

## **CSS INTERVIEW QUESTION WITH THERE ANSWERS**

### **Q1. What is the full form of CSS?**

CSS stands for Cascading Style Sheets. It is a technology developed by the World Wide Web Consortium or W3C. It was developed to streamline the styling of webpages into a separate technology.

### **Q2. What is the meaning of cascading?**

Cascading refers to the process of performing multiple operations/tasks in a single line of code.

### **Q3. What are the major versions of CSS?**

The following are the major versions of CSS

1. CSS 1
2. CSS 2
3. CSS 2.1
4. CSS 3
5. CSS 4

### **Q4. What are the different modules used in the current version of CSS?**

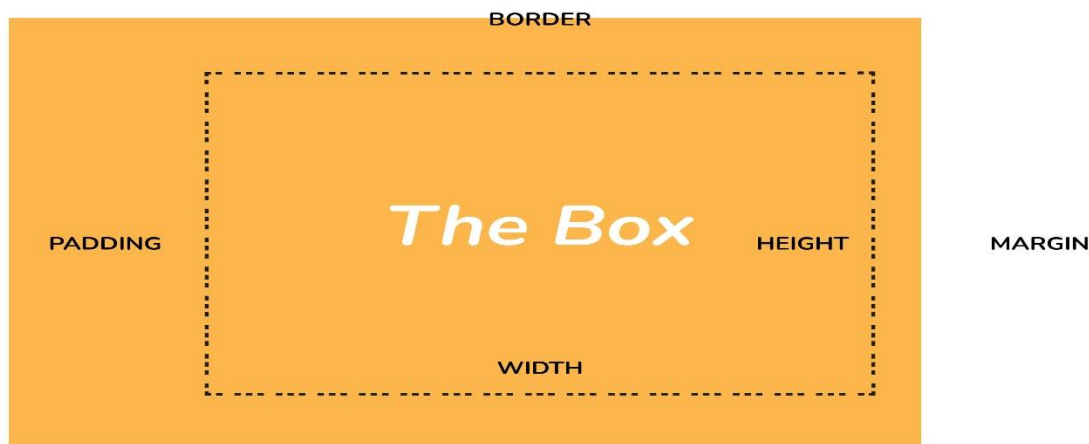
There are several modules in CSS. Below are a few of them:

- Selectors
- Box Model
- Backgrounds and Borders
- Text Effects
- 2D/3D Transformations
- Animations
- Multiple Column Layout
- User Interface

Cascading Style Sheets (CSS) has three major versions: CSS1, CSS2, and CSS3. The current version of CSS is CSS4, which was released in 2017.

### **Q5. What is the Box model in CSS? Which CSS properties are a part of it?**

A rectangle box is wrapped around every HTML element. The box model is used to determine the height and width of the rectangular box. The CSS Box consists of Width and height (or in the absence of that, default values and the content inside), padding, borders, margin.



**Content:** Actual Content of the box where the text or image is placed.

**Padding:** Area surrounding the content (Space between the border and content).

**Border:** Area surrounding the padding.

**Margin:** Area surrounding the border.

## Q6. How to include CSS in the webpage?

There are different ways to include a CSS in a webpage,

**1 - External Style Sheet:** An external file linked to your HTML document: Using link tag, we can link the style sheet to the HTML page.

```
<link rel="stylesheet" type="text/css" href="mystyles.CSS" />
```

**2 - Embed CSS with a style tag:** A set of CSS styles included within your HTML page.

```
<style type="text/css">
```

```
/*Add style rules here*/
```

```
</style>
```

Add your CSS rules between the opening and closing style tags and write your CSS exactly the same way as you do in stand-alone stylesheet files.

