HTML Forms

1.: What are HTML forms used for? Describe the purpose of the input, textarea, select, and button elements.

Ans

HTML forms are used to collect user input and send data to a server for processing. For example: login forms, registration forms, contact forms, search bars, etc.

- 1. <input> 2. <textarea> 3. <select> and <option> 4. <button>
- 2.: Explain the difference between the GET and POST methods in form submission. When should each be used?

Ans

The GET and POST methods are two primary ways to send data from an HTML form to a server. Their key differences lie in how they transmit data, their security implications, and their intended use cases. GET Method: Data Transmission: Data is appended to the URL as query parameters, visible in the browser's address bar. Visibility: Form data is exposed in the URL, making it visible in browser history, server logs, and potentially shareable via bookmarks. Data Size: Has limitations on the amount of data that can be sent, typically around 2048 characters, varying by browser and server. Caching: GET requests are generally cacheable by browsers and proxy servers. Idempotency: GET requests are considered idempotent, meaning multiple identical requests will have the same effect as a single request (e.g., retrieving data). POST Method: Data Transmission: Data is sent in the body of the HTTP request, not visible in the URL. Visibility: Form data is hidden from the URL, providing more privacy for sensitive information. Data Size: Has no practical limit on the amount of

data that can be sent, making it suitable for large amounts of data or file uploads. Caching: POST requests are generally not cacheable. Idempotency: POST requests are not necessarily idempotent, meaning multiple identical requests might have different effects (e.g., creating multiple entries in a database).

3. What is the purpose of the label element in a form, and how does it improve accessibility?

Ans

Purpose of the <label> Element in a Form The <label> element is used to define a label for an input element (like text boxes, checkboxes, etc.).

Why Use <label>?

- 1. Describes the input clearly
 - Tells the user what to enter in the input field
 - o Example: "Name:", "Email:", "Password:"

2. Improves Accessibility

- Helps screen readers understand the purpose of the input field
- Allows users with disabilities to fill out forms easily

 Clicking on the label will focus or activate the input field