

## HTML Forms

**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 data from users and send it to a server for processing such as login details, search queries, etc..

1. <input> :

Used to collect small amounts of user input. The type attribute controls its behavior e.g., text, email, password, checkbox, radio, file, etc..

2. <textarea> :

Used for multi-line text input like comments or messages.

3. <select> :

Creates a drop-down menu for selecting one or more options using <option> tags inside it to define choices.

4. <button> :

Creates a clickable button. Used to submit forms type="submit", reset them type="reset", or trigger custom actions type="button".

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

**Ans.** In HTML form submission, GET and POST are two different HTTP methods used to send data from the browser to the server.

### GET :-

- Sends form data appended to the URL as a query string ; for e.g., example.com/search?name=Uday&age=21.
- Data is visible in the browser's address bar and can be bookmarked or shared.
- Limited to about 2000 characters.

- Less secure, since data is exposed in the URL.

### **POST :-**

- Sends form data in the HTTP request body, not in the URL.
- Data is invisible in the address bar and not stored in browser history.
- Can handle much larger amounts of data like files, long text, etc..
- Slightly more secure than GET

### **When to use :-**

#### **GET :**

Request is read-only.

Data you want the result to be bookmarkable/shareable.

Data is small and not private.

#### **POST :**

Action changes server data.

You're sending sensitive or large data.

Data is large.

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

**Ans.** The <label> element in a form is used to provide a text description for a form control like <input> , <textarea> , <select>. The purpose of <label> is It tells users what information they should enter into the form field.

### **It improve accessibility :**

- For everyone : It makes forms easier to understand users instantly know what to type or select.
- For screen reader users : A screen reader will read the label together with the field, so blind or visually impaired users know exactly what the field is asking for.

- For clickable areas : Clicking the label will focus or activate the field helpful for small checkboxes or radio buttons.