# Lab Report-1

| Course Code | Course Title |
|---|---|
| 0CSE416 | Web Engineering Lab |

| Report Details | |
|---|---|
| **Experiment Name** | HTML Tags with Description, Attributes, Code, and Output |
| **Submission Date** | 25-05-2025 |

| Submitted To | Submitted By |
|---|---|
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# Daffodil International University

# Tag 1: &lt;html&gt;

- **Description**: Serves as the root container of an HTML document, encompassing all visible and non-visible page elements.

- **Common Attributes**: lang
- **Code Snippet**:

  **&lt;html lang="en"&gt; &lt;/html&gt;**

- **Output**: Declares the document structure and language; not visually rendered.
- **Influence**: Serves as the container for all HTML content.

# Tag 2: &lt;head&gt;

- **Description**: Holds metadata, links to stylesheets, scripts, and the page's title.
- **Common Attributes**: None
- **Code Snippet**:

  **&lt;head&gt; &lt;title&gt;My Website&lt;/title&gt; &lt;/head&gt;**
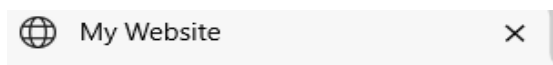
- **Output**: No direct visual output; enables the browser to load linked resources.

- **Influence**: Helps browsers and search engines understand the page.

# Tag 3: &lt;title&gt;

- **Description**: Sets the text shown in the browser's title/tab.
- **Common Attributes**: None
- **Code Snippet**:

  **&lt;title&gt;My Website&lt;/title&gt;**

- **Output**: Shows "My Website" on the browser tab.



- **Influence**: Improves SEO and user experience

# Tag 4: <meta>

- **Description**: Provides metadata such as character encoding and viewport settings.

- **Code Snippet**:

  **<meta charset="UTF-8">**

- **Output**: Not visible; ensures correct character display.

# Tag 5: <link>

- **Description**: Used to link external files like CSS to the HTML document.

- **Code Snippet**:
  **<link rel="stylesheet" href="style.css">**
- **Output**: Applies external styles to the webpage.

# Tag 6: <script>

- **Description**: Embeds or links JavaScript code for interactivity.
- **Common Attributes**: src, type
- **Code Snippet:**

  **<script>alert("Hi from Tomalika!");</script>**

- **Output**: Renders page content with a light blue background.



- **Influence**: Everything the user sees is inside <body>.

## Tag 7: &lt;body&gt;

- **Description**: Contains all elements that are visible to the user.
- **Common Attributes**: bgcolor, background, style
- **Code Snippet**:

```
<body bgcolor="lightblue">
```

- **Output**: Renders page content with a light blue background.
- **Influence**: Everything the user sees is inside &lt;body&gt;.

## Tag 8: &lt;h1&gt;

- **Description**: Denotes the most important heading on the page.
- **Common Attributes**: id, class, style

- **Code Snippet**:
  ```
  <h1 style="color: brown;">Welcome to My Lab</h1>
  ```

- **Output**: Big bold "**Welcome to My Lab**" heading

**Welcome to My Lab**

- **Influence:** Marks the main heading of the page, improves structure.

## Tag 9: &lt;h2&gt;

- **Description**: Represents a second-level heading, typically used for subsections.

- **Code Snippet:**
  ```
  <h2>Introduction</h2>
  ```
- **Output**: Medium-size "**Introduction**" heading

**Introduction**

- **Influence:** Organizes content hierarchically.

## Tag 10: &lt;p&gt;

- **Description**: Defines a paragraph block of text.
- **Code Snippet**:

<p>This is a paragraph demonstrating HTML basics. Student Name: Tomalika Sarker | ID: 221-15-5341</p>

- **Output**:

This is a paragraph demonstrating HTML basics. Student Name: Tomalika Sarker | ID: 221-15-5341

# Tag 11: <a>

- **Description**: Creates hyperlinks to other documents or websites.
- **Code Snippet**:
  <a href="https://www.google.com" target="_blank" title="Go to Google">Visit Google</a>

- **Output**:

Visit Google

# Tag 12: <img>

- **Description**: Embeds an image from a local or remote source.
- **Code Snippet**:
  <img src="https://cdn2.hubspot.net/hubfs/53/image8-2.jpg" alt="Sample Logo" width="100" height="100">
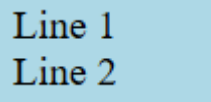
- **Output**:



# Tag 13: <br>

- **Description**: Inserts a line break within content.
- **Code Snippet**:

  Line 1<br>
  Line 2<br>

- **Output**:

Line 1
Line 2

- **Influence**: Helps in line formatting.

# Tag 14: <hr>

- **Description**: Renders a horizontal line for content separation.

- **Code Snippet:**

```
<hr>
```

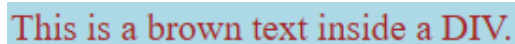- **Output**: A horizontal rule appears across the page.

- **Influence**: Visually separates content.

# Tag 15: <div>

- **Description**: A block-level container for grouping elements.

- **Code Snippet:**

```
<div style="color:brown;">This is a brown text inside a DIV.</div>
```

- **Output**:

This is a brown text inside a DIV.

- **Influence**: Helps in layout and styling.

# Tag 16: <span>

- **Description**: An inline container used for styling text without breaking flow.

- **Code Snippet:**

```
<p>This is a <span style="color:purple;">purple</span> word using span tag.</p>
```

- **Output**:

This is a purple word using span tag.

- **Influence**: Applies styles without breaking lines.

