

# HTML Forms:-

Like the forms we see in our real life, HTML forms will also have some space to enter your information.

Syntax:-

```
<form action="">  
  
</form>
```

So the form has some attributes. They are mentioned below:-

- **'action'** attribute is used to specify which task is to be performed when the form is submitted.
- **'method'** attribute is used to specify the HTTP method to be used while submitting the form
- **'Target'** defines where our response should be displayed after the form is submitted

So, the HTML form will take inputs from the user and we will use several elements to create a form.

The details are given below:-

## Label element:-

So you have a form with so many input fields, but how do you know where to fill which information i.e., among all those input fields you don't know where to fill your name, where to fill your number and many other details.. So, that's where **we use labels to specify which input field is used to fill which information.**

Syntax:

```
<label for="name">Name</label>
```

For attribute:- for attribute specifies which form element a label is bound to. **The for attribute of the label element, must refer to the id attribute of the input element.**

## Input element:-

The place where you provide your inputs i.e., where you write your information.

Syntax:

```
<input type="text"/>
```

**Type attribute:** It specifies the type of data we are allowed to fill in the field  
Types of values we can write in type attribute are:-

`<input type="text"/>`

- Default type. Accepts any kind of characters (numerical, alphabetical, special characters etc.)

`<input type="number"/>`

- Accepts numerical data

`<input type="radio" name="a"/>`

- Used to let the user select only one option among many given options. So just make sure to mention the value of the name attribute to be the same for all the radio buttons to ensure unique selection.

`<input type="checkbox"/>`

- Allows the user choose multiple options

`<input type="password"/>`

- Allows the user hide the text he types as passwords should be confidential

`<input type="email">`

- Allows the user to provide email address

`<input type="date"/>`

- Allows the user to select a date

`<input type="time"/>`

- Allows the user to select time

`<input type="datetime-local"/>`

- Allows the user to select both date and time

`<input type="reset"/>`

- Resets all the input fields to its default values

`<input type="submit"/>`

- This creates a button which on clicking submits the form to the server for further processing

`<input type="range"/>`

- This creates a slider that is used to allow users to select a numerical value from a range of values.
- It consists a temporary text that lets the user know what they must fill in that field

```
<input type="file"/>
```

- Allows the user to upload a file from our local machines

```
<input type="file" multiple/>
```

- Use the multiple attribute to allow the user to select multiple files

These are not every existing type of input and there are many other input types that are very rarely used.

Apart from the input 'type' attribute, input has several other attributes as well and they're given below

```
<input type="text" placeholder="Enter your name"/>
```

- The 'placeholder' attribute creates a temporary text that lets the user know what kind of information must be filled in that field. It's like providing a hint to the user on what data is to be filled.

```
<input type="text" value="Chandrabhas"/>
```

- So, whatever is specified in the 'value' attribute will be present in the input field by default

```
<input type="number" min="10" max="100"/>
```

- The 'min' attributes and the 'max' attribute is used to set the ranges of the input field

```
<input type="tel" minlength="1" maxlength="10"/>
```

- 'minlength' attribute specifies the minimum characters required and 'maxlength' specifies the maximum characters allowed in an input field

```
<input type="text" required/>
```

- 'required' attribute restricts the form from getting submitted before filling that input field

```
<input type="text" disabled/>
```

- 'disabled' attribute makes the input cannot be edited and the browser it while the form is submitted

```
<input type="text" readonly/>
```

- 'readonly' attribute will not allow us to edit the data present in that input field

Some other form elements are given below:-

### **Textarea Element:-**

This element is used to provide multi-lined inputs such as addresses.

Syntax:-

```
<textarea cols="21" rows="10"></textarea>
```

Here 'rows' define the height and 'cols' define the width of the field.

### **Select, option and optgroup Elements:-**

**Select:-**

Used to create a drop-down list

**Option:-**

Used to create the options present in the drop-down list

**Optgroup:-**

Used to group the options present in the drop-down list

Syntax:-

```
<select multiple>
  <optgroup label="frontend">
    <option value="HTML">HTML</option>
    <option value="CSS">CSS</option>
    <option value="Javascript">Javascript</option>
    <option value="React">React JS</option>
  </optgroup>
  <optgroup label="backend">
    <option value="MongoDB">Mongo DB</option>
    <option value="Express">Express JS</option>
    <option value="Node">Node JS</option>
  </optgroup>
</select>
```

The 'multiple' attribute allows us to select multiple options in the list.

### **Datalist Elements:-**

It provides a list of options that can be filled in the input field and the user select either one of the given options or can write a different one.

Syntax:-

```
<input list="MAANG">
<datalist id="MAANG">
  <option value="Microsoft">
  <option value="Amazon">
  <option value="Apple">
  <option value="Netflix">
  <option value="Google">
</datalist>
</form>
```

Note:- **The list attribute of the input element, must refer to the id attribute of the datalist element.**

### **Fieldset and Legend Elements:-**

**Fieldset element** is used to group some elements with some common characteristics(eg. Name has first, middle and last name so all these three inputs and their corresponding labels are grouped as name)

**Legend element** acts like a title or caption of the content present in the fieldset element

Syntax:-

```
<fieldset>
  <legend>Name</legend>

  <label for="firstName">First Name:</label>
  <input type="text" id="fname" name="fname">
  <label for="midName">Middle Name:</label>
  <input type="text" id="lname" name="lname">
  <label for="lastName">Last Name:</label>
  <input type="text" id="lname" name="lname">
</fieldset>
```

## **Progress Element:-**

This is to represent the completion progress of a task like form submission or file upload.

Syntax:-

```
<label for="file">File Upload Progress:</label>  
<progress id="file" value="50" max="100">50%</progress>
```

Here the '**value**' attribute represents the current progress and it can be anywhere between 0 and the max value.

The '**max**' attribute is used to specify the completion value.



<Mr.DC/>