

# Module II: Basic web elements

## HTML5 - Page Layout Semantic Elements and Web Form

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## TLO-5, TLO-6

- ✓ Basic web elements using HTML and HTML5
- ✓ Implement web forms, media, storage, and geolocation features using HTML5.

## Session Activity

- ✓ Apply the HTML5 semantic elements
- ✓ Design web form using web form attributes

## Keywords





- ✓ HTML5 is the latest and most enhanced version of HTML. Technically, HTML is not a programming language, but rather a Mark-up language
- ✓ HTML5 is a cooperation between the World Wide Web Consortium (W3C) and the Web Hypertext Application Technology Working Group (WHATWG).
- ✓ HTML5 introduces a number of new elements and attributes that can help you in building modern websites. Here is a set of some of the most prominent features introduced in HTML5.

## EXPLORE

[https://tutorialspoint.com/html5/html5\\_overview.htm](https://tutorialspoint.com/html5/html5_overview.htm)

## HTML5 New Features

- ✓ New Semantic Elements – These are like <header>, <footer>, and <section>.
- ✓ Forms 2.0 – Improvements to HTML web forms where new attributes have been introduced for <input> tag.
- ✓ Persistent Local Storage – To achieve without resorting to third-party plugins.
- ✓ WebSocket – A next-generation bidirectional communication technology for web applications.
- ✓ Server-Sent Events – HTML5 introduces events which flow from server to client, these are called Server-Sent Events (SSE).
- ✓ Canvas – This supports a two-dimensional drawing surface that you can program with JavaScript.

## EXPLORE

[https://www.tutorialspoint.com/html5/html5\\_overview.htm](https://www.tutorialspoint.com/html5/html5_overview.htm)

- ✓ Audio & Video – You can embed audio or video on your webpages without resorting to third-party plugins.
- ✓ Geolocation – Now visitors can choose to share their physical location with your web application.
- ✓ Microdata – This lets you create your own vocabularies beyond HTML5 and extend your web pages with custom semantics.
- ✓ Drag and drop – Drag and drop the items from one location to another location on the same webpage.

**EXPLORE**

[https://www.tutorialspoint.com/html5/html5\\_overview.htm](https://www.tutorialspoint.com/html5/html5_overview.htm)

The following tags have been introduced for better structure –

- ✓ section – This tag represents a generic document or application section. It can be used together with h1-h6 to indicate the document structure.
- ✓ article – This tag represents an independent piece of content of a document, such as a blog entry or newspaper article.
- ✓ aside – This tag represents a piece of content that is only slightly related to the rest of the page.
- ✓ header – This tag represents the header of a section.
- ✓ footer – This tag represents a footer for a section and can contain information about the author, copyright information, et cetera.
- ✓ nav – This tag represents a section of the document intended for navigation.
- ✓ dialog – This tag can be used to mark up a conversation.
- ✓ figure – This tag can be used to associate a caption together with some embedded content, such as a graphic or video.

# HTML5 tags Example

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    <meta charset = "utf-8">
```

```
    <title>...</title>
```

```
  </head>
```

```
  <body>
```

```
    <header>...</header>
```

```
    <nav>...</nav>
```

```
<article>
```

```
  <section>
```

```
    ...
```

```
  </section>
```

```
</article>
```

```
<aside>...</aside>
```

```
<footer>...</footer>
```

```
</body>
```

```
</html>
```





- ✓ Web Forms 2.0 is an extension to the forms features found in HTML4. Form elements and attributes in HTML5 provide a greater degree of semantic mark-up than HTML4 and free us from a great deal of tedious scripting and styling that was required in HTML4.



**EXPLORE**

<https://htmlreference.io/forms/>



## Button

- ✓ **name:** Defines the unique identifier for that button within the form.  
example name="submit\_button"
- ✓ **value:** The value sent to the server when submitting the form.  
Example value="primary" (The server will receive the value primary.)
- ✓ **type:** Defines the button type.  
Example type="submit" (The button sends the form data to the server)  
"reset" The button resets the form.  
Example type="Reset"
- ✓ **disabled** Disables the button.
- ✓ **autofocus:** Sets focus on the element when the web page loads.

Registration button

