

Web design and development I

Topic 6: Forms and Forms input tags

1.0 Overview

HTML Forms are required, when you want to collect some data from the site visitor. For example, during user registration you would like to collect information such as name, email address, credit card, etc. A form will take input from the site visitor and then will post it to a back-end application such as CGI, ASP Script or PHP script etc. The back-end application will perform required processing on the passed data based on defined business logic inside the application. There are various form elements available like text fields, textarea fields, drop-down menus, radio buttons, checkboxes, etc.

The HTML **<form>** element defines a form that is used to collect user input:

```
<form>
.
form elements
.
</form>
```

An HTML form contains **form elements**. Form elements are different types of input elements, like text fields, checkboxes, radio buttons, submit buttons, and more. The **<input>** element is the most important form element. The **<input>** element can be displayed in several ways, depending on the **type** attribute.

Here are some examples:

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)

1.1 Text input

`<input type="text">` defines a one-line input field for **text input**:

There are three types of text input used on forms –

- i. **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.
- ii. **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.
- iii. **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.

1.2 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.

1.3 Radio Input

<input type="radio"> defines a **radio button**.

Radio buttons let a user select ONE of a limited number of choices:

1.4 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.

1.4 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.

1.6 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 –

1.6.1 Submit Button

This creates a button that automatically submits a form.

1.6.2 reset

This creates a button that automatically resets form controls to their initial values.

1.6.3 button

This creates a button that is used to trigger a client-side script when the user clicks that button.

1.7 Form attributes

1.7.1 action

The **action** attribute defines the action to be performed when the form is submitted. Normally, the form data is sent to a web page on the server when the user clicks on the submit button.

1.7.2 method

Method to be used to upload data. The most frequently used are GET and POST methods.

The default method when submitting form data is GET. However, when GET is used, the submitted form data will be **visible in the page address field**:

Always use POST if the form data contains sensitive or personal information. The POST method does not display the submitted form data in the page address field. POST has no size limitations, and can be used to send large amounts of data.

1.7.3 target

Specify the target window or frame where the result of the script will be displayed. It takes values like _blank, _self, _parent etc.

1.7.4 enctype

You can use the enctype attribute to specify how the browser encodes the data before it sends it to the server.

1.8 Form inputs tags attributes

1.8.1 type

Indicates the type of input control

1.8.2 name

Used to give a name to the control which is sent to the server to be recognized and get the value.

1.8.3 value

This can be used to provide an initial value inside the control.

1.8.4 size

Allows to specify the width of the text-input control in terms of characters.

1.8.5 maxlength

Allows to specify the maximum number of characters a user can enter into the text box.

1.8.6 rows

Indicates the number of rows of text area box.

1.8.7 cols

Indicates the number of columns of text area box

1.8.8 checked

Set to *checked* if you want to select it by default.

1.8.9 size

This can be used to present a scrolling list box.

1.8.10 multiple

If set to "multiple" then allows a user to select multiple items from the menu.

1.8.11 label

An alternative way of labeling options

1.8.12 accept

Specifies the types of files that the server accepts.

