

Q1. 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 on a webpage. They allow users to enter information such as text, email, or selections, which can then be sent to a server for processing (for example, submitting feedback, signing up, or logging in). Forms are created using the <form> element and contain various input controls like text boxes, radio buttons, checkboxes, dropdowns, and buttons.

1. <input> Element:

The <input> tag is used to collect data from users in different formats such as text, email, password, number, or date. It has different type attributes (like text, email, tel, password, etc.) to define the kind of data a user can enter.

Example:

2. <input type="text" placeholder="Enter your name">

3. <textarea> Element:

The <textarea> tag is used when users need to enter multi-line text, such as comments, messages, or descriptions. It allows for larger text input than a regular input box.

Example:

4. <textarea rows="4" cols="40" placeholder="Enter your message"></textarea>

5. <select> Element:

The <select> tag is used to create a dropdown menu from which users can choose one or more options. Each option is defined using the <option> tag.

Example:

6. <select>

7. <option value="html">HTML</option>

8. <option value="css">CSS</option>

9. </select>

10. <button> Element:

The <button> tag is used to create clickable buttons. It is commonly used to submit or reset a form, or to trigger actions using JavaScript.

Example:

<button type="submit">Submit</button>

Q2. Explain the difference between the GET and POST methods in form submission. When should each be used?

Ans: In HTML, when a form is submitted, the data entered by the user is sent to a web server for processing. This data can be sent using either the GET or POST method, specified in the <form> tag's method attribute.

Feature	GET Method	POST Method
Data Transmission	Sends form data appended to the URL (visible in the address bar).	Sends form data inside the request body (not visible in the URL).
Visibility	Data is visible to everyone through the URL.	Data remains hidden and more secure.
Data Length	Limited amount of data can be sent (due to URL length limit).	Can send large amounts of data, including files.
Use Case	Best for simple data retrieval, like search queries or filters.	Best for sensitive or confidential data, like passwords or login forms.
Bookmarking	URLs with GET data can be bookmarked or shared easily.	Data from POST requests cannot be bookmarked.

- Use GET when you want to retrieve or view data from a server without changing anything, such as in search forms or filters.
- Use POST when you need to send or update data securely, such as submitting login forms, registration details, or uploading files.

Q3. What is the purpose of the label element in a form, and how does it improve accessibility?

Ans: The <label> element in HTML is used to define a caption or description for an input field in a form. It tells users what kind of information should be entered in the corresponding input box, making forms easier to understand and use.

The <label> element is usually linked to an input field using the for attribute, which should match the id of that input element. This association allows users to click on the label to automatically focus or activate the related input field.

Example:

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<label for="email">Email Address:</label>
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<input type="email" id="email" name="email">
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How It Improves Accessibility

1. For Screen Readers:

The <label> element helps screen readers (used by visually impaired users) identify and read out the purpose of each form field clearly.

2. For Better Usability:

Clicking on the label automatically focuses the related input box, making it easier to fill forms — especially for users with motor disabilities.

3. Improves Clarity:

It ensures every input field is properly described, reducing confusion and improving the overall user experience.