

Assignment – Module: 2 [CSS]

Q-1. What are the benefits of using CSS?

Ans.

Some of the benefits of using CSS are:

- (i) Gives styling to the webpage.
- (ii) Separates the code for content and styling.
- (iii) Responsive design.
- (iv) Animations.
- (v) Better user experiences.

Q-2. What are the disadvantages of CSS?

Ans.

Some disadvantages of CSS are as follows:

- (i) Multiple browser compatibility issue.
- (ii) Difficult to maintain in large projects.
- (iii) Security Issues.
- (iv) Limited layout control.

Q-3. What is the difference between CSS2 and CSS3?

Ans.

CSS	CSS3
Responsive design is not supported.	Responsive design is supported.
CSS is slow as compared to CSS3.	CSS3 is faster as compared to CSS.
Using CSS, we cannot build 3D animation and transformation.	In CSS3, we can perform all kinds of animation and transformations as it

	supports animation and 3D transformations.
CSS cannot be split into modules.	CSS3 can be breakdown into modules.
In CSS we have set of standard colours and it uses basic colour schemes only.	CSS3 has a good collection of HSL RGBA, HSLA, and gradient colours.
CSS does not support media queries.	CSS3 supports media queries.

Q-4. Name a few CSS style components.

Ans.

- (i) **Selectors:** Selectors are patterns used to select and style HTML elements.
For example, h1 selects all <h1> elements on a page.
- (ii) **Properties:** CSS properties define the visual aspects of the selected elements.
For example - colour, font-size, margin, padding, etc.
- (iii) **Values:** Values are assigned to properties to define the specific style.
For example, colour: red; sets the text colour to red.
- (iv) **Classes:** Classes allow you to apply styles to multiple elements with the same class attribute.
They are defined in CSS with a dot (ex - .my-class).
- (v) **IDs:** IDs are similar to classes but are intended to be unique on a page.
They are defined in CSS with a hash symbol (ex - #my-id).

Q-5. What do you understand by CSS opacity?

Ans.

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% transparent, and 0 is completely transparent.

Ex –

```
div {  
  opacity: 0.5;  
}
```

Q-6. How can the background colour of an element be changed?

Ans.

We can change the background colour of an HTML element using the background-colour CSS property and giving it a value of a colour.

Ex –

```
h1 {  
  background-color: #80ced6;  
}
```

Q-7. How can image repetition of the backup be controlled?

Ans.

The background-repeat property in CSS can be used to control the repetition of an image in the background.

To control the repetition of an image, you can:

Use the no-repeat value to prevent an image from repeating.

Use the repeat-x value to repeat the image horizontally.

Use the repeat-y value to repeat the image vertically.

Ex –

```
body {  
  background-image: url("bg.jpg");  
  background-repeat: repeat-y;  
}
```

Q-8. 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.

Ex –

```
body {  
  background-image: url('bg.jpg');  
  background-repeat: no-repeat;  
  background-position: center;  
}
```

Q - 9. Which property controls the image scroll in the background?

Ans.

The background-attachment property in CSS determines whether a background image scrolls with the page or remains fixed.

The property has three values: scroll, fixed, and local.

Ex –

```
<style>  
  div {  
    height: 300px;  
    background-image: url("/Images/istockphoto-517188688-612x612.jpg");  
    background-repeat: no-repeat;  
    background-attachment: fixed;  
  }  
</style>
```

Q-10. Which property controls the image scroll in the background?

Ans.

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

Values:

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.

Ex –

```
body {  
  background-image: url("bg.jpg");  
  background-repeat: no-repeat;  
  background-attachment: fixed;  
}
```

Q-11. Why should background and colour be used as separate properties?

Ans.

(i) It improves the accessibility of style sheets. In CSS, the background property is quite complex. If it is paired with colour, the complexity increases even more.

(ii) Colours are inherited, but backgrounds are not. This can increase the confusion.

Q-12. How to centre block elements using CSS1?

Ans.

The following are the ways to centre a block element in CSS :

(i) Margin Property

→ We can use the margin property to align a block element to the centre.