```
<button name="Singup" value="primary"  
type="submit" autofocus > Registration  
button </button>
```

## EXPLORE

<https://htmlreference.io/forms/>

## Form fieldset

Fieldset: Defines a group of controls within a form.

Syntax

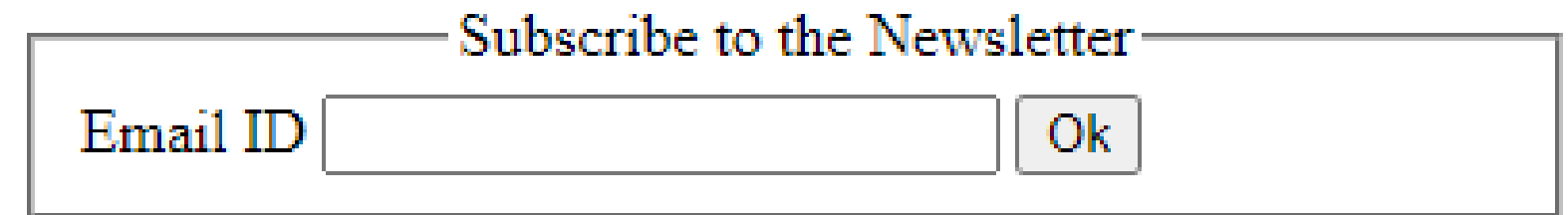
```
<fieldset>
```

```
    <legend> .....
```

```
    here will design form controls
```

```
    </legend>
```

```
</fieldset>
```



```
<form action="/subscribe" method="post"
style="width:30%;margin:10px; margin:10px">
    <fieldset>
        <legend style="text-align:center">Subscribe to the
Newsletter
    </legend>
        <label> Email ID </label>
        <input type="email" name="email">
        <button>Ok</button>
    </fieldset>
</form>
```

**EXPLORE**

<https://htmlreference.io/forms/>

## Web Forms Input

- ❖ Input: Defines an interactive control within a web form.
- ✓ type :Defines the type of form input.
  - "text" Simple single line text input that accepts any type of character
  - "email" a text input, but the browser will try to only allow valid email
  - "number" Like a text input, but the browser will try to only allow valid numbers.
  - "checkbox": A toggle checkbox that can only be one of two states
  - "radio": Needs to be used used in combination with other radio buttons

Syntax:

```
<input type="text" name="first-name" placeholder="e.g Pema" required>
```

**EXPLORE**

<https://htmlreference.io/forms/>

## Web Forms Input

❖ Input: textarea: Defines a multi-line text control within a web form.

### Attributes

- ❖ name="Message"
- ❖ autocomplete="on"
- ❖ minlength="15"
- ❖ maxlength="200"
- ❖ placeholder="e.g hello my name is Sunil"
- ❖ wrap="soft"
- ❖ spellcheck
- ❖ required
- ❖ disabled
- ❖ autofocus
- ❖ Readonly
- ❖ Row
- ❖ Col

### Syntax:

```
<textarea name="Message" maxlength="200" spellcheck  
placeholder="e.g hello my name is sunil">
```

```
</textarea>
```

## EXPLORE

<https://htmlreference.io/forms/>

## Practical Task for Lab

**Implement the below task using HTML5 tags and its attributes in webpage.**

1. Create a web form of student registration using html 5.
2. Create a web form of user login and registration using html 5 and its attributes





# Thank You

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## Reference

1. [https://www.w3schools.com/tags/tag\\_iframe.ASP](https://www.w3schools.com/tags/tag_iframe.ASP)
2. <https://www.javatpoint.com/html-iframes>