

# **WEB PROGRAMMING - HTML, CSS, JS - 2**

**TEXAS SKILLS DEVELOPMENT FUND  
TRAINING PARTNERSHIP**



# Day – 2 Objectives

01 | Introduction

02 | Form Elements

03 | HTML Tags

04 | Attributes

05 | Assignment 2

06 | Lab 2



# HTML Elements

- HTML elements are the basic building blocks to create a web page.
- HTML elements are created with the help of an opening tag, content, and ending tag.
- Most HTML elements are written with a start tag (or opening tag) and an end tag (or closing tag), with content in between.
- An HTML element is a part of an HTML document that instructs a web browser how to structure and display content.



# Sample HTML Elements

- <p> for paragraphs
- <h1> to <h6> for headings
- <a> for links
- <img> for images and <div> for division of content.

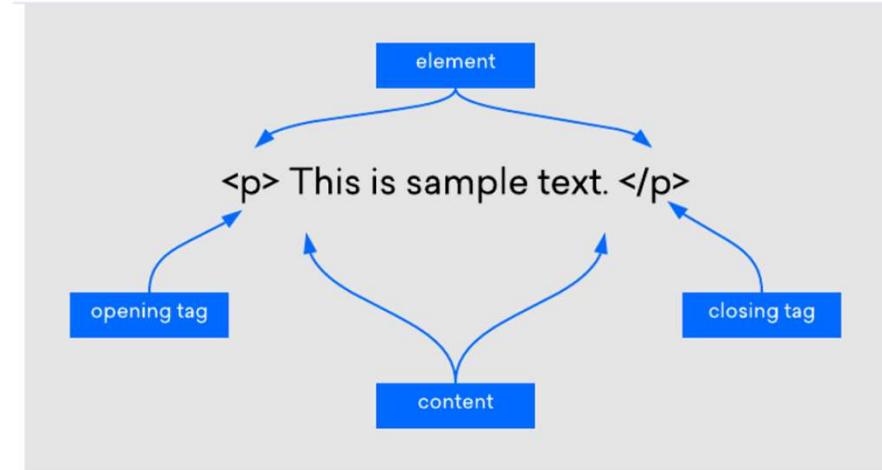
<p>This is paragraph content.</p>

<h1>This is heading content.</h1>

<div>This is division content.</div>

# HTML Tag

- Tags define the structure and content of elements, crucial for creating structured and readable web documents.



# Tags vs Elements

HTML Tags	HTML Elements
HTML tags are used to hold the HTML element.	HTML element holds the content.
HTML tag starts with < and ends with >	Whatever written within a HTML tag are HTML elements.
HTML tags are almost like keywords where every single tag has unique meaning.	HTML elements specifies the general content.
Tags define the type of HTML element (e.g., heading, paragraph).	Elements represent the complete, functional unit on a webpage.



# HTML Attributes

- HTML attributes are special words that provide additional information to an HTML element.
- Attributes are placed inside the element's opening tag, and they are used to configure or adjust the element's behavior.
- All attributes are made up of two parts: a name and a value
- All HTML elements can have attributes except a few like `<head>`, `<title>`, `<script>`, etc

# Sample code

```
<html>

<head>
    <title>Example of HTML Attributes</title>
</head>

<body>
    <p align="left">Left Aligned</p>
    <p align="center">Center Aligned</p>
    <p align="right">Right Aligned</p>
</body>

</html>
```



# Example

Left Aligned

Center Aligned

Right Aligned

Attribute	Options	Function
Attribute	Options	Function
<u>align</u>	right, left, center	Horizontally aligns tags
valign	top, middle, bottom	Vertically aligns tags within an HTML element.
<u>bgcolor</u>	numeric, hexidecimal, RGB values	Places a background color behind an element
background	URL	Places a background image behind an element
<u>id</u>	User Defined	Names an element for use with Cascading Style Sheets.
<u>class</u>	User Defined	Classifies an element for use with Cascading Style Sheets.
<u>width</u>	Numeric Value	Specifies the width of tables, images, or table cells.



