



AN INSTITUTION OF NATIONAL IMPORTANCE ESTABLISHED BY AN ACT OF PARLIAMENT

# UNIT 1: HTML

CSCSE11 : Bachelor of Science (I<sup>st</sup> Semester)

By

Shashvat Pratap Singh

Department of Computer Science  
Institute of Science  
Banaras Hindu University

# Form Element

<form> </form>

The element defines a fill-in form that can contain labels and form controls, such as menus and text entry boxes that might be filled in by a user.

**Customer Survey**

**Full Name**  
John Doe

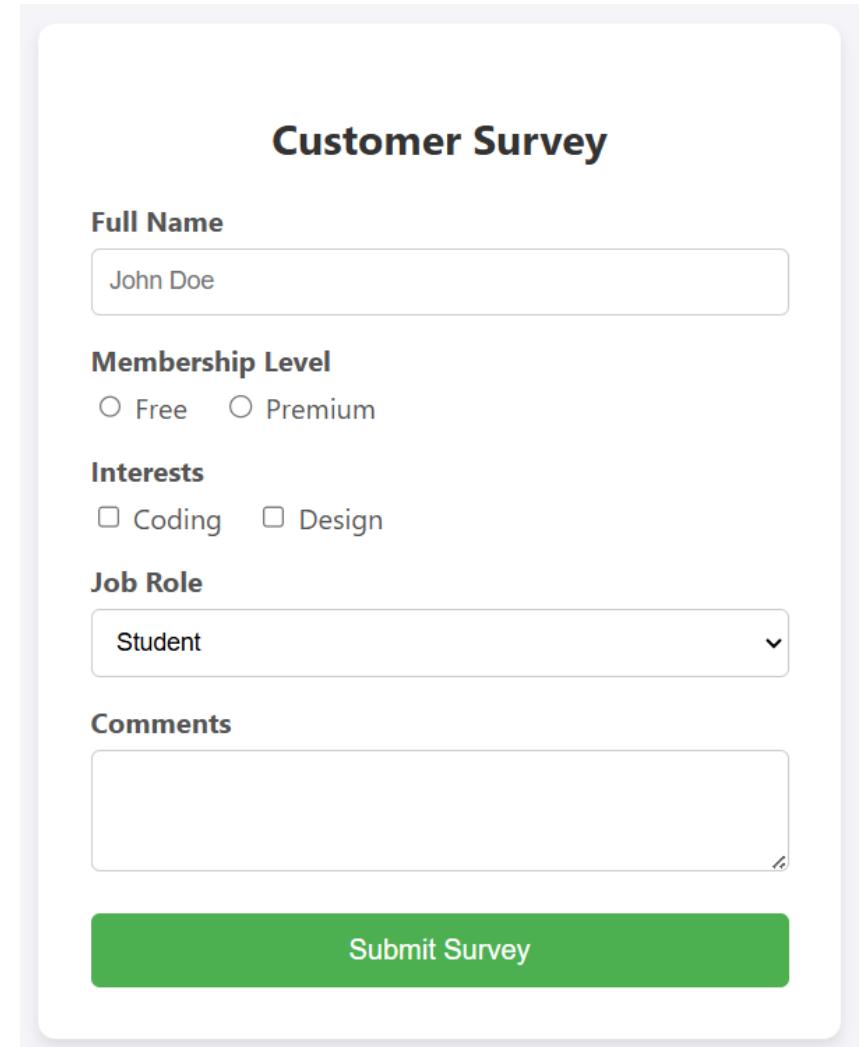
**Membership Level**  
 Free  Premium

**Interests**  
 Coding  Design

**Job Role**  
Student

**Comments**

**Submit Survey**



## Client Side (Web Browser)

**HTML Form**  
(e.g., index.html)

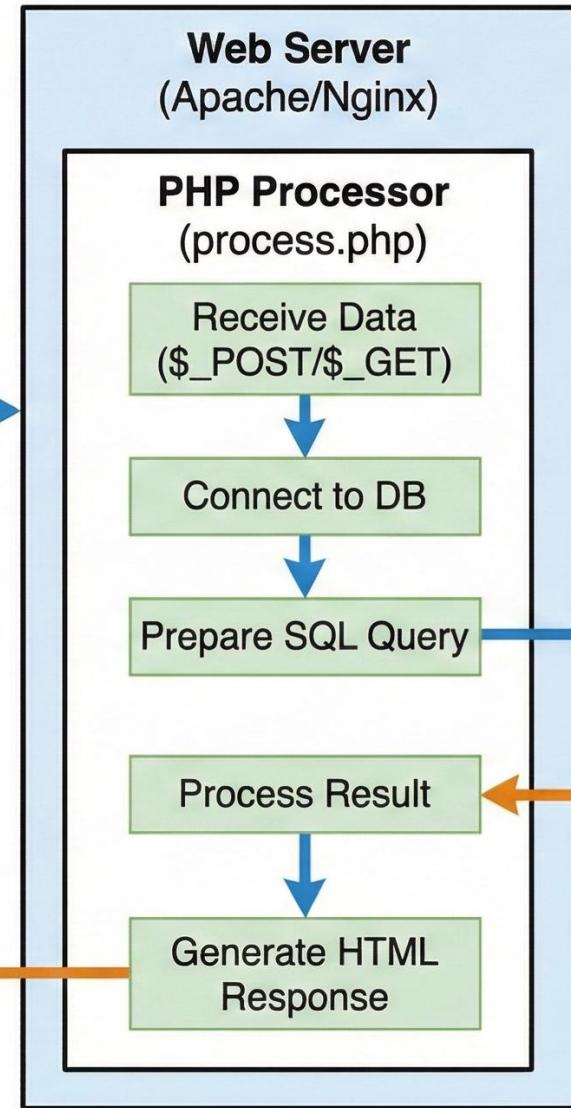
Username  
Password  
Submit

**Submit Form Data**  
(Action: process.php,  
Method: POST/GET)

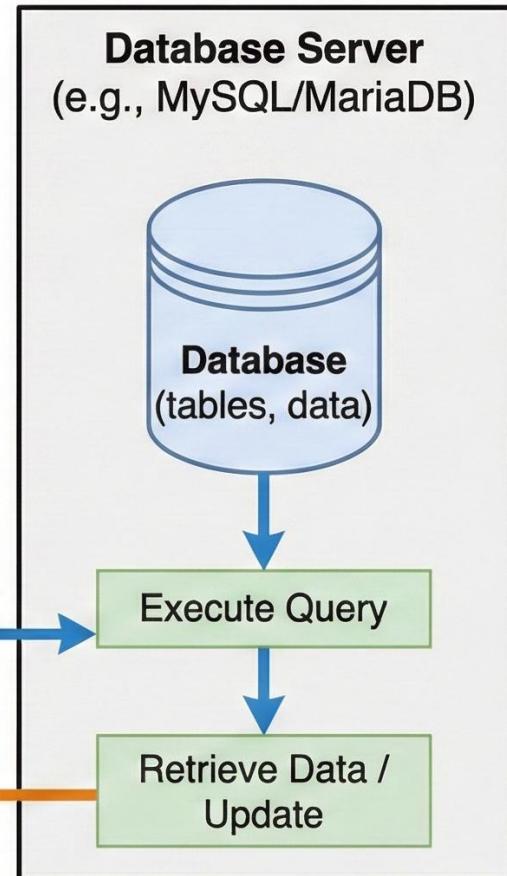
**Web Browser**  
(Result Page)

Login Successful!  
Welcome, [Username].  
Error: Invalid Credentials.

## Server Side (Web Server & PHP)



## Database Server



# Key Form Element

**Customer Survey**

Label → **Full Name**

input → **John Doe**

Radio → **Membership Level**  
○ Free ○ Premium

Checkbox → **Interests**  
□ Coding □ Design

Dropdown list → **Job Role**  
Student

Text area → **Comments**

This diagram illustrates a 'Customer Survey' form with various input fields. The fields include: 'Full Name' (input type text, value 'John Doe'), 'Membership Level' (radio buttons for 'Free' and 'Premium'), 'Interests' (checkboxes for 'Coding' and 'Design'), 'Job Role' (dropdown list with value 'Student'), and 'Comments' (text area). Labels on the left side of the form are connected by arrows to their corresponding input fields: 'Label' points to 'Full Name', 'input' points to 'John Doe', 'Radio' points to 'Membership Level', 'Checkbox' points to 'Interests', 'Dropdown list' points to 'Job Role', and 'Text area' points to 'Comments'.

# Key Form Element

## Customer Survey

**Full Name**

John Doe

**Membership Level**

Free  Premium

**Interests**

Coding  Design

**Job Role**

Student

**Comments**

Submit Button → **Submit Survey**

# Form Element: <form> </form>

The container for all form controls. It defines where and how the data is sent when the user hits “Submit”.

