

CSS3

1.1 Interview Questions

1) What is CSS?

CSS stands for Cascading Style Sheets.

It is widely used language on web like HTML.

It is extremely used to apply the styles on HTML elements.

In general, CSS is used to design the HTML elements/tags.

The latest version of CSS3 was introduced in 2001.

All CSS files we need to save with ".css" extension.

2) Advantages of CSS?

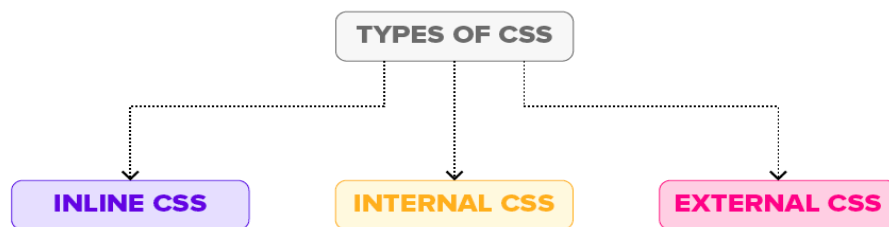
- Flexibility
- Saves lot of time
- Performance is faster
- Support Global Change
- Compatibility with multiple devices

3) Disadvantages of CSS?

- Fragmentation
- Need to update all the versions of CSS
- There exists a scarcity of security
- Browser compatibility

4) Different types of CSS?

We have three types of CSS.



Inline CSS:

Inline CSS may use to apply a unique style for a single Element/Tag.

We can achieve inline CSS with the help of "style" attribute.

The "style" attribute may contain any CSS property.

Ex:

```
<h1 style="color:red">Heading Tag</h1>
```

```
<p style="background-color:yellow"></p>
```

```
<b style="font-size:30px"></b>
```

Internal CSS or Embedded CSS:

Internal CSS may use when a single HTML document must be styled uniquely.

Using <style> tag we can achieve internal CSS.

A <style> tag must be placed inside <head> tag.

Ex:

```
<!DOCTYPE html>
<html>
  <head>
    <title>IHUB TALENT</title>
    <style type="text/css">
      body
      {
        background-color:red;
      }
    </style>
  </head>
  <body>
    Welcome to IHUB TALENT MANAGEMENT
  </body>
</html>
```

External CSS:

External CSS may use to change the look of the entire website by changing just one file.

Each html pages includes a reference to the external style sheet inside the <link> tag.

In external css we have to create two files. i.e ".html" and ".css" file.

The external ".css" file should not contain any html tags.

Ex:

```
index.html
<!DOCTYPE html>
<html>
  <head>
    <title>IHUB Talent</title>
    <!-- adding external css file -->
    <link rel="stylesheet" type="text/css" href="mystyles.css">
  </head>
  <body>
    Welcome to IHUB TALENT MANAGEMENT
  </body>
</html>
mystyles.css
body
{
  background-color:violet;
}
```

5) Limitations of CSS?

CSS has various limitations as a programming language as follows

- ✓ CSS cannot perform any logical operations like if/else or for/while or +/-.
- ✓ We can't read any files using CSS.
- ✓ It can't interact with databases.
- ✓ CSS can't request a web page.

6) What is CSS framework?

A CSS framework comprises several CSS style sheets ready for use by web developers and designers. The framework already has built-in classes for common website elements – footer, slider, navigation bar, hamburger menu, column-based layouts, etc.

We have following list of CSS frameworks.

Ex:

Bootstrap, Tailwind CSS, Bulma, Skeleton, Foundation and etc.

7) How to declare units in CSS?

A CSS unit is used to determine the property size, which we set for an element or its content. Units are used to set margin, padding, lengths, and so on.

