



HTML: Forms

- HTML Forms are required, when data needs to be collected from the site visitor
- A form will take input from the site visitor and then will post it to a back-end application
- The back-end application will perform required processing on the passed data based

— The form tag

- **<form>** tag is used to create an HTML form
- Syntax –

`<form>`

.

form elements

.

`</form>`

- Some of important attributes in HTML are:
 - Action Attribute
 - Method Attribute
 - Target Attribute
 - Name Attribute

— The form tag

- **<form>** tag is used to create an HTML form

- Syntax –

`<form action = "Script URL" method = "GET | POST">`

form elements like input, textarea etc.

`</form>`

- Defines the action to be performed when the form is submitted
- The form data is sent to a web page on the server when the user clicks on the submit button
- In the example, the form data is sent to a page on the server called `"/action_page.php"`
- This page contains a server-side script that handles the form data:
`<form action="/action_page.php">`
- If the action attribute is omitted, the action is set to the current page

- Specifies if the submitted result will open in a new browser tab, a frame, or in the current window
- The default value is `"_self"` : form will be submitted in the current window
- `"_blank"`: form result open in a new browser tab
- Example

```
<form action="/action_page.php" target="_blank">
```

- Specifies the HTTP method (**GET** or **POST**) to be used when submitting the form data

```
<form action="/action_page.php" method="get">
```

```
<form action="/action_page.php" method="post">
```


- It is the default method
- the submitted form data will be **visible in the page address field**
- Appends form-data into the URL in name/value pairs
- The length of a URL is limited (about 3000 characters)
- Never use GET to send sensitive data
- Useful for form submissions where a user wants to bookmark the result
- GET is better for non-secure data, like query strings in Google

Using POST Method

- Used when the form data contains sensitive or personal information
- Does not display the submitted form data in the page address field
- No size limitations
- used to send large amounts of data
- Form submissions cannot be bookmarked

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

`<input>` Element

- Most important form element
- Can be displayed in several ways, depending on the **type** attribute

Type	Description
<code><input type="text"></code>	Defines a one-line text input field
<code><input type="radio"></code>	Defines a radio button (for selecting one of many choices)
<code><input type="submit"></code>	Defines a submit button (for submitting the form)

`<input>` Element

- `<input type="button">`
- `<input type="checkbox">`
- `<input type="color">`
- `<input type="date">`
- `<input type="datetime-local">`
- `<input type="email">`
- `<input type="file">`
- `<input type="hidden">`
- `<input type="image">`
- `<input type="month">`
- `<input type="number">`
- `<input type="password">`
- `<input type="radio">`
- `<input type="range">`
- `<input type="reset">`
- `<input type="search">`
- `<input type="submit">`
- `<input type="tel">`
- `<input type="text">`
- `<input type="time">`
- `<input type="url">`
- `<input type="week">`



HTML: Form Controls

Different types of form controls to collect data using HTML form –

- Text Input Controls
- Checkboxes Controls
- Radio Box Controls
- Select Box Controls
- File Select boxes
- Hidden Controls
- Clickable Buttons
- Submit and Reset Button

There are three types of text input used on forms –

- Single-line text input controls
- Password input controls
- Multi-line text input controls

Single-line text input controls

- This control is used for items that require only one line of user input, such as search boxes or names
- Created using HTML `<input>` tag

```
<!DOCTYPE html>
<html>

  <head>
    <title>Text Input Control</title>
  </head>

  <body>
    <form >
      First name: <input type = "text" name = "first_name" />
      <br>
      Last name: <input type = "text" name = "last_name" />
    </form>
  </body>

</html>
```

First name:

Last name:

Sr. No.	Attribute	Attribute & Description
1	type	Indicates the type of input control and for text input control it will be set to text
2	name	Used to give a name to the control which is sent to the server to be recognized and get the value
3	value	This can be used to provide an initial value inside the control
4	size	Allows to specify the width of the text-input control in terms of characters
5	maxlength	Allows to specify the maximum number of characters a user can enter into the text box

— Password Input Controls

- A single-line text input
- Masks the character as soon as a user enters it
- Created using HTML `<input>` tag but type attribute is set to **password**

```
<!DOCTYPE html>
<html>

  <head>
    <title>Text Input Control</title>
  </head>

  <body>
    <form >
      User ID: <input type = "text" name = "User_ID" />
      <br>
      Password: <input type = "password" name = "password" />
    </form>
  </body>

</html>
```

User ID :

Password:

Sr. No.	Attribute	Attribute & Description
1	type	Indicates the type of input control and for text input control it will be set to password
2	name	Used to give a name to the control which is sent to the server to be recognized and get the value
3	value	This can be used to provide an initial value inside the control
4	size	Allows to specify the width of the text-input control in terms of characters
5	maxlength	Allows to specify the maximum number of characters a user can enter into the text box

Multiple-Line Text Input Controls

- This is used when the user is required to give details that may be longer than a single sentence
- Created using HTML `<textarea>` tag

```
<!DOCTYPE html>
<html>

  <head>
    <title>Multiple-Line Input Control</title>
  </head>

  <body>
    <form>
      Description : <br />
      <textarea rows = "5" cols = "50" name = "description">
        Enter description here...
      </textarea>
    </form>
  </body>

</html>
```

Description:

Enter description here...