Attribute	Description	Common Values
action	The URL where the form data is sent for processing.	/login.php, https://example.com/api
method	The HTTP method used to send the data.	GET (default, appends to URL), POST (secure, inside body)
enctype	Crucial for file uploads. Specifies how data is encoded.	application/x-www-form-urlencoded (default), multipart/form-data (required for files)
autocomplete	Specifies if the browser should suggest previously typed values.	on, off
target	Specifies where to display the response after submitting.	_self (same tab), _blank (new tab)

# Key Form Element

---

The <input> Element

---

<fieldset>

---

<legend>

---

The <label> Element

---

The <select> and <option> Element

---

The <textarea> Element

---

The <button> Element

# Key Form Element

---

## The <fieldset> Element

The <fieldset> tag in HTML is a powerful semantic element used to **group related elements** within a form. It is almost always used in conjunction with the <legend> tag, which defines a caption for the grouped content.

# Key Form Element

---

## The <legend> Element

The <legend> tag is the caption or title for the <fieldset>. It provides context for the group of form elements contained within the fieldset.

For a <legend> to work correctly, it must be the very first child element inside the <fieldset>. You cannot place it after a <div> or an <input>.

# Key Form Element

---

## The <legend> Element

```
<form action="#" method="get">
  <fieldset>
    <legend align="top">User Information</legend>
    <div>
      <label>First Name:
        <input type="text" id="firstname" size="20">
      </label><br>
      <label>Last Name:
        <input type="text" id="lastname" size="20">
      </label><br>
    </div>
  </fieldset>
</form>
```

# Key Form Element

---

## The <input> Element

This element specifies an input control for a form. The type of input is set by the type attribute and can be a variety of different types, including single-line text field, password field, hidden, check box, radio button, or push button.

```
<input type="text" name="username" placeholder="Enter Username">
<input type="password" name="userpassword">
```

# Key Form Element

---

## The <input> Element

Attribute	Description	Common Values
type	Determines the kind of input displayed.	text, password, email, number, radio, checkbox, date, file, hidden
name	The identifier used by the server to recognize the data.	Any string (e.g., user_email, zip_code)
value	The initial value of the input. For buttons/checkboxes, this is the data sent on submit.	Any string.
placeholder	A faint hint displayed inside the field before the user types.	"Enter your email here..."
required	Prevents submission if the field is empty.	required (boolean attribute)
disabled	The element is unusable and its value is <b>NOT</b> sent to the server.	disabled
checked	Pre-selects a radio button or checkbox.	checked

# Key Form Element

---

## The <label> Element

This connects text to an input. The for attribute in the label must match the id in the input.

Attribute	Description	Common Values
<b>for</b>	Links the label to a specific input. <b>Must match the input's id.</b>	The id of the target input element.

```
<input type="checkbox" id="terms_box" name="terms">  
<label for="terms_box">I agree to the Terms and Conditions</label>
```

# Key Form Element

---

## The <select> and <option> Element

The <select> and <option> elements work together to create a **dropdown list**. This is used when you want the user to choose one (or sometimes multiple) items from a predefined list, saving space on the screen compared to listing every radio button.

# Key Form Element

---

## The <select> and <option> Element

**Parent (<select>):** The container. It defines the name of the list and how it behaves (e.g., is it a dropdown or a scrolling list?).

**Child (<option>):** The individual items inside the list.

# Key Form Element

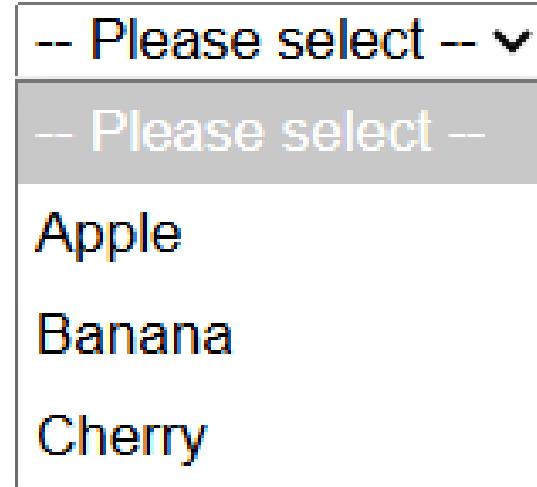
---

## The <select> and <option> Element

```
<select id="fruits" name="fruit_selection">
    <option value="" disabled selected>-- Please select --</option>

    <option value="apple">Apple</option>
    <option value="banana">Banana</option>
    <option value="cherry">Cherry</option>
</select>
```

### OUTPUT



A screenshot of a dropdown menu interface. The menu has a light gray border and a white background. At the top left, it says "Please select" with a dropdown arrow. Below this, there is a list of fruit names: "Apple", "Banana", and "Cherry".

-- Please select -- ▾
-- Please select --
Apple
Banana
Cherry

THANK YOU