**3 - Add inline styles** to HTML elements(CSS rules applied directly within an HTML tag.): Style can be added directly to the HTML element using a style tag.

```
<h2 style="color:red;background:black">Inline Style</h2>
```

[4 - Import a stylesheet file](#) (An external file imported into another CSS file): Another way to add CSS is by using the @import rule. This is to add a new CSS file within CSS itself.

```
@import "path/to/style.css";
```

### [Q7. What are the different types of Selectors in CSS?](#)

**1. Universal Selector:** The universal selector works like a wildcard character, selecting all elements on a page. In the given example, the provided styles will get applied to all the elements on the page.

```
* {  
  color: "green";  
  font-size: 20px;  
  line-height: 25px;  
}
```

**2. ID Selector:** This selector matches any HTML element that has an ID attribute with the same value as that of the selector. In the given example, the provided styles will get applied to all the elements having ID as a container on the page.

```
#container {  
  width: 960px;  
  margin: 0 auto;  
}  
  
<div id="container"></div>
```

**3. Class Selector:** The class selector also matches all elements on the page that have their class attribute set to the same value as the class. In the given example, the provided styles will get applied to all the elements having ID as the box on the page.

```
.box {  
  padding: 10px;  
  margin: 10px;  
  width: 240px;  
}  
  
<div class="box"></div>
```

### Q8. Name a few prominent CSS frameworks.

#### **Bootstrap**

Bootstrap is the most popular **CSS framework** for developing responsive and mobile-first websites. **Bootstrap 4** is the newest version of Bootstrap

#### **Foundation**

Foundation is a responsive front-end framework. Foundation provides a responsive grid and HTML and CSS UI components, templates, and code snippets, including typography, forms, buttons, navigation and other interface elements, as well as optional functionality provided by JavaScript extensions.

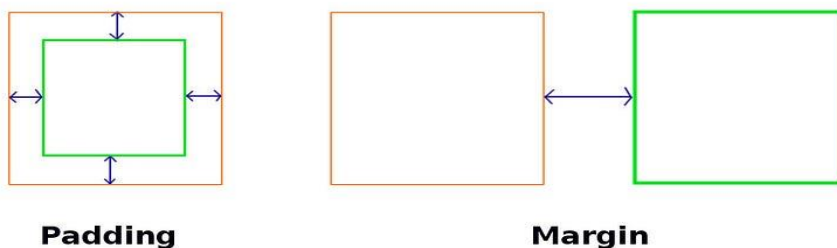
#### **SemanticUI**

Semantic UI is a modern front-end development framework, powered by LESS(CSS-preprocessor) and [jQuery](#). It has a sleek, subtle, and flat design look that provides a lightweight user experience.

#### **UIKit**

UIKit is a lightweight and modular front-end framework for developing fast and powerful web interfaces.

### Q9 what is padding & margin?



Margin is the space around an element's border, while padding is the space between an element's border and the element's content.

### Q10. Z-index

The z-index property is used to displace elements on the z-axis i.e in or out of the screen. It is used to define the order of elements if they overlap on each other.

#### **Syntax:**

```
z-index: auto|number|initial|inherit;
```

Property values:

- Auto: The stack order is equal to that of the parent(default).

- Number: The stack order depends in the number.
- Initial: Sets the property to its default value.
- Inherit: Inherits the property from the parent element.



### [Q11. What are CSS Sprites?](#)

CSS sprites combine multiple images into one single larger image. It is a commonly-used technique for icons (Gmail uses it).

### [Q12. What are pseudo-elements in CSS?](#)

A CSS pseudo-element is a keyword added to a selector that lets you style a specific part of the selected elements. For Example, Styling the first letter or line of an element, and Inserting content before or after the content of an element. All of these can be done using Pseudo Elements in CSS.

#### **Syntax:**

```
selector::pseudo-element
    property:                                {
}                                             value;
```

ex:-

```
p::first-line {
    color: Red;
    font-weight: bold;
}
```

# Geeks For Geeks

## ::first-line element

**This is a paragraph using first-line pseudo-element to style first line of the paragraph. Content in the first line turns red and becomes bold.**

### Q13. What are the different media types allowed by CSS?

There are four types of @media properties (including *screen*):

- **all** – for all media type devices
- **print** – for printers
- **speech** – for screenreaders that “reads” the page out loud
- **screen** – for computer screens, tablets, smart-phones etc.

Here is an example of print-media type’s usage:

```
@media print {  
  
h1 {  
  
background-color: yellow;  
  
}  
}
```

### Q14. What are the different units used in CSS?

CSS has two types of lengths. Relative length and absolute length. Different units are used for them.