# **Best Practices for Using HTML Attributes**

## Write Values in Quotes

- You should always write the attribute values in single or double quotes.

## Use Lowercase

- HTML is case-insensitive, but the good practice is to write the HTML attribute in lowercase

## Use of Single and Double Quotes Together

- When you need to provide any string in quotes as the value of an attribute, you can use the combination of single and double quotes

# HTML Tags

Heading Tags	<code>&lt;h1&gt;, &lt;h2&gt;, &lt;h3&gt;, &lt;h4&gt;, &lt;h5&gt;, and &lt;h6&gt;</code>
Paragraph Tag	<code>&lt;p&gt;</code>
Line Break Tag	<code>&lt;br&gt; or &lt;br /&gt;</code>
Center Tag	<code>&lt;center&gt;</code>
Horizontal Rule Tag	<code>&lt;hr&gt; or &lt;hr /&gt;</code>
Preserve Formatting Tag	<code>&lt;pre&gt;</code>
Non-breaking Space	<code>&amp;nbsp;</code>
Listing Tags	<code>&lt;ul&gt; and &lt;/ul&gt;</code> <ul style="list-style-type: none"><li>• Unordered Listing: <code>&lt;ul&gt;</code></li><li>• Ordered Listing: <code>&lt;ol&gt;</code></li><li>• List Item: <code>&lt;li&gt;</code></li></ul>
<b>HTML Basic Tags</b>	



# Paragraph Tag

- The `<p>` tag offers a way to structure your text into different paragraphs. Each paragraph of text should go in between an opening `<p>` and a closing `</p>` tag

# Paragraph Tag

The diagram illustrates the structure of an HTML paragraph tag, `<p></p>`, with the following annotations:

- Start tag**: Points to the opening tag `<p`.
- Attribute**: Points to the attribute `class="foo"`. It includes a **value** annotation pointing to the string `"foo"`.
- Content**: Points to the text within the tag, `This is a paragraph.`
- End tag**: Points to the closing tag `</p>`.

# Sample Code

```
<html>
  <head>
  </head>
  <body>
    <h1>This is a heading</h1>
    <p>First Paragraph.</p>
    <p>Second Paragraph</p>
  </body>
</html>
```

# **Paragraph Example**

First Paragraph.

Second Paragraph

# Paragraph Sample

```
<!DOCTYPE html>
<html>
<head>
    <title>Paragraph Example</title>
</head>
<body>
    <p>Here is a first paragraph of text.</p>
    <p>Here is a second paragraph of text.</p>
    <p>Here is a third paragraph of text.</p>
</body>
</html>
```

# Heading tag

```
<!DOCTYPE html>
<html>
<head>
  <title>Heading Example</title>
</head>
<body>
  <h1>This is heading 1</h1>
  <h2>This is heading 2</h2>
  <h3>This is heading 3</h3>
  <h4>This is heading 4</h4>
  <h5>This is heading 5</h5>
  <h6>This is heading 6</h6>
</body>
</html>
```



# **Levels of heading**

- HTML also has six levels of headings, which use the elements `<h1>`, `<h2>`, `<h3>`, `<h4>`, `<h5>`, and `<h6>`.



# Links

- HTML links are hyperlinks.
- You can click on a link and jump to another document.
- When you move the mouse over a link, the mouse arrow will turn into a little hand.

```
<a href="url">link text</a>
```



# Links

- Creating links in HTML involves using the `<a>` (anchor) tag. Examples include:

```
<!-- Link to an external website -->
```

