HTML - 4

FORMS

FORMS

- The HTML **<form>** tag is used to create an HTML form and it has following syntax −

<form action = "Script URL" method = "GET|POST">
        form elements like input, textarea etc.
 </form>

- An HTML form provides data gathering functionality to a web page.
- The data submitted can be processed at the web server.
- JavaScript allows the validation of data entered into a form at the client side.
- JavaScript can be used to ensure that only valid data is returned to a server for further processing.

HTML Form Controls

There are different types of form controls that you can use to collect data using HTML form –

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

Text Input Controls

There are three types of text input used on forms −

- **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. They are created using HTML **<input>** tag.

- **Password input controls** − This is also a single-line text input but it masks the character as soon as a user enters it. They are also created using HTMl **<input>** tag.

- **Multi-line text input controls** − This is used when the user is required to give details that may be longer than a single sentence. Multi-line input controls are created using HTML **<textarea>** tag.

Single-line text input controls

Sr.No	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.

Example

```
<!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>
```

output

First name: [   ]
Last name: [   ]

Password input controls

Sr.No	Attribute & Description
1	**type** Indicates the type of input control and for password 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.

Example

```
<!DOCTYPE html>
<html>
  <head>
    <title>Password Input Control</title>
  </head>
  <body>
    <form >
      User ID : <input type = "text" name = "user_id" />
      <br>
      Password: <input type = "password" name = "password" />
    </form>
  </body>
</html>
```

Multiple-Line Text Input Controls

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	**rows** Indicates the number of rows of text area box.
3	**cols** Indicates the number of columns of text area box

Example

```
<!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>
```

Checkbox Control

Checkboxes are used when more than one option is required to be selected. They are also created using HTML <input> tag but type attribute is set to **checkbox.**

Sr.No	Attribute & Description
1	**type** 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.

Example

```
<!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>
```

Output:
☐Maths ☐ Physics

Radio Button Control

Radio buttons are used when out of many options, just one option is required to be selected. They are also created using HTML <input> tag but type attribute is set to **radio**.

Sr.No	Attribute & Description
1	**type** Indicates the type of input control and for checkbox 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.

Example

```
<!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>
```

Output:

◯ **Maths** ◯ **Physics**

Select Box Control

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

Following is the list of important attributes of **<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.

Select Box Control

Following is the list of important attributes of **<option>** **tag** –

Sr.No	Attribute & Description
1	**value** The value that will be used if an option in the select box 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

Example

```
<!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>
```

Output:

Maths ▼

File Upload Box

If you want to allow a user to upload a file to your web site, you will need to use a file upload box, also known as a file select box. This is also created using the <input> element but type attribute is set to **file**.

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.

Example

```
<!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 |

Button Controls

There are various ways in HTML to create clickable buttons. You can also create a clickable button using <input>tag by setting its type attribute to **button**. The type attribute can take the following values –

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.

Example

```
<!DOCTYPE html>
<html>
  <head>
    <title>Button Control </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" />
      <input type = "image" name = "imagebutton" src = "logo.png" />
    </form>
  </body>
</html>
```