## **PPT Program Assignment**

## Web Development Assignment - 2

**Answer 1 :** Box model in CSS is a concept that describes how elements on a webpage are rendered and what their dimensions and space are. It consists of the content area, padding, border, and margin.

**Answer 2 :** Selectors in CSS are used to target specific HTML elements and apply style on them. There are lots of selector in CSS and all with its own advantages and use cases.

- 1. Type Selector: This selector targets their tag name and applies style on the tag. Ex. 'p', 'h1', 'div'.
- 2. Class Selector: Class selector target specific class attribute. It's also reusable to use the same style on different code. Ex. .my-class.
- 3. Id Selector: Id selector target specific id attribute. They are used to style unique elements. Ex. #my-id.
- 4. Attribute Selector: Attribute selectors allow you to target elements based on their attribute values. Ex. [type="text"]
- 5. Descendant Selector: Descendant selectors target elements that are descendants of other elements. They allow you to apply styles to specific elements that are nested inside other elements. Ex. div p.
- 6. Child Selector: Child selectors are similar to descendant selectors but only target elements that are direct children of other elements. Ex. div > p.
- 7. Pseudo-classes and Pseudo-elements: Pseudo-classes and pseudo-elements allow you to apply styles to elements based on various states or positions within the document. Ex. :hover, :first-child, ::before.

**Answer 3**: VW (viewport width) and VH (viewport height) are units of measurement in CSS that are based on the size of the screen. Instead of using fixed sizes like pixels, VW and VH use percentages of the width and height of the screen. This means that when the screen size changes, elements sized with VW and VH will adjust accordingly. They are often used to make web designs look good on different devices and screen sizes.

**Answer 4 :** Inline, inline-block, and block are three different display properties.

Inline: Inline flow along with text content. They only take as much space as needed for their content. Ex. <span>, <a>, <em>.

Inline-block: Inline-block element same as inline element but inline-block element has width, margin and padding similar to block element. Ex. <img>, <button>, <input>.

Block: Block line elements start on a new line and occupy the entire width available. Block line elements have height, width, margin, padding. Ex. <div>, , <h1>.

**Answer 5 :** Content Box: In the content-box model, the size of an element is calculated by considering only the content area.

BorderBox: The border-box model includes the content area, padding, and border within the specified width and height values.

**Answer 6 :** The z-index property in CSS determines the order of positioned elements along the z-axis, allowing the object to keep the object upper and down. It has numeric values with positive, negative and zero. The higher the z-index value, the closer it is to the viewer. Elements with the higher z-index value overlap the lower z-index element. If there are the same z-index of many elements then it will go for position or transform.

**Answer 7**: Layout Approach: Grid is a two-dimensional layout system, while Flexbox is a one-dimensional layout system.

Dimensions: Grid allows control over both rows and columns, while Flexbox operates along a single axis..

Alignment: Flexbox provides powerful alignment options along the main and cross axes, while Grid offers more control over the placement and alignment of items within grid cells.

Overlapping Elements: Grid allows elements to overlap within the grid cells, whereas Flexbox does not have built-in support for element overlapping.

**Answer 8 :** Absolute positioning removes the element from its usual position in the document, allowing you to place it anywhere you want. Relative positioning keeps the element in its regular position within the document flow.

With absolute positioning, you can position the element based on its closest positioned ancestor or the document itself. Relative positioning allows you to shift the element from its original position within the normal flow by specifying how much it should move.

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Sticky positioning makes an element behave like it's glued in a certain position as you scroll, sticking to that spot when you reach a specific point on the page. Fixed positioning keeps an element in a fixed position on the screen, regardless of scrolling.

With sticky positioning, the element stays in its normal flow until you scroll past a particular point, at which it becomes fixed in place temporarily. Fixed positioning, however, keeps the element fixed at all times, even when scrolling.

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Answer 9 : Github Repo Link

Answer 10: HTML: Github Repo Link CSS: Github Repo Link