

Statement Purpose:

To familiarize the students with

- ▣ Links
- ▣ Tables
- ▣ Forms (Attributes, Elements, Types)
- ▣ Quotations
- ▣ Cascading Stylesheet (CSS) Basics, and inline styling

Activity Outcomes:

After this lab the students should be able to add links, tables, create forms, add quotations and inline CSS in web pages.

1) Introduction

HTML Links - Hyperlinks

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.

HTML Links - Syntax

The HTML `<a>` tag defines a hyperlink. It has the following syntax:

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

The most important attribute of the `<a>` element is the `href` attribute, which indicates the link's destination. The *link text* is the part that will be visible to the reader. Clicking on the link text, will send the reader to the specified URL address.

```
<a href="https://www.google.com/">Visit google.com!</a>
```

By default, links will appear as follows in all browsers:

- An unvisited link is underlined and blue
- A visited link is underlined and purple
- An active link is underlined and red

HTML Links - The target Attribute

By default, the linked page will be displayed in the current browser window. To change this, you must specify another target for the link.

The **target** attribute specifies where to open the linked document.

The **target** attribute can have one of the following values:

- **_self** - Default. Opens the document in the same window/tab as it was clicked
- **_blank** - Opens the document in a new window or tab
- **_parent** - Opens the document in the parent frame
- **_top** - Opens the document in the full body of the window

Example

Use `target="_blank"` to open the linked document in a new browser window or tab:

```
<a href="https://www.google.com/" target="_blank">Visit Google!</a>
```

Absolute URLs vs. Relative URLs

Both examples above are using an **absolute URL** (a full web address) in the **href** attribute. A local link (a link to a page within the same website) is specified with a **relative URL** (without the "https://www" part):

Example

```
<h2>Absolute URLs</h2>
<p><a href="https://www.w3.org/">W3C</a></p>
<p><a href="https://www.google.com/">Google</a></p>

<h2>Relative URLs</h2>
<p><a href="html_images.asp">HTML Images</a></p>
<p><a href="/css/default.asp">CSS Tutorial</a></p>
```

HTML Links - Use an Image as a Link

To use an image as a link, just put the **** tag inside the **<a>** tag:

```
<a href="default.asp">

</a>
```

Link to an Email Address

Use **mailto:** inside the **href** attribute to create a link that opens the user's email program (to let them send a new email):

```
<a href="mailto:someone@example.com">Send email</a>
```

HTML Table

A table in HTML consists of table cells inside rows and columns

```
<table>
  <tr>
    <th></th>
    <th> </th>
    <th> </th>
  </tr>
  <tr>
    <td> </td>
    <td> </td>
    <td> </td>
  </tr>
</table>
```

Table Cells

Each table cell is defined by a `<td>` and a `</td>` tag. `td` stands for table data. Everything between `<td>` and `</td>` are the content of the table cell.

Table Rows

Each table row starts with a `<tr>` and end with a `</tr>` tag.

Table Headers

Sometimes you want your cells to be headers, in those cases use the `<th>` tag instead of the `<td>` tag:

HTML Forms

An HTML form is used to collect user input. The user input is most often sent to a server for processing.

`<form>` Element

The HTML `<form>` element is used to create an HTML form for user input:

```
<form>
.
  form elements
.
</form>
```

`<input>` Element

The HTML `<input>` element is the most used form element. An `<input>` element can be displayed in many ways, depending on the `type` attribute.

Type	Description
<code><input type="text"></code>	Displays a single-line text input field
<code><input type="radio"></code>	Displays a radio button (for selecting one of many choices)
<code><input type="checkbox"></code>	Displays a checkbox (for selecting zero or more of many choices)
<code><input type="submit"></code>	Displays a submit button (for submitting the form)
<code><input type="button"></code>	Displays a clickable button

Text Fields

The `<input type="text">` defines a single-line input field for text input.

Example

A form with input fields for text:

```
<form>
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname"><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname">
</form>
```

<label> Element

The `<label>` tag defines a label for many form elements. The `<label>` element is useful for screen-reader users because the screen-reader will read out loud the label when the user focus on the input element. The `for` attribute of the `<label>` tag should be equal to the `id` attribute of the `<input>` element to bind them together.

Radio Buttons

The `<input type="radio">` defines a radio button. Radio buttons let a user select ONE of a limited number of choices.

Example

A form with radio buttons:

```
<p>Choose your favorite Web language:</p>

<form>
  <input type="radio" id="html" name="fav_language" value="HTML">
  <label for="html">HTML</label><br>
  <input type="radio" id="css" name="fav_language" value="CSS">
  <label for="css">CSS</label><br>
  <input type="radio" id="javascript" name="fav_language" value="JavaScript">
  <label for="javascript">JavaScript</label>
</form>
```

Choose your favorite Web language:

- ☐ HTML
- ☐ CSS
- ☐ JavaScript

Checkboxes

The `<input type="checkbox">` defines a **checkbox**. Checkboxes let a user select ZERO or MORE options of a limited number of choices.

Example

A form with checkboxes:

```
<form>
  <input type="checkbox" id="vehicle1" name="vehicle1" value="Bike">
  <label for="vehicle1"> I have a bike</label><br>
  <input type="checkbox" id="vehicle2" name="vehicle2" value="Car">
  <label for="vehicle2"> I have a car</label><br>
  <input type="checkbox" id="vehicle3" name="vehicle3" value="Boat">
  <label for="vehicle3"> I have a boat</label>
</form>
```

- ☐ I have a bike
- ☐ I have a car
- ☐ I have a boat

Submit Button

The `<input type="submit">` defines a button for submitting the form data to a form-handler. The form-handler is typically a file on the server with a script for processing input data. The form-handler is specified in the form's `action` attribute.

Example

A form with a submit button:

```
<form action="/action_page.php">
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname" value="John"><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname" value="Doe"><br><br>
  <input type="submit" value="Submit">
</form>
```

Tag	Description
<table>	Defines a table
<th>	Defines a header cell in a table

<tr>	Defines a row in a table
<td>	Defines a cell in a table
<caption>	Defines a table caption
<colgroup>	Specifies a group of one or more columns in a table for formatting
<col>	Specifies column properties for each column within a <colgroup> element
<thead>	Groups the header content in a table
<tbody>	Groups the body content in a table
<tfoot>	Groups the footer content in a table

HTML Form Attributes

Action Attribute

The **action** attribute defines the action to be performed when the form is submitted. Usually, the form data is sent to a file on the server when the user clicks on the submit button.

```
<form action="/action_page.php">
```

Target Attribute

The **target** attribute specifies where to display the response that is received after submitting the form.

```
<form action="/action_page.php" target="_blank">
```

Method Attribute

The **method** attribute specifies the HTTP method to be used when submitting the form data. The form-data can be sent as URL variables (with **method="get"**) or as HTTP post transaction (with **method="post"**).

```
<form action="/action_page.php" method="get">
<form action="/action_page.php" method="post">
```

Autocomplete Attribute

The **autocomplete** attribute specifies whether a form should have autocomplete on or off. When autocomplete is on, the browser automatically complete values based on values that the user has entered before.

```
<form action="/action_page.php" autocomplete="on">
```

The HTML <form> Elements

The HTML **<form>** element can contