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MERN Stack Assignment

Module 2 – Mernstack - HTML (Theory)

HTML BASICS

Question 1: Define HTML. What is the purpose of HTML in web development?

Answer: **HTML (HyperText Markup Language)** is the foundational language for creating and structuring content on the web. It is a **markup language**, which means it is designed to annotate text or content with special tags that define the structure and meaning of different parts of the document.

HTML tells a web browser how to display the text, images, and other content on a webpage by using tags or elements. These elements are made up of an opening tag, content, and a closing tag.

Purpose of HTML in Web Development:

Structure of Web Pages:

HTML is responsible for giving structure to web pages by organizing content into elements such as headings, paragraphs, links, tables, images, and more..

Web Browser Interpretation:

When a browser loads a web page, it interprets the HTML code and displays the content in a format that is readable and navigable by the user.

Without HTML, a browser wouldn't know how to display text, images, or other media.

Integration with Other Web Technologies:

HTML is often combined with **CSS** (Cascading Style Sheets) and **JavaScript** to create fully functional web pages:

Interactivity and Navigation:

HTML enables navigation and interaction on web pages. For instance, the `<a>` tag creates hyperlinks that allow users to move from one page to another, or to different sections within a page.

Form Handling:

HTML also includes specific tags like `<form>`, `<input>`, and `<button>` that allow users to interact with web applications, providing input (like filling out contact forms or signing up for newsletters).

Support for Media:

HTML can embed multimedia elements, such as images, audio, and video, using specific tags like `<img>`, `<audio>`, and `<video>`. This allows multimedia-rich content to be easily included on web pages.

Compatibility Across Devices:

HTML is designed to be responsive, meaning it can adapt to different screen sizes and devices. Using appropriate HTML structure and combined with CSS, you can create responsive web designs that work well on desktops, tablets, and smartphones.

Mobile-friendly: HTML5 introduced several features that improve mobile compatibility, such as the `<meta>` tag for viewport settings, which helps optimize content for mobile displays.