties?
Ans.

Web Designing Assignment

- 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.

- Color is an inherited property while the background is not. So this can make confusion further.

Q12. How to center block elements using CSS1?
Ans.

- To center block elements using CSS1, we can use the margin property.
- We need to set the values of margin-left and margin-right to auto and width to some explicit value.
- This will center the block-level element 1
- Alternatively, we can use the shorthand margin property to center the block element horizontally.

Q13. How to maintain the CSS specifications?
Ans.

- The CSS specifications are maintained by the CSS Working Group (CSS WG) of the World Wide Web Consortium (W3C) . The CSS WG is responsible for developing and maintaining the CSS specifications, which define how web browsers should interpret and display CSS code .

- To maintain the CSS specifications, the CSS WG follows a standardization process that involves several stages, including Working Drafts, Candidate Recommendations, and Proposed Recommendations . During each stage, the CSS WG solicits feedback from the public and other

stakeholders to ensure that the specifications are accurate, complete, and useful .

- If you are interested in contributing to the development of CSS specifications, you can visit the CSS WG's website to learn more about the current work and how to give feedback . Additionally, you can read the CSS Design Principles to understand the philosophy behind the development of CSS .

Q14. What are the ways to integrate CSS as a web page?
Ans.
Inline CSS: You can add CSS rules directly to an HTML element using the style attribute.
Ex.,

```
<p style="color: red;">This is a red paragraph.</p>
```

Internal CSS: You can define CSS rules in the head section of an HTML document using the <style> tag.
Ex.,

```
<head>
<style>p {color: red;}</style>
</head>
```

External CSS: You can define CSS rules in a separate file and link it to the HTML document using the <link> tag.
Ex.,

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

Web Designing Assignment

Q15. What is embedded style sheets?
Ans.

- Embedded stylesheets, also known as internal stylesheets, involve placing the CSS styles directly within the HTML document.
- This is done using the <style> element within the <head> section of an HTML document.
- The styles specified within the <style> tags apply to the elements within that particular HTML document.
- Embedded style sheets are particularly useful for HTML documents that have unique style requirements from the rest of the documents in your project.

Q16.What are the external style sheets?
Ans.

- External style sheets are a way to define styles for an entire website in one place.
- This is done by creating a separate CSS file that contains all the styles that need to be used on a website.
- With an external style sheet, you can change the look of an entire website by changing just one file.
- Each HTML page must include a reference to the external style sheet file inside the <link> element, inside the head section.

Q17. What are the advantages and disadvantages of using external style sheets?
Ans.

- external style sheets are a great way to maintain a consistent look and feel across multiple web pages.

- However, it's important to consider the potential downsides before deciding to use them.

Advantages:
- ➢ Improved maintainability and code organization.
- ➢ Enhanced reusability across multiple HTML files.
- ➢ Efficient caching and faster page load times.

Disadvantages:
- ➢ Pages may not render correctly until the external CSS is loaded.
- ➢ Uploading or linking to multiple CSS files may increase your site's download time, affecting its overall performance.
- ➢ Large-scale projects may face versioning and caching challenges when using external CSS.

Q18. What is the meaning of the CSS selector?
Ans.
- ➢ a selector is a pattern used to select and style one or more HTML elements.
- ➢ Selectors target specific elements on a web page, and the associated style rules define how those elements should be presented or formatted.
- ➢ The combination of selectors and style rules is what allows developers to control the visual presentation of a web page.

Q19. What are the media types allowed by CSS?
Ans.
- ➢ CSS allows you to define different style rules for different media types.
- ➢ They allow you to specify different style rules for different output devices or presentations.

Web Designing Assignment

Here are some of the common media types allowed by CSS:

All : The default media type. It applies to all devices.

Print : Intended for paged material and for documents viewed on a print preview screen.

Screen : Intended primarily for color computer screens.

Speech : Intended for speech synthesizers.

Q20. What is the rule set?
Ans.

- A CSS rule set is a collection of rules that define how HTML elements should be displayed.
- It consists of a selector and a declaration block.
- The selector points to the HTML element you want to style, while the declaration block contains one or more declarations separated by semicolons.
- Each declaration includes a CSS property name and a value, separated by a colon.
- Multiple CSS declarations are separated with semicolons, and declaration blocks are surrounded by curly braces.