Ex –

```
div{
margin: 5px;
/* gives same margin to all sides */
margin-top: 5px;
/* gives margin from the top only */
margin-bottom: 5px;
/* gives margin from the bottom */
margin-left: 5px;
/* gives margin from the left side */
margin-right: 5px;
/* gives margin from the right side */
margin: 5px 5px;
/* margin: top-bottom left-right */
}
```

(ii) Padding Property

→ We can use the padding property to centre any content in a block element, if present.

Ex –

```
div{
padding: 5px;
/* gives same padding to all sides */
padding-top: 5px;
/* gives padding from the top only */
padding-bottom: 5px;
/* gives padding from the bottom */
padding-left: 5px;
```

```
/* gives padding from the left side */  
padding-right: 5px;  
/* gives padding from the right side */  
padding: 5px 5px;  
/* padding : top-bottom left-right */  
}
```

Q - 13. How to maintain the CSS specifications?

Ans.

To maintain the CSS specifications effectively, we need to make sure that the following steps are followed:

- (i) Use a consistent coding style.
- (ii) Organize selectors and classes logically.
- (iii) Implement responsive design using Media Queries.
- (iv) Add comments for clarity.
- (v) Use external stylesheets.
- (vi) Check browser compatibility.
- (vii) Use proper naming.

Q - 14. What are the ways to integrate CSS as a web page?

Ans.

There are three ways to integrate CSS:

- (i) Inline CSS
➔ In Inline type, the CSS properties and styling are given in the tag itself, using the 'style' attribute.

Ex -

```
<!DOCTYPE html>  
<html lang="en">  
<head>  
  <meta charset="UTF-8">  
  <meta name="viewport" content="width=device-width, initial-scale=1.0">  
  <title>Document</title>  
</head>  
<body>
```

```
<h1 style="color: aquamarine;">Inline CSS</h1>
</body>
</html>
```

(ii) Internal CSS

➔ In Internal CSS, the CSS properties are given inside the head part, using the <style> tag and with the use of selectors.

Ex –

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    h1{
      color: aquamarine;
    }
  </style>
</head>
<body>
  <h1>Internal CSS</h1>
</body>
</html>
```

(iii) External CSS

➔ In External CSS, a separate file is created to give CSS styling with the extension of .css and is linked with the html file using the <link> tag.

Ex –

HTML Files (1.html)

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <link rel="stylesheet" href="/css/styles.css">
</head>
<body>
  <h1>External CSS</h1>
</body>
</html>
```


CSS File (style.css)

```
h1{  
  color: aquamarine;  
}
```

Q – 15. What is embedded style sheets?

Ans.

Embedded style sheet is same as the Inline CSS.

We use the <style> tag to give all the CSS styling and properties in the entire html file.

It is defined inside the <head> tag of the html file.

Ex –

```
<!DOCTYPE html>  
<html lang="en">  
<head>  
  <meta charset="UTF-8">  
  <meta name="viewport" content="width=device-width, initial-scale=1.0">  
  <title>Document</title>  
  <style>  
    h1{  
      color: aquamarine;  
    }  
  </style>  
</head>  
<body>  
  <h1>Internal CSS</h1>  
</body>  
</html>
```

Q – 16. What are External style sheets?

Ans.

External style sheet is same as External CSS.

We give the CSS styling and properties in a separate file with .css extension and that file is linked with the html file using the <link> tag inside the <head> tag of a html file.