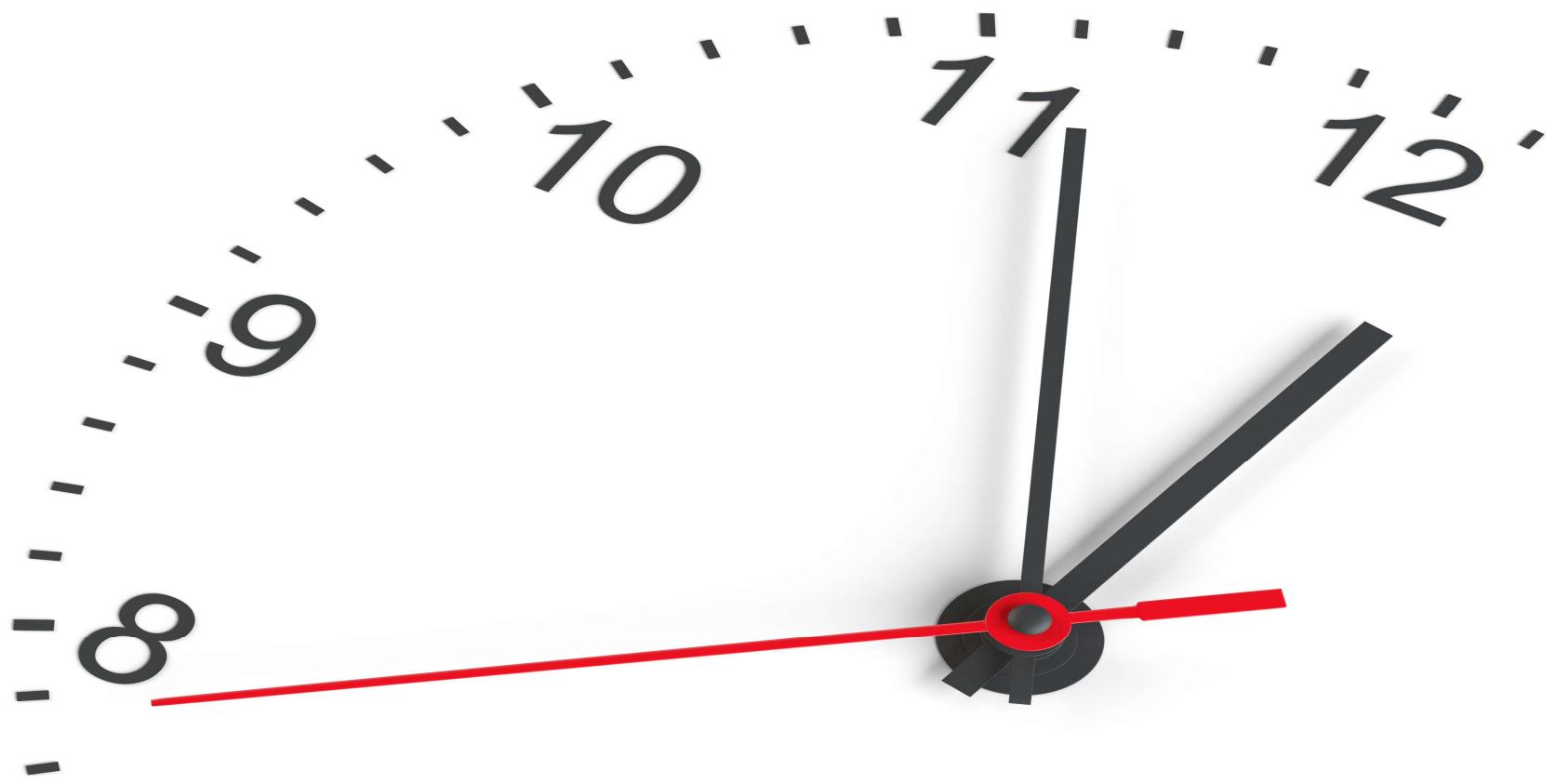
```
<a href="https://www.example.com">Visit Example</a>
```

```
<!-- Link to an internal page -->
```

```
<a href="about.html">About Us</a>
```



# Break





# **HTML Lists**

- HTML lists are group or collection of items.
- The items can be organized or unorganized.
- To display a list of information in HTML, we use various list tags like `<ul>`, `<ol>`, and `<li>`

