

## html layouts

- html layouts provide a way to arrange web pages in well-mannered, well structured, & in a responsive form.
- in other words html layouts specifies a way in which the web pages can be arranged.
- Every website has a specific layouts to display content in a specific manner.

## <header>

- header element is used to create header section of web page.
- header contains introductory element, heading element, logo or icon for web page.

## <nav>

- nav element is a container for the main block of navigation links.
- It can contain links for same page or for other pages.

## <Section>

- Section elements represent a separate section of web page which contains related element grouped together.
- It can contain text, images, tables & media

## <article>

article tag is used to contain article such as self-contained article such as big story, huge article

## <aside>

- defines aside content related to primary content
- It can function as side bar for the main content of web page

## <footer>

- footer elements defines the footer for that document of web page
- It mostly contains information about (author, copyright & other links etc..)

### <details>

- details element is used to add extra details about the web page.
- details element can be used to hide or show details as per requirement.

### <Summary>

- Summary element is used with the <details> element in web page.
- It is used as summary, caption about the content of <details> element.

# HTML forms

- An HTML form is used to collect user input.
- The user input can then be sent to server for processing.

<form> :

<form> elements defines a form  
That is used to collect user input

</form>

:  
form elements  
:

</form>

- HTML form contains form elements
- form elements are different types of input elements like: text fields, checkboxes, radio buttons etc...

<input> element  
in our form

<input> element is the most important form element.

input element is displayed in several ways, depending on "type" attribute

## Text Fields

<input type="text">  
defines a single-line input field for text input.

ex:

<form>

<label for="name">Name:</label>  
<input type="text" id="name">

</form>

<label>

- <label> tag defines a label for many form elements

- label element also helps users who have difficulty clicking on very small area
- when user clicks the texts within <label> element, it toggles to the respective input element.
- the for attribute of the <label> tag should be equal to the id attribute of input element to bind them together.

Input type = password

- The password is not visible to the user in password field control.

```
<form>
  <label for="pass">Password</label>
  <input type="password" id="pass" />
</form>
```

Input type = email

The email field in HTMLs, it validates the text for correct email address. You must use @ and .(dot) in this field.

```
<form>
  <label for="email">Email : </label>
  <input type="email" id="email" />
</form>
```

Radio button :

Radio button is used to select one option from multiple options.

- Radio button from one option
- If you use one name for all the radio buttons, only one radio button can be selected at a time

```
<form>
  <label for="gender">Gender : </label>
  <input type="radio" id="gender"
    name="gender" value="male"/> Male
  <input type="radio" id="gender"
    name="gender" value="female"/> Female
</form>
```

## checkbox

The checkbox is used to check multiple options for given checkboxes.

<form>

Subject : <br>

<input type="checkbox" id="e~~check~~" name="Java" value="Java"/>

<label for="Java">Java</label>

<br>

<input type="checkbox" id="JS" name="JS" value="JS"/>

<label for="JS">JavaScript

</label>

</form>

## Submit button

are used to add a submit button on webpage, when user clicks on submit button then form get submitted to server.

<input type="submit" />

- ```
<input type="submit" value="Submit">
```
- type= submit, specifying that it is a Submit button.
  - The value attribute can be anything

```
<form>  
  <label for="name"> Enter Name  
    <input type="text" id="name" />
```

```
  <label for="pass"> Password  
    <input type="password" id="pass" />
```

```
  <input type="submit" value="Submit" />
```

```
</form>
```

```
<legend> &lt;fieldset>
```

The `legend` element in HTML is used to group the related information of a form.

This element is used with `legend` element which provides caption for grouped elements

<form> <input type="text">

<fieldset> <legend> User information </legend>

<input type="text" name="name" value="John" />

<input type="text" name="age" value="25" />

form elements <input type="text" name="name" value="John" />

<input type="text" name="age" value="25" />

<fieldset> <input type="text" name="name" />

<form> <input type="text" name="name" />

Input type = Reset

this is exactly similar

as Input type = "Submit" property.

but This will Reset the

all inputted values.

<input type="Reset" value="reset" />

<input type="Submit" value="submit" />

<input type="button" value="button" />

Other forms of buttons

Checkboxes, Radio buttons, etc.

Form submission

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Form submission

`<input type = "file">`

- Is used to Select one or more files from user device's file area

Once you Select The file, & after Submission, This file can be uploaded to The Server with help of JS Code

`<form>`

`<label> Select file to upload`

`<label>`

`<input type = "file" name = "newfile">`

`<input type = "submit" value = "Submit">`

`</form>`

---

`<input type = "color">`

- Is used to define an input field which contains a color. It allows users to specify the color by visual color interface.

