LAB ASSIGNMENT : 1

Aim :- Develop a responsive web design using HTML5, containing a form. Style the pages using CSS. Use of tag selector, class selector and id selectors Use Inline, Internal and External CSS, Apply Bootstrap CSS.

Objectives :-

1] To understand HTML tags
2] To learn the styling of web pages using CSS.
3] To learn Bootstrap Front End Framework.

Theory :-

Q1] Define Responsive Web Design [RWD]. What is it's primary goal?

=> Responsive Web Design [RWD] is an approach to web design that enables websities to adapt to differen screen sizes, devices and orientations. The primar goal of RWD is to provide an optimal user experie regardless of how users access the website. RWD involves using flexible grids, images and media queries to create a website that can adjust it's layout and content to fit different screen sizes and devices.

Primary Goal:- The Primary goal of RWD is to ensure that a website is accessible, readable and usable across various devices and screen sizes, providing a good user experience for all users.

2] Explain the role of the <meta name="viewport"> tag. Why is this tag essential for RWD?

→ The <meta name="viewport"> tag plays a crucial role in Responsive Web design by controlling the zooming and scalling of web pages on mobile devices. This tag is essential for RWD because it allows developers to define the width and scalling of the viewport, ensuring that the website is displayed correctly on different devices. Without this tag, mobile devices may zoom out the website to fit the screen making it difficult to read and navigate. The <meta name="viewport"> tag typically includes attributes such as width=device-width and initial-scale=1.0, which set the width of the viewport to the device's screen width and the initial zoom level at 1.0, respectively.

3] How does Bootstrap assist in creating a responsive layout? Discuss the concept of a grid system and how it adapts to different screen sizes.

→ Bootstrap is a popular frontend framework that assists in creating responsive layouts through its grid system. The grid system is based on a 12-

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column layout that adapts to different screen sizes and devices.

Grid System: Bootstrap's grid system uses a combination of rows and columns to create a flexible and responsive layout. The grid system includes several classes such as .container, .row, and .col-*, which can be used to define the width and behavior of elements on different screen sizes.

Adapting to different screen sizes: Bootstrap's grid system uses media queries to apply different styles based on the screen size. This allows developers to create responsive layouts that work well on different devices.

4) Differentiate between Tag, Class, and ID selectors

	Tag Selectors	Class Selectors	ID Selectors
x	element { style }	.class { styles }	#id { styles }
e	Apply styles to all elements of a particular type	Apply styles to specific elements that have a particular class	Apply styles to a single element with a unique ID
icity	Lowest specificity	Medium specificity	High specificity
e-	Can be applied to all elements of a particular type	Can be applied to multiple elements	Should be applied to only one element.

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5) Describe the three main ways to apply CSS to an HTML document.

⇒ There are three main ways to apply CSS to an HTML document:

1] Internal Stylesheet: CSS code is written directly in the HTML document using the <style> element.

2] External Stylesheet: CSS code is written in a separate file with a .css extension and linked to the HTML document using the <link> element.

3] Inline Styles: CSS code is applied directly to an HTML element using the style attribute.

Each method has its own advantages and disadvantages, and the choice of method depends on the specific use case and project requirements

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