Ex -

HTML Files (1.html)

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <link rel="stylesheet" href="/css/styles.css">
</head>
<body>
  <h1>External CSS</h1>
</body>
</html>
```

CSS File (style.css)

```
h1{
  color: aquamarine;
}
```

Q – 17. What are the advantages and disadvantages of using external style sheets?

Ans.

Advantages:

- (i) Using External Style Sheets, the styles of multiple documents can be organized from one single file.
- (ii) Reuse of the style sheet.
- (iii) Improved performance.
- (iv) Separation of HTML and CSS code makes the code look clean.

Disadvantages:

- (i) If external CSS is not able to load due to any reasons, the page will be left without styling.
- (ii) For very small projects, using External CSS might not be the best option. One can go with Internal or Inline CSS.

Q – 18. What is the meaning of the CSS selector?

Ans.

CSS selectors are used to find or select elements or classes that we want to style.

There are several types of selectors in CSS:

- (i) Universal Selector
➔ Selects the entire body and applies the style to the entire body.

Ex –

```
<!-- syntax - *{  
    property:value  
} -->  
  
<style>  
    *{  
        background-color: cadetblue;  
        color:aliceblue  
    }  
</style>
```

- (ii) Element Tag Selector
➔ The element selector selects all elements with the specified element name.

Ex –

```
<!-- Syntax - tagname{
    property:value
} -->

<style>
    p{
        background-color: blue;
        color: red;
    }

    pre{
        background-color: rgb(159, 255, 255);
        color:blueviolet
    }
</style>
```

(iii) Class Selector

➔ The class selector selects HTML elements with a specific class attribute.

Ex –

```
<style>
    .header{
        text-decoration:line-through;
        color:cadetblue
    }
    .x{
        font-size:xx-large;
    }
    .y{
        background-color: brown;
    }
</style>
```

(iv) Id Selector

➔ The id selector selects an element based on the id attribute of the HTML element.

➔ An element's id is unique within the page, so we use the id selector to select only one unique element.

➔ To pick an element with an id, type the hash character (hash) followed by the element's id.

Ex –

```
<style>
  /* syntax - #idname{
  property:value
  } */

  #name {
    background-color: rebeccapurple;
  }

  #nav {
    background-color: red;
  }
</style>
```

(v) Group Selector

➔ Group selector is used to select multiple classes or ids together.

Ex –

```
<style>
  .header,.nav,.section,#footer{
    color: red;
    font-family: 'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS',
sans-serif;
    font-size: xx-large;
  }
</style>
```

(vi) Descendent Selector

➔ The descendant selector matches all elements that are descendants of a specified element.

Ex –

```
<style>
  ul li a {
    color: aqua;
    font-family: Georgia, 'Times New Roman', Times, serif;
    font-size: xx-large;
  }

  div section.xyz a{
    background-color: red;
  }
```

```
div section#abc a{
    background-color: blue;
}
</style>
```

(vii) Adjacent Selector

➔ The adjacent selector is used to select an element that is directly after another specific element.

Ex –

```
<style>
/* applies to the adjacent tag */
div+a{
    background-color: chartreuse;
}
</style>
```

(viii) General Sibling Selector

➔ The general sibling selector selects all elements that are next siblings of a specified element.

Ex –

```
<style>
div~pre{
    background-color: darkmagenta;
}
div~p{
    font-size: xx-small;
}
</style>
```

Q – 19. What are the media types allowed by CSS?

Ans.

- (i) All – Used for all media type devices.
- (ii) Print – Used for print preview mode.
- (iii) Screen - Used for Computer Screens, Tablets, Smartphones, etc.

Q – 20. What is the rule set?

Ans.

In CSS, a rule set is a collection of style declarations that define how HTML elements should be styled on a web page.

A rule set consists of a selector and a declaration block. Here's a breakdown of its components:

(i) Selector

➔ The selector is the part of the rule set that targets HTML elements to which the styles will be applied. It can be an HTML element, a class, an ID, or a combination of these.

Ex –

```
p {  
    /* styles for <p> elements */  
}  
  
.myClass {  
    /* styles for elements with class="myClass" */  
}  
  
#myID {  
    /* styles for the element with id="myID" */  
}
```

(ii) Declaration Block

➔ The declaration block is enclosed in curly braces {} and contains one or more style elements. Each element consists of a property and a value, separated by a colon. Multiple elements are separated by semicolons.

Ex –

```
p {  
    color: blue;  
    font-size: 16px;  
    margin-top: 10px;  
}
```

Example of a complete rule set:

```
selector {  
  property1: value1;  
  property2: value2;  
}
```