<input type="date">

- generates an input field which allows a user to input the date in a given format.

<input type="month">

- creates an input field which allows a user to easily enter month & year in format "MM, YYYY"

<input type="number">

- allows user to enter the numeric value
- you can also restrict to enter a minimum & maximum value

<input type="number" name="num" min="50" max="80">

<input type="url">

Creates an input field which enables user to enter url

<input type="url" name="site" placeholder="www.google.com">

---

<input type="search">

- Creates an input field which allows user to enter a string.
- Search functionality same as text input type, but may be styled differently

<input type="search">

---

<input type="tel">

Creates an input field to enter the telephone number.

tel type does not have default validation like email.

`<textarea>`

- Is used to input multiple-line text in a form.

- The size of `<textarea>` can be specified using rows or cols attribute or by CSS.

`<form>`

`<textarea rows="2" cols="20">`

`</textarea>`

HTML form attributes

action attribute

- defines the action to be performed when the form is submitted.

- usually, the form data is sent to a page on the server.

when user clicks on the submit button.

`<form action="form">`

Target attribute

target attribute specifies if the submitted result will open in a new browser tab, a frame or in current window.

<form action="form" target="\_blank">

Method attribute

• Specifies the HTTP-method to be used when submitting the form data.

<form action="form" method="get">

<form action="form" method="Post">

• The default http method when submitting form data is get

• when get is used, the form data is visible in page's url  
Send Sensitive data

• never use get to send sensitive data

• get is better for non-sensitive data, like query strings in google.

- Always we post if the form data contains sensitive or personal information.
- the post method does not display the form data in the page url.

Name attribute

- Each input field must have a name attribute to be submitted
- If name attribute is omitted, the data of that input field will not be sent at all.

<input type="text" name="name">

<Select>

• defining a dropdown list

<Select name="Cars">

<option value="Volvo">

Volvo

</options>

<option value="Honda">

Honda

</options>

<option value="Maruti">

Maruti

</options>

</Select>

- <option> elements define an option that can be selected.
- By default, the first item in the drop-down list is selected.

To define a pre-selected option, add the `selected` attribute to the option.

`<option value="Honda" selected>`  
Honda  
</option>

- Use `size` attribute to specify the number of visible values.

`<select name="cars" size="3">`  
:  
:  
:  
:  
:  
</select>

- Use `multiple` attribute to allow the user to select more than one value.

`<select name="cars" size="4" multiple>`  
:  
:  
:  
</select>

## <datalist>

- Specifies a list of pre-defined options for an <input> element
- User will see a drop-down list of the pre-defined options as they input data.
- The list attribute of <input> element must refer to the id attribute of <datalist> element

## <form>

```
<input list="Subject">
<datalist id="Subject">
    <option value="HTML">
    <option value="CSS">
    <option value="JS">
</datalist>
</form>
```

Value attribute

Value attribute specifies an initial value for an input field.

```
<input type="text" name="name"  
value="abhi">
```

ReadOnly

- readonly attribute specifies that an input field is readonly.
- Readonly input field cannot be modified.
- The value of a read-only input field will be sent when submitting the form.

```
<input type="text" name="name"  
value="Brock" readonly>
```

Disabled

- Specifies that an input field should be disabled.
- A disabled input field is unusable & un-clickable.
- The value of a disabled input field will not be sent when submitting form.

```
<input type="text" name="frame"  
Value="Brock" disabled>
```

Size:

Specifies the visible width, in characters, of an input field

default value for Size is 20

Size works with following  
input type: text, search, tel,  
url, email, password

```
<input type="text" name="pm"  
Size="4">
```

max-length:

Specifies the maximum number of characters allowed in an input field

when max-length is set, the input field will not take more than Specified number of characters.

min and max

Specifies minimum & maximum values for an input field.

works for: number, range, date, month, time, week

```
<input type="number"  
min="1" max="5">
```

placeholder

- Specifies a short hint that describes the expected value of an input field
- Short hint is displayed in the field before the user enters a value.

```
<input type="text" name="name"  
placeholder="enter your name">
```

required:

Required attribute specifies that an input field must be filled out before submitting form

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

## Step attribute

- Specifies legal number intervals for an input field
- If step = "2"  
legal numbers could be  
..., -2, 0, 2, 4, 6, ...
- 7

autofocus:  
Specifies that an input field should automatically get focus when page loads.

## form attribute

- Specifies the form the input element belongs to.

The value of this attribute must be equal to the id attribute of the `<form>` element it belongs to.