

Web Basics – HTML5

Lesson 7. HTML Forms for User Input

Lesson Objectives



After completing this module you will be able to:

- Understand the role of forms in web pages
- Understand various HTML elements used in forms.
 - Single line text field
 - Text area
 - Check box
 - Radio buttons
 - Password fields
 - Pull-down menus
 - File selector dialog box



HTML Forms for User Input

HTML forms are used to accept user inputs and then submit data for processing.

A *form* is an area that contains form elements.

Types of elements which can be included in a form are

- Label
- Single line text field
- Password field
- Text area
- Drop down menu
- Radio button
- Checkbox
- File selector box, etc..



HTML Forms for User Input

User input forms are created using `<form>` tag.

Syntax:

```
<form method="get/post" action="URL"  
    enctype="Encryption Type">  
    Field definitions  
</form>
```

- **action:** the URL of the script
- **method:** the HTTP request method to use, sometimes GET, but usually POST
- **enctype:** Specifies how the data is to be encoded.



HTML Forms for User Input

Some more attributes which can be used in <form> tag are

Attribute Name	Attribute Value	Description
name	Form name as a string	Mentions the name of a form.
autocomplete	On, off	Specifies whether a form should have autocomplete on or off
target	_blank, _self, _parent, _top	Specifies where to display the response that is received after submitting the form
novalidate	novalidate	Specifies that the form should not be validated during form submission.



HTML Form Elements

`<input>` element is the most used form tag.

An `<input>` tag includes the following attributes

- **name:** Name of the field which is required to send data(Key/Value pair) during form submission
- **id:** A unique identified of the field
- **value:** Sets a default value of the field
- **maxlength:** Specifies the maximum number of characters allowed in an `<input>` element
- **readonly:** Specifies that an input field is read-only
- **size:** Specifies the width, in characters, of an `<input>` element
- **Disabled:** specified that an input element should be displayed.
- **type** attribute of `<input>` tag specifies the field type



Text- related Elements

Text related elements can be created as shown below:

Code	Element
<code><input type="text"></code>	Single line text box
<code><input type="password"></code>	Password field
<code><input type="hidden"></code>	Hidden field

- If input exceeds more than one line, then create Multi-line input control using HTML `<textarea>` tag
- Syntax:
`<textarea rows=" " cols=" " name=" ">`
 - Rows : Number of rows of text area box
 - Cols: Number of columns of text area box
 - Name: name of the element



Checkbox Element

If more than one option is required to be selected from multiple options, then create checkbox as shown below:

- `<input type="checkbox">`
- Use checked attribute for selecting any checkbox to be selected by default

Example:

```
<input type="checkbox" name="hobbies" value="Reading Books"> Reading Books  
<input type="checkbox" name="hobbies" value="Net Surfing"> Net Surfing  
<input type="checkbox" name="hobbies" value="Singing" checked> Singing
```

Select your Hobbies: ☐ Reading Books ☐ Net Surfing ☒ Singing



Radio Button

If only one option is required to be selected from multiple options, then create radio button as shown below:

- `<input type="radio">`
- Use checked attribute for making a radio button to be selected by default

Example:

```
<input type="radio" name="sector" value="Public">  
Public  
<input type="radio" name="sector" value="Private">  
Private
```

Select your sector in which you are working: ☐ Public ☐ Private



Drop down list

Drop down list allow the user to select one or more values from a pre-determined options

Tags for creating drop down list with options are:

- `<select>` : Creates drop down list
- `<option>`: Defines an option in a select list.

Tag name	Attribute	Description
<select>	Name	Defines a name for the drop down list
	Size	Defines the number of visible options in a drop down list
	Multiple	Allow to select multiple options at once
	Disabled	Disable drop down list
<option>	value	Specifies the value to be sent to a server
	Selected	Makes option to be selected by default



Drop down list - Example

```
<!DOCTYPE html>
<html>
<body>Select a country:
    <select name="country">
        <option value="Germany">Germany</option>
        <option value="India" selected>India</option>
        <option value="China">China</option>
        <option value="Japan" >Japan</option>
    </select>
</body>
</html>
```

Select a country: ▼

File Upload



File upload will allow the user to upload a file from the desktop to an application in browser.

The below code is used to define a file-select field and a "Browse..." button (for file uploads):

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

Attribute	Description
Name	Defines a name for the file upload dialog box
Disabled	Disable element
Accept	Specify MIME type to describe the file type which accepts by a server

In `<form>` tag, use `enctype="multipart/form-data"` if file need to be uploaded using file selector form element.



File Upload- Example

```
<!DOCTYPE html>
<html>
<body>
    <form method="post" action="success.html"

        enctype="multipart/formdata">
        Select a photo to upload:
        <input type="file" name="photo"/>
    </form>
</body>
</html>
```

Select a photo to upload:



Button

Different types of button which is possible to be created in HTML5 are as shown below:

Field type	Element	
<code><input type="button"></code>	Button	A clickable button, that activates a JavaScript when it is clicked
<code><input type="submit"></code>	Submit button	Defines a button for submitting a form
<code><input type="reset"></code>	Reset button	Define a reset button (resets all form values to default values)

Demo



CheckboxExample.html

FormExamples.html

Passwordfield

RadioButtonExample

RadioExample

TextFieldExample.html

FormSubmission.html

Lab



Lab 7

Summary



After completing this module you now:

- Understand the role of forms in web pages
- Understand various HTML elements used in forms like:
 - Single line text field
 - Text area
 - Check box
 - Radio buttons
 - Password fields
 - Pull-down menus
 - File selector dialog box



Review Question



Question 1: Radio Buttons are used when you want the user to select:

- Option 1: one of a limited number of choices.
- Option 2: one or more options of a limited number of choices.
- Option 3: many of unlimited number of choices.

Question 2: METHOD attribute states the method to use when you send the form to the server.

- True/ False

Question 3: The _____ attribute of form specifies how the data is to be encoded.



Review Question: Match the Following

1. Check Boxes
2. Radio Buttons
3. Password fields
4. Hidden Input Type
5. <code><select></code> tag in Drop Down List
6. <code><option></code> tag in Drop Down List

a. Populate data in the list.
b. Create a select list.
c. Include form data without rendering it to the user.
d. Entered text is shown as asterisks.
e. Only one option of a limited number of choices.
f. One or more options of a limited number of choices