Sr.No	Attributes	Description
1	Name	Used to give a name to the control which is sent to the server to be recognized and get the value.
2	Rows	Indicates the number of rows of text area box.
3	cols	Indicates the number of columns of text area box

Checkbox Control

- Checkboxes are used when more than one option is required to be selected
- Created using HTML `<input>` tag
- type attribute is set to **checkbox**

```
<!DOCTYPE html>
<html>

  <head>
    <title>Checkbox Control</title>
  </head>

  <body>
    <form>
      <input type = "checkbox" name = "maths" value = "on"> Maths
      <input type = "checkbox" name = "physics" value = "on"> Physics
    </form>
  </body>

</html>
```

☐ Maths ☐ Physics

Sr.No	Attribute	Description
1	Types	Indicates the type of input control and for checkbox input control it will be set to checkbox.
2	Name	Used to give a name to the control which is sent to the server to be recognized and get the value.
3	Value	The value that will be used if the checkbox is selected.
4	checked	Set to checked if you want to select it by default.

Radio button Control

- Used when out of many options, just one option is required to be selected
- Created using HTML `<input>` tag
- type attribute is set to **radio**

```
<!DOCTYPE html>
<html>

  <head>
    <title>Radio Box Control</title>
  </head>

  <body>
    <form>
      <input type = "radio" name = "subject" value = "maths"> Maths
      <input type = "radio" name = "subject" value = "physics"> Physics
    </form>
  </body>

</html>
```

☐ Maths ☐ Physics

Sr.No	Attribute	Description
1	Types	Indicates the type of input control and for radio button input control it will be set to radio.
2	Name	Used to give a name to the control which is sent to the server to be recognized and get the value.
3	Value	The value that will be used if the radio button is selected.
4	checked	Set to checked if you want to select it by default.

Select Box Control

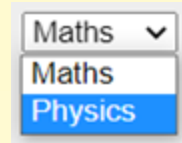
- A select box, also called drop down box
- Provides option to list down various options in the form of drop down list, from where a user can select one or more options

```
<!DOCTYPE html>
<html>

  <head>
    <title>Select Box Control</title>
  </head>

  <body>
    <form>
      <select name = "dropdown">
        <option value = "Maths" selected>Maths</option>
        <option value = "Physics">Physics</option>
      </select>
    </form>
  </body>

</html>
```



Attributes: <select> tag

Sr.No	Attribute & Description
1	name Used to give a name to the control which is sent to the server to be recognized and get the value.
2	size This can be used to present a scrolling list box.
3	multiple If set to "multiple" then allows a user to select multiple items from the menu.

Attributes: <option> tag

Sr.No	Attribute & Description
1	value The value that will be used if an option in the select box is selected.
2	selected Specifies that this option should be the initially selected value when the page loads.
3	label An alternative way of labeling options

File Upload Box

- Allow a user to upload a file
- Also known as a file select box
- Created using the `<input>` element
- Type attribute is set to **file**

```
<!DOCTYPE html>
<html>

  <head>
    <title>File Upload Box</title>
  </head>

  <body>
    <form>
      <input type = "file" name = "fileupload" accept = "image/*" />
    </form>
  </body>

</html>
```

Choose File No file chosen

Attributes: <select> tag

Sr. No	Attribute & Description
1	name Used to give a name to the control which is sent to the server to be recognized and get the value.
2	accept Specifies the types of files that the server accepts.

Hidden Form Control

- Hide data inside the page which later on can be pushed to the server
- This control hides inside the code and does not appear on the actual page

```
<!DOCTYPE html>
<html>

  <head>
    <title>File Upload Box</title>
  </head>

  <body>
    <form>
      <p>This is page 10</p>
      <input type = "hidden" name = "pagename" value = "10" />
      <input type = "submit" name = "submit" value = "Submit" />
      <input type = "reset" name = "reset" value = "Reset" />
    </form>
  </body>

</html>
```

This is page 10

Button Controls

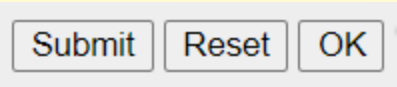
- There are various ways in HTML to create clickable buttons
- Created using `<input>` tag
- By setting its type attribute is **button**

```
<!DOCTYPE html>
<html>

  <head>
    <title>File Upload Box</title>
  </head>

  <body>
    <form>
      <input type = "submit" name = "submit" value = "Submit" />
      <input type = "reset" name = "reset" value = "Reset" />
      <input type = "button" name = "ok" value = "OK" />
    </form>
  </body>

</html>
```



Attributes: <select> tag

Sr.No	Type & Description
1	submit This creates a button that automatically submits a form.
2	reset This creates a button that automatically resets form controls to their initial values.
3	button This creates a button that is used to trigger a client-side script when the user clicks that button.
4	image This creates a clickable button but we can use an image as background of the button.

Thank You