# Lists

```
<!-- Unordered list -->
<ul>
  <li>Item 1</li>
  <li>Item 2</li>
  <li>Item 3</li>
</ul>
```



# Ordered List

```
<!-- Ordered list -->  
<ol>  
  <li>First item</li>  
  <li>Second item</li>  
  <li>Third item</li>  
</ol>
```

# Ordered List

1. First item
2. Second item
3. Third item

# Unordered List

```
<!DOCTYPE html>
<html>
  <head>
    <title>A first website</title>
  </head>
  <body>
    <ul>
      <li>First item</li>
      <li>Second item</li>
      <li>Third item</li>
    </ul>
  </body>
</html>
```



# Unordered List

- First item
- Second item
- Third item



# HTML Tables

- HTML tables offer a visual structure that aids in clarity and comprehension, making them a fundamental element in web development.

Main purposes include

- Structuring Data – Tables provide a coherent structure for organizing and displaying data, making it easier for users to interpret information.
- Comparative Presentation – When there is a need to compare different sets of data side by side like difference between two concepts, tables offer a clear and visually accessible format.
- Tabular Data Representation – Information that naturally fits into rows and columns, such as schedules, statistics, or pricing tables, can be well-represented using HTML tables.



# HTML Tables

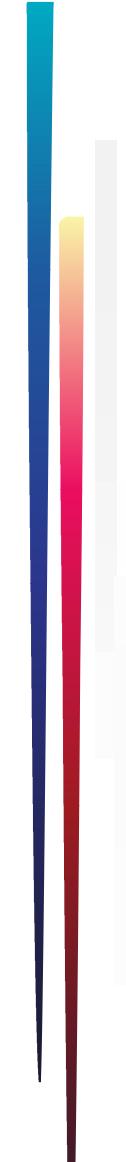
- HTML <table> Tag: This tag is used to create the table that wrap the rows and columns within it.
- HTML <tr> Tag: Stands for "table row" and is used to create a row within the table.
- HTML <td> Tag: Represents "table data" and is used to create standard cells within a row.
- HTML <th> Tag: Represents "table header" and is used to create header cells within a row.

# Tables

```
<table>
  <tr>
    <th>Header 1</th>
    <th>Header 2</th>
  </tr>
  <tr>
    <td>Data 1</td>
    <td>Data 2</td>
  </tr>
</table>
```

# HTML table Sample

Product	Category	Price
Laptop	Electronics	\$800
Bookshelf	Furniture	\$150
Coffee Maker	Appliances	\$50



# **HTML Image**

- HTML images provide visual content for web pages, enhancing user experiences and conveying information.
- Images can be photographs, graphics, icons, or illustrations.

# HTML Image

```

```

- **src**: The src attribute defines the path of the image (image URL).
- **alt**: The alt attribute defines the alternate text; if there is a broken link to the image path, the alternate text displays on the webpage.
- **width and height**: The width and height attribute define the height and width for the image.



# Multimedia

- Multimedia comes in many different formats.
- It can be almost anything you can hear or see, like images, music, sound, videos, records, films, animations, and more.
- A variety of tags such as the `<img>` tag, `<video>` tag, and `<audio>` tag are available in HTML to include media on your web page.

# Multimedia - Embedding Image

- <body>
- <img src=
- "https://media.geeksforgeeks.org/wp-content/uploads/20190328185307/gfg28.png"
- alt="gfglogo">
- </body>



# Embed a Video

- <body>
- <video width="500px" height="300px" controls>
- <source src="Small\_movie.mp4" type="video/mp4">
- <source src="Small\_movie.webm" type="video/webm">
- Your browser does not support this video tag.
- </video>
- </body>



## Lab 2

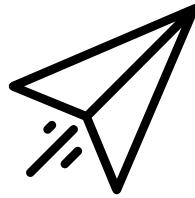
- Please practice the ordered list and unordered list.



# **Lab 3**

- Please practice html table's code.

# End of Day 2



For any questions or clarifications  
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