#### Relative Length

UNIT	DESCRIPTION
em	Relative to the font-size of the element (2em means 2 times the size of the current font)
ex	Relative to the x-height of the current font (rarely used)
ch	Relative to the width of the “0” (zero)
rem	Relative to font-size of the root element
vw	Relative to 1% of the width of the viewport*
vh	Relative to 1% of the height of the viewport*
vmin	Relative to 1% of viewport’s* smaller dimension
vmax	Relative to 1% of viewport’s* larger dimension
%	Relative to the parent element

#### Absolute Length

UNIT	DESCRIPTION
CM	centimetres
MM	millimetres

IN	inches (1in = 96px = 2.54cm)
PX	pixels (1px = 1/96th of 1in)
PT	points (1pt = 1/72 of 1in)
PC	picas (1pc = 12 pt)

#### Q25. What is the difference between {visibility: hidden} and {display: none}?

**display:none** means that the tag in question will not appear on the page at all (although you can still interact with it through the DOM). There will be no space allocated for it between the other tags.

**visibility:hidden** means that unlike **display:none**, the tag is not visible, but space is allocated for it on the page. The tag is rendered, it just isn't seen on the page.

#### Q16. What are the various font-related attributes in CSS?

Below are the different font-related attributes available in CSS:

- Font-style
- Font-variant
- Font-weight
- Font-size/line-height
- Font-family
- Caption
- Icon

#### Q17. What is CSS flexbox?

The **flexbox** or flexible box model in CSS is a one-dimensional layout model that has flexible and efficient layouts with distributed spaces among items to control their alignment structure

The flexbox model, we had 4 layout modes:

- **Block:** It is used to make sections in web pages.
- **Inline:** It is used for text.
- **Table:** It is used for two-dimensional table data.
- **Positioned:** It is used for the explicit position of an element.
- 

#### Q18. Explain the difference in approach when designing a responsive website over a mobile-first strategy?

These two approaches are not exclusive. Making a website responsive means some elements will respond by adapting its size or other functionality according to the device's screen size, typically the viewport width, through CSS media queries.

For example, making the font size smaller on smaller devices.

```
@media (min-width: 601px) {  
  
  .my-class {  
  
    font-size: 24px;  
  
  }  
}
```

### Q19. What's the difference between a relative, fixed, absolute and statically positioned element?

A positioned element is an element whose computed position property is either relative, absolute, fixed or sticky.

- **Static**  
The default position; the element will flow into the page as it normally would. The top, right, bottom, left and z-index properties do not apply.
- **Relative**  
The element's position is adjusted relative to itself, without changing the layout (and thus leaving a gap for the element where it would have been had it not been positioned).
- **Absolute**  
The element is removed from the flow of the page and positioned at a specified position relative to its closest positioned ancestor if any, or otherwise relative to the initial containing block. Absolutely positioned boxes can have margins, and they do not collapse with any other margins. These elements do not affect the position of other elements.
- **Fixed**  
The element is removed from the flow of the page and positioned at a specified position relative to the viewport and doesn't move when scrolled.
- **Sticky**  
Sticky positioning is a hybrid of relative and fixed positioning. The element is treated as relative positioned until it crosses a specified threshold, at which point it is treated as fixed positioned.

### Q20. What are functions/mixins?

Functions are blocks of code that return a single value of any Sass data type. A **mixin** is very similar to a function. The main difference between the two is that mixins output lines of Sass code that will compile directly into CSS styles, while functions return a value that can then become the value for a CSS property or become something that might be passed to another function or mixin.

### Q21. What is the purpose of the 'clearfix' hack in CSS?

The **clearfix** is a CSS hack that fixes a bug that occurs when two floated elements are stacked next to each other.



### Without Clearfix

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus imperdiet, nulla et dictum interdum...



### With Clearfix

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus imperdiet, nulla et dictum interdum...



### Q22. What is the difference between 'em' and 'rem' units in CSS?

'em' is relative to the font-size of its nearest parent, while 'rem' is relative to the font-size of the root element (html).

### Q23. Explain the 'transition' property in CSS.

The 'transition' property is used to create smooth transitions between different property values. It defines the duration, timing function, and other aspects of the transition effect.

