<u>Assignment</u>

Topic: Mobile responsive and Positions 2

Q1. What is position property in CSS and its type?

Ans: The position property in CSS is used to define how an element is positioned within a document. It allows you to control the placement of an element relative to its normal position, a parent element, or the viewport. The position property is essential for creating complex layouts and positioning elements precisely.

Types of position Property

The position property can take one of the following values:

1. static (default):

- The element is positioned according to the normal flow of the document.
- Properties like top, right, bottom, left, and z-index have no effect.
- This is the default positioning for all elements.

2.relative:

 The element is positioned relative to its normal position in the document flow.

- You can use top, right, bottom, and left to offset the element from its normal position.
- The space originally occupied by the element is preserved, and other elements are not affected.

3.absolute:

- The element is removed from the normal document flow and positioned relative to its nearest positioned ancestor (an ancestor with a position value other than static).
- If no such ancestor exists, it is positioned relative to the initial containing block (usually the viewport).
- You can use top, right, bottom, and left to position the element.
- The element does not occupy space in the normal flow, and other elements behave as if it were not there.

4.fixed:

- The element is removed from the normal document flow and positioned relative to the viewport (the browser window).
- It stays in the same position even when the page is scrolled.
- You can use top, right, bottom, and left to position the element.
- Commonly used for sticky headers, footers, or modals.

5.sticky:

- The element is positioned based on the user's scroll position.
- It behaves like relative positioning until a specified scroll threshold is reached, after which it behaves like fixed positioning.

- You must specify at least one of top, right, bottom, or left for it to work.
- Commonly used for sticky navigation bars or headers.

Q2. How many types of positioning are there in CSS?

Ans: 1.Static Positioning (position: static;)

- This is the default positioning for all elements.
- Elements are positioned according to the normal flow of the document.
- Properties like top, right, bottom, left, and z-index have no effect.
- 2. Relative Positioning (position: relative;)
 - The element is positioned relative to its normal position in the document flow.
 - You can use top, right, bottom, and left to offset the element from its original position.
 - The space it originally occupied is preserved.
- 3. Absolute Positioning (position: absolute;)
 - The element is removed from the normal document flow and positioned relative to its nearest positioned ancestor (an ancestor with position set to relative, absolute, fixed, or sticky).
 - If no such ancestor exists, it is positioned relative to the initial containing block (usually the viewport).

 You can use top, right, bottom, and left to position the element.

4. Fixed Positioning (position: fixed;)

- The element is removed from the normal document flow and positioned relative to the viewport.
- It stays in the same place even when the page is scrolled.
- Commonly used for headers, footers, or modals.

5. Sticky Positioning (position: sticky;)

- The element is treated as relatively positioned until it crosses a specified threshold (e.g., top: 10px) during scrolling, at which point it becomes fixed.
- It toggles between relative and fixed positioning based on the user's scroll position.
- Useful for sticky headers or navigation bars.

Q3. What is Z-index and why to use it?

Ans: The CSS property that controls the stacking order of overlapping elements on a page. An element with a higher z-index value will appear in front of an element with a lower z-index value. The property is called "z-index" because it sets the order of elements along the z-axis.