Unit	Name	Explanation
cm	Centimeters	It is used to define the measurement in centimeters.
mm	Millimeters	It is used to define the measurement in millimeters.
in	Inches	It is used to define the measurement in inches. 1in = 96px = 2.54cm
pt	Points	It is used to define the measurement in points. 1pt = 1/72 of 1 inch.
pc	Picas	It is used to define the measurement in picas. 1pc = 12pt so, there 6 picas is equivalent to 1 inch.
px	Pixels	It is used to define the measurement in pixels. 1px = 1/96th of inch

Ex:

```
<p style = "font-size: 20px;" > It has a font-size: 20px; </p>
<p style = "font-size: 1.2cm;" > It has a font-size: 1.2cm; </p>
<p style = "font-size: .7in;" > It has a font-size: .7in; </p>
<p style = "font-size: 18pt;" > It has a font-size: 18pt; </p>
<p style = "font-size: 2pc;" > It has a font-size: 2pc; </p>
<p style = "font-size: 10mm;" > It has a font-size: 10mm; </p>
```

8) How to include CSS in a web page?

There are three ways to include CSS in a web page

- Inline CSS: We can achieve inline CSS using style attribute.
- Internal CSS: We can achieve internal CSS using <style> tag.
- External CSS: We can achieve external CSS using <link> tag.

9) What are CSS selectors and Types of selectors in CSS?

CSS selectors are used to find/select the elements to which we want to apply styles.

We have five types of CSS selectors.

- **CSS element selector:**

- The element selector selects HTML elements based on element name.

Ex:

```
P
{
    text-align:center;
    color:red;
}
```

- **CSS id selector:**

- The id selector uses the id attribute of an HTML element to select a specific element.
- The id of an element is unique within a page, so the id selector is used to select one unique element.
- To select an element with a specific id, write a hash (#) character, followed by the id of the element.

Ex:

```
#para1
{
    text-align: center;
    color: red;
}
<p id="para1">This is paragraph tag </p>
```

- **CSS class selector:**

- The class selector selects HTML elements with a specific class attribute.
- To select elements with a specific class, write a period (.) character, followed by the class name.

Ex:

```
.center
{
    text-align: center;
    color: red;
}
<p class="center">This is paragraph</p>
```

- **CSS grouping selector:**

The grouping selector selects all the HTML elements with the same style definitions.

Ex:

```
h1, h2, p
{
    text-align: center;
    color: red;
}
<p>This is paragraph</p>
<h1>This is Heading1 Tag</h1>
<h2>This is Heading2 Tag</h2>
```

- **CSS universal selector:**

The universal selector (*) selects all HTML elements on the page.

Ex:

```
*
{
    text-align: center;
    color: blue;
}
<p>This is Paragraph</p>
<h1>This is heading1 tag</h1>
```

10) Difference between id selector and class selector?

id selector	class selector
Using '#' symbol we can create id selector.	Using dot(.) symbol we can create class selector.
The id selector uses the "id" attribute of an HTML element to select a specific element.	The class selector uses the "class" attribute of an HTML element to select a specific element.
We can't use multiple ids on elements.	We can use multiple classes on elements.
A id selector is used for single tags.	A class selector is used for multiple tags.

11) Difference between inline, block and inline-block?

- **inline :**
We can't define height and width.
It automatically adjusts its height and width based on the content.
- **block:**
We can define height and width.
Block elements always starts on a new line.
By default it will occupy complete width of a window/viewport.

- **inline-block:**
Like block elements, we can define height and width.
It does not start on a new line.

12) Which property is used to change the font face?

A “font-family” property is used to change the font face.

Ex:

```
<p style=" font-family:georgia,garamond,serif;"> This is Paragraph </p>
```

13) Difference between content-box and border-box?

content-box: Box-sizing content-box consider width equals to content width. Adding border and padding can increase size of box.

Ex:

```
.box
{
    width:320px;
    height:200px;
    background:#ccc;
    padding:10px;
    box-sizing: content-box
}
<div class="box"></div>
```

border-box: Box-sizing border-box consider width equals to total border box. Adding border and padding will not change size of box.

Ex:

```
.box
{
    width:320px;
    height:200px;
    background:#ccc;
    padding:10px;
    box-sizing: border-box
}
<div class="box"></div>
```

14) Explain float property in CSS?