### Q24. What Is Asynchronous Loading?

Asynchronous or async loading refers to downloading and applying a page resource in the background, independently of other resources and without otherwise impacting the initial loading process.

### Q25. Explain the difference between 'flex' and 'grid' layout in CSS.

Flexbox is a one-dimensional layout model for laying out items in rows or columns, while CSS Grid is a two-dimensional layout model that allows the creation of complex grid-based layouts.

### Q26. What is the importance of the 'currentColor' keyword in CSS?

'currentColor' is a keyword that represents the computed value of the 'color' property. It is useful for making an element inherit its color from its parent.

### Q27. . How is opacity specified in CSS3?

Opacity refers to the degree to which the content is transparent or opaque. We can use the property named `opacity` which takes the values ranging from 0 to 1. 0 specifies that the

element is completely transparent where 1 means that the element is completely opaque. We can use the opacity property as follows:

```
div {  
    opacity: 0.6;  
}
```

### Q28. What are the properties of flexbox?

Flexbox stands for flexible box and it was introduced around 2017 in CSS with the purpose of providing an efficient way to handle layouts, align elements within them and distribute spaces amongst the items in dynamic/responsive conditions. It provides an enhanced ability to alter the dimensions of the items and make use of the available space in the container efficiently. In order to achieve this, CSS3 provides some properties. The properties of flexbox are as follows:

- **flex-direction**: This property helps in defining the direction the container should stack the items targeted for flex. The values of this property can be
  - row: Stacks items horizontally from left to right in the flex container.
  - column: Stacks items vertically from top to bottom in the flex container.
  - row-reverse: Stacks items horizontally from right to left in the flex container.
  - column-reverse: Stacks items vertically from bottom to top in the flex container.
- **flex-wrap**: This property specifies if the flex items should be wrapped or not. Possible values are:
  - wrap: The flex items would be wrapped if needed.
  - nowrap: This is the default value that says the items won't be wrapped.
  - wrap-reverse: This specifies that the items will be wrapped if needed but in reverse order.
- **flex-flow**: This property is used for setting both flex-direction and flex-wrap properties in one statement.
- **justify-content**: Used for aligning the flex items. Possible values are:
  - center: It means that all the flex items are present at the center of the container.
  - flex-start: This value states that the items are aligned at the start of the container. This is the default value.
  - flex-end: This value ensures the items are aligned at the end of the container.
  - space-around: This value displays the items having space between, before, around the items.
  - space-between: This value displays items with spaces between the lines.
- **align-items**: This is used for aligning flex items.
- **align-content**: This is used for aligning the flex lines

### Q30. When does DOM reflow occur?

Reflow occurs when:

- Insert, remove or update an element in the DOM.

- Modify content on the page, e.g. the text in an input box.
- Move a DOM element.
- Animate a DOM element.
- Take measurements of an element such as `offsetHeight` or `getComputedStyle`.
- Change a CSS style.

### Q31. How does Calc work?

The CSS3 `calc()` function allows us to perform mathematical operations on property values. Instead of declaring, for example, static pixel values for an element's width, we can use `calc()` to specify that the width is the result of the addition of two or more numeric values.

```
.foo {
  Width: calc(100px + 50px);
}
```

### Q32. What is a CSS preprocessor?

CSS preprocessors are scripting languages that extend the default capabilities of CSS. They enable us to use logic in our CSS code, such as variables, nesting, inheritance, mixins, functions, and mathematical operations.

Each CSS preprocessor has its own syntax that they compile into regular CSS so that browsers can render it on the client side.

### Q 33 Type of css Pre[rocessor ?

There are three main CSS preprocessors at the time of writing this article: [SASS](#), [LESS](#), and Stylus. Most CSS preprocessors have similar features. Yet each one has its own unique way of completing the same task.

#### 1 Sass: Syntactically Awesome Style Sheet :-

Sass was released in 2006 and it is considered as the oldest CSS preprocessor. Sass is basically written in [Ruby](#), which is used for adding dynamic functionality to an application. The main motive of the creators of Sass was to implement dynamic functionality to the CSS.

