Web Basics – HTML5

Lesson 7. HTML Forms for User Input

Capgemini

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
<input type="text">	Single line text box
<input type="password">	Password field
<input type="hidden">	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: | India ▼ |

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: [   ] Browse...

Button

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

Field type	Element	
<input type="button">	Button	A clickable button, that activates a JavaScript when it is clicked
<input type="submit">	Submit button	Defines a button for submitting a form
<input type="reset">	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	a. Populate data in the list.
2. Radio Buttons	b. Create a select list.
3. Password fields	c. Include form data without rendering it to the user.
4. Hidden Input Type	d. Entered text is shown as asterisks.
5. <select> tag in Drop Down List	e. Only one option of a limited number of choices.
6. <option> tag in Drop Down List	f. One or more options of a limited number of choices