The float property specifies whether an element should float to the left or right or not at all.

Ex:

```
float: none|left|right|initial|inherit;
```

15) Describe z-index in CSS?

- The z-index property specifies the stack order of an element.
- An element with greater stack order is always in front of an element with a lower stack order.
- A z-index only works on positioned elements and flex items.

Ex:

```
img
{
    position: absolute;
    left: 0px;
    top: 0px;
    z-index: -1;
}
<h1>This is a heading</h1>

<p>Image has a z-index of -1, it will be placed behind the text.</p>
```

16) Explain CSS position property?

The position property specifies the type of positioning method used for an element (static, relative, absolute, fixed, or sticky).

Ex:

```
position: static | absolute | fixed | relative | sticky | initial | inherit;
```

17) Difference between CSS Grid and Flexbox?

GRID	FLEXBOX
Grid is made for two-dimensional layout	Grid is made for two-dimensional layout
Grid can work on rows and columns at a time.	Flexbox can work on either rows or columns at a time.
Grid helps you create the outer layout of the webpage.	Flexbox mostly helps align content & move blocks.

18) Explain transition property?

CSS transitions allow you to change property values smoothly, over a given duration. We have following list of transition properties.

Ex:

```
transition
transition-delay
transition-duration
transition-property
transition-timing-function
```

We can see transition effects, if we use mouse over (hover) property.

19) Difference between margin property and padding property?

CSS margins: It is used to create space around the element. We can set the different sizes of margins for individual sides (top, right, bottom, left).

CSS padding: It is used to create space around the element, inside any defined border. We can set different paddings for individual sides (top, right, bottom, left). It is important to add border properties to implement padding properties.

20) Difference between visibility:hidden and display:none?

visibility:hidden- It is not visible but gets up its original space.

Ex:

```
h1
{
    visibility: hidden;
}
```

display:none- It is hidden and takes no space.

Ex:

```
h1
{
    display:none;
}
```

21) How to set background image in CSS?

We can use following properties to define background image in css.

Ex:

```
body
{
    background-color: #FFF;
    background-image: url('images/bg2.jpg');
    background-repeat: no-repeat;
    background-size: cover;
    background-position: center 0px;
    background-attachment: fixed;
}
```

//or

We can use shorthand property to define background image in css.

Ex:

```
body
{
    Background: #fff url('images/bg2.jpg') no-repeat center 0px fixed;
}
```


22) Explain about CSS gradients?

CSS gradients let you display smooth transitions between two or more specified colors.

CSS defines three types of gradients

- Linear Gradients (goes down/up/left/right/diagonally)

Ex:

```
background-image: linear-gradient(red, yellow);
```

- Radial Gradients (defined by their center)

Ex:

```
background-image: radial-gradient(red, yellow, green);
```

- Conic Gradients (rotated around a center point)

Ex:

```
background-image: conic-gradient(red, yellow, green);
```

23) Difference between px, em and %?

Pixel is a static measurement, while percent and EM are relative measurements.

Ex:

<u>px</u>	<u>em</u>	<u>percent</u>
25px	1.5625em	156.25%

24) In how many ways we can define colors in CSS?

There are following ways to define colors in CSS.

- ✓ With color name like red.
- ✓ With HEX value like #FFFF00.
- ✓ With RGB value like rgb(255,0,0).
- ✓ With HSL value like hsl(0,100%,50%).

25) Explain about transform property in CSS?

The transform property applies a 2D or 3D transformation to an element. This property allows you to rotate, scale, move, skew, etc., elements.

Ex:

```
transform: none|transform-functions|initial|inherit;
```

26) Explain about clear property in CSS?

- The clear property controls the flow next to floated elements.
- The clear property specifies what should happen with the element that is next to a floating element.

27) Explain about cursor property in CSS?

The cursor property specifies the mouse cursor to be displayed when pointing over an element.

Ex:

```
p:hover {cursor: pointer};
```