#### 2 LESS: Learner Style Sheets :-

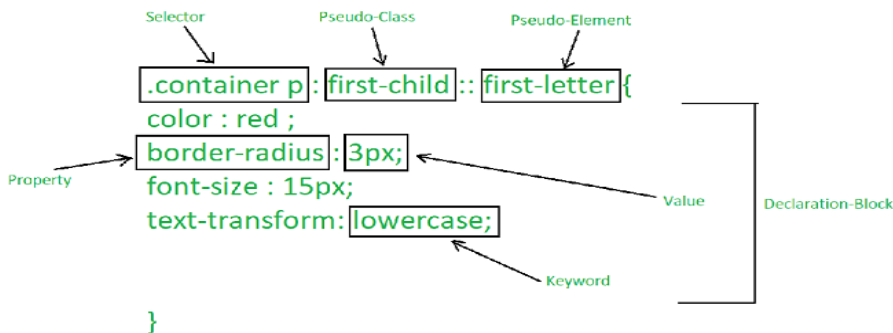
LESS, inspired by Sass, was released in 2009 after the release of Sass. Many of the features of Sass such as variables, nesting, mixins are also present in LESS or Learner Style Sheets. LESS, inspired by Sass, was released in 2009 after the release of Sass. Many of the features of Sass such as variables, nesting, mixins are also present in LESS or Learner Style Sheets.

#### 3 Stylus :

Stylus was launched in 2010, just after the launch year of LESS. It was written in NodeJS, so Stylus can easily be integrated into the Node projects. The powerful logical abilities of Sass and straightforward setup of the LESS are combined in Stylus.

### Q34. Tell us about the use of ruleset.

The ruleset is used for the identification of selectors, which can be attached with other selectors.



### Q35. What is meant by RGB stream?

RGB represents colors in CSS. The three streams are namely Red, Green, and Blue. The intensity of colors is represented using numbers 0 to 256.

### Q 36. Define contextual selectors.

"Contextual selectors" in CSS allow you to specify different styles for different parts of your document. You can assign styles directly to specific HTML tags

```
div {color: red};    p {color: red;}
```

### Q 37. When should you use `translate()` instead of absolute positioning?

We should use `translate()` instead of absolute positioning when you want to move an element without affecting the layout of other elements on the page.

### Q 38. Name different ways to position some aspects in CSS.

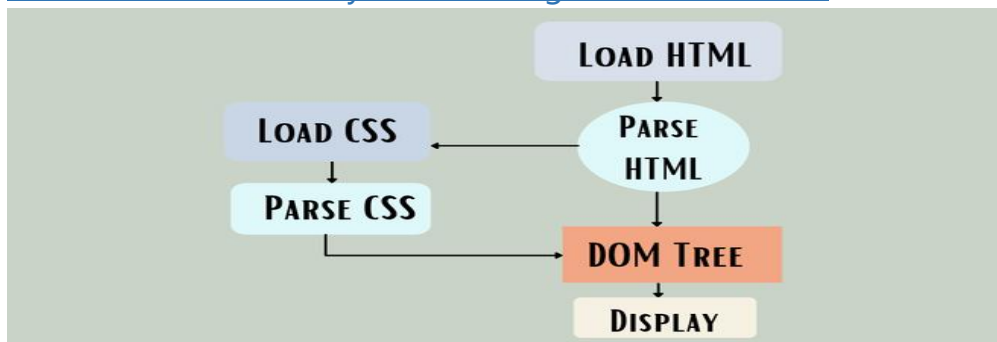
The positioning property specifies the positioning method type.

The five different position values are: 1 Fixed 2 Static 3 Absolute 4 Relative 5 Sticky.

### Q 39. What are mixins?

A mixin is similar to a function block of code returning a single value-mixin output lines of Sass code that directly compiles into CSS styles.

### Q 40. What is meant by CSS working under the hood?



Q41. Differentiate between logical and physical tags.

A logical tag is a tag that describes the meaning or structure of the content it surrounds, while a physical tag describes the presentation or appearance of the content.

Q42. Define gradients in CSS.

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

Q43. What are the properties of flexbox?

Designed as a one-dimensional layout model, and as a method that could offer space distribution between items in an interface and powerful alignment capabilities.

Q 44. Difference between absolute and relative in css.

Relative positioning moves an element relative to its default position on the page. Absolute positioning moves an element relative to its nearest positioned ancestor