# Tag 17: <ul>

- **Description**: Creates an unordered list of bullet points.
- **Code Snippet**:

```
<ul type="disc">
 <li>Unordered Item 1</li>
 <li>Unordered Item 2</li>
</ul>
```

- **Output**:

  - Unordered Item 1
  - Unordered Item 2

- **Influence**: Used for lists with no order.

# Tag 18: <ol>

- **Description**: Constructs an ordered (numbered) list.
- **Code Snippet**:

```
<ol type="1">
    <li>Ordered Step 1</li>
    <li>Ordered Step 2</li>
</ol>
```

- **Output**:

  1. Ordered Step 1
  2. Ordered Step 2

- **Influence**: Helpful in instructions/steps.

# Tag 19: <li>

- **Description**: Defines each item in a list.

- **Code Snippet:**

    <li>Ordered Step 1</li>

- **Output**:

    1. Ordered Step 1

- **Influence**: Makes up list content.


# Tag 20: <table>

- **Description**: Creates a table for organizing content in rows and columns.

- **Common Attributes**: border, cellpadding, cellspacing
- **Code Snippet**:

    <table border="1" cellpadding="5" cellspacing="0">

**Output**:

| Image | Item Name | Description |
|---|---|---|
|  | Fruit Smoothie | Mixed fruits, honey, mint |

**Influence**: Organizes data in rows and columns.


# Tag 21: <tr>

- **Description**: Represents a row in a table.

- **Code Snippet:**

```
  <tr>
 <th>Image</th>
 <th>Item Name</th>
 <th>Description</th>
</tr>
```

- **Output**: A single row is added to the table layout.

| Description |
| --- |

- **Influence**: Used to define each row in a table.


# Tag 22: <td>

- **Description**: Represents a standard data cell within a table row.

- **Code Snippet:**

```
  <tr>
   <td><img src="https://www.dinneratthezoo.com/wp-
content/uploads/2016/08/tropical-smoothie-14.jpg" alt="Fruit Smoothie" width="100"></td>
      <td>Fruit Smoothie</td>
     <td>Mixed fruits, honey, mint</td>
   </tr>
```

- **Output**: Displays content inside a table cell.

| Description |
| --- |
| Mixed fruits, honey, mint |

- **Influence**: Holds the actual data inside a table.

# Tag 23: <th>

- **Description**: Defines a header cell in a table.

- **Code Snippet:**

  **<th>Image</th>**

  **<th>Item Name</th>**

  **<th>Description</th>**

- **Output**: Bold and centered text in a table header.

| Image | Item Name | Description |
|-------|-----------|-------------|

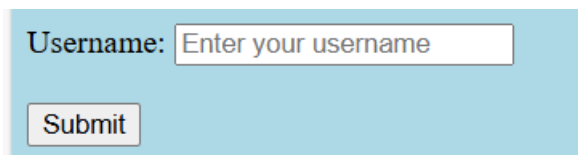- **Influence**: Labels columns/rows, improves readability.


# Tag 24: <form>

- **Description:** Creates a form for user input submission.

- **Attributes:** action, method

- **Code Snippet**:
  ```
  <form action="/submit" method="post">
  <label for="username">Username:</label>
  <input type="text" name="username" placeholder="Enter your username" required>
  <br><br>
  <button type="submit">Submit</button>
  </form>
  ```
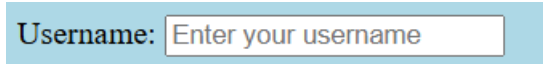
- **Output**: Renders a blank form container.

  Username: [Enter your username]

  [Submit]

- **Influence**: Accepts user input.

# Tag 25: \<label\>

- **Description**: Provides a descriptive label for form inputs.

- **Code Snippet:**

  <span style="color:green">\<label for="username"\>Username:\</label\></span>

- **Output**:

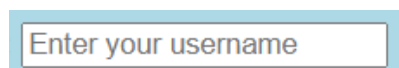  Username: [Enter your username]

- **Influence**: Improves accessibility.

# Tag 26: \<input\>

- **Description**: Accepts user input in various formats like text, radio, etc.

- **Attributes**: type, name, value

- **Code Snippet:**

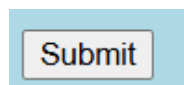  <span style="color:green">\<input type="text" name="username" placeholder="Enter your username" required\></span>

- **Output**: Text input box

  [Enter your username]

- **Influence**: Allows user to enter data.

# Tag 27: \<button\>

- **Description**: Adds a button element for form submission or actions.

- **Code Snippet:**

  <span style="color:green">\<button type="submit"\>Submit\</button\></span>

- **Output**:

  Submit

- **Influence**: Triggers actions.

# Tag 28: < select>

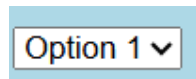- **Description**: Creates a drop-down list menu.

- **Code Snippet:**
  ```
  <select name="dropdown">
  <option value="1">Option 1</option>
  <option value="2">Option 2</option>
  </select>
  ```

- **Output**:



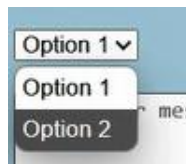# Tag 29: <option>

- **Description:** Specifies individual options in a drop-down list.

- **Code Snippet**:
  ```
  <option value="1">Option 1</option>
  <option value="2">Option 2</option>
  ```

- **Output**:



# Tag 30: < textarea>

- **Description**: Provides a field for multi-line text input.
- **Code Snippet**:

  ```
  <textarea rows="4" cols="30" placeholder="Enter your message here...">
  </textarea>
  ```

- **Output**: