INTRODUCTION TO HTML FORMS

HTML FORMS

- An **HTML form** is a section of a document which contains controls such as text fields, password fields, checkboxes, radio buttons, submit button, menus etc.
- An HTML form facilitates the user to enter data that is to be sent to the server for processing such as name, email address, password, phone number, etc. .
- HTML Form Syntax

  <form action="server url" method="get|post">

  //input controls e.g. textfield, textarea, radiobutton, button

  </form>

HTML5 FORM TAGS

Tag	Description
<form>	It defines an HTML form to enter inputs by the used side.
<input>	It defines an input control.
<textarea>	It defines a multi-line input control.
<label>	It defines a label for an input element.
<fieldset>	It groups the related element in a form.
<legend>	It defines a caption for a <fieldset> element.
<select>	It defines a drop-down list.
<optgroup>	It defines a group of related options in a drop-down list.
<option>	It defines an option in a drop-down list.
<button>	It defines a clickable button.
<datalist>	It specifies a list of pre-defined options for input control.
<keygen>	It defines a key-pair generator field for forms.
<output>	It defines the result of a calculation.

HTML FORM INPUT TYPES

In HTML <input type=" "> is an important element of HTML form. The "type" attribute of input element can be various types, which defines information field. Such as <input type="text" name="name"> gives a text box.

type=" "	Description
text	Defines a one-line text input field
password	Defines a one-line password input field
submit	Defines a submit button to submit the form to server
reset	Defines a reset button to reset all values in the form.
radio	Defines a radio button which allows select one option.
checkbox	Defines checkboxes which allow select multiple options form.
button	Defines a simple push button, which can be programmed to perform a task on an event.
file	Defines to select the file from device storage.
image	Defines a graphical submit button.

HTML5 ADDED NEW TYPES ON <INPUT> ELEMENT. FOLLOWING IS THE LIST OF TYPES OF ELEMENTS OF HTML5

type=" "	Description
color	Defines an input field with a specific color.
date	Defines an input field for selection of date.
datetime-local	Defines an input field for entering a date without time zone.
email	Defines an input field for entering an email address.
month	Defines a control with month and year, without time zone.
number	Defines an input field to enter a number.
url	Defines a field for entering URL
week	Defines a field to enter the date with week-year, without time zone.
search	Defines a single line text field for entering a search string.
tel	Defines an input field for entering the telephone number.

HTML FORM ATTRIBUTE

In HTML there are various attributes available for <form> element which are given below:

HTML ACTION ATTRIBUTE

- The action attribute of <form> element defines the process to be performed on form when form is submitted, or it is a URI to process the form information.
- The action attribute value defines the web page where information proceed. It can be .php, .jsp, .asp, etc. or any URL where you want to process your form.
- If action attribute value is blank then form will be processed to the same page.

HTML METHOD ATTRIBUTE

- The method attribute defines the HTTP method which browser used to submit the form. The possible values of method attribute can be:
- **post:** We can use the post value of method attribute when we want to process the sensitive data as it does not display the submitted data in URL.
- Example:

  <form action="action.html" method="post"**>**
- **get:** The get value of method attribute is default value while submitting the form. But this is not secure as it displays data in URL after submitting the form.

  Example:

  <form action="action.html" method="get"**>**
- When submitting the data, it will display the entered data in the form of:

  file:///D:/HTML/action.html?name=xyz&pass=123

HTML META TAG

Definition and Usage

- The <meta> tag defines metadata about an HTML document. Metadata is data (information) about data.
- <meta> tags always go inside the <head> element, and are typically used to specify character set, page description, keywords, author of the document, and viewport settings.
- Metadata will not be displayed on the page, but is machine parsable.
- Metadata is used by browsers (how to display content or reload page), search engines (keywords), and other web services.
- There is a method to let web designers take control over the viewport (the user's visible area of a web page), through the <meta> tag.

META TAG ATTRIBUTES

Attribute	Value	Description
charset	characterset	Specifies the character encoding for the HTML document
content	text	Specifies the value associated with the http-equiv or name attribute
http-equiv	content-security-policy content-type default-style refresh	Provides an HTTP header for the information/value of the content attribute
name	application-name author description generator keywords viewport	Specifies a name for the metadata

- The <meta> tag also supports the Global Attributes in HTML.
- **Define keywords for search engines:**

  <meta name="keywords" content="HTML, CSS, JavaScript">
- **Define a description of your web page:**

  <meta name="description" content="HTML and CSS">
- **Define the author of a page:**

  <meta name="author" content="XYZ">
- **Refresh document every 30 seconds:**

  <meta http-equiv="refresh" content="30">
- **Setting the viewport to make your website look good on all devices:**

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

HTML IFRAME TAG

An HTML iframe is used to display a web page within a web page.

HTML Iframe Syntax

- The HTML <iframe> tag specifies an inline frame.
- An inline frame is used to embed another document within the current HTML document.

Iframe - Remove the Border

- By default, an iframe has a border around it.
- To remove the border, add the style attribute and use the CSS border property.

Iframe - Target for a Link

- An iframe can be used as the target frame for a link.
- The target attribute of the link must refer to the name attribute of the iframe

HTML AUDIO TAG

- The HTML <audio> element is used to play an audio file on a web page.
- The controls attribute adds audio controls, like play, pause, and volume.
- The <source> element allows you to specify alternative audio files which the browser may choose from. The browser will use the first recognized format.
- The text between the <audio> and </audio> tags will only be displayed in browsers that do not support the <audio> element.

Tag	Description
<audio>	Defines sound content
<source>	Defines multiple media resources for media elements, such as <video> and <audio>

HTML VIDEO TAG

- The HTML <video> element is used to show a video on a web page.
- The controls attribute adds video controls, like play, pause, and volume.
- It is a good idea to always include width and height attributes. If height and width are not set, the page might flicker while the video loads.
- The <source> element allows you to specify alternative video files which the browser may choose from. The browser will use the first recognized format.
- The text between the <video> and </video> tags will only be displayed in browsers that do not support the <video> element.

Tag	Description
<video>	Defines a video or movie
<source>	Defines multiple media resources for media elements, such as <video> and <audio>
<track>	Defines text tracks in media players

HTML Semantic Tags

Semantic tags: <form>, <header>, <table>, and <article> -- these clearly define their content.

Non-semantic tags: and -- these tell nothing about their content.

List of Semantic Tags:

<header>

<nav>

<main>

<section>

<aside>

<article>

<footer>

<figure>

<figcaption>

<time>

<mark>

<details>

<summary>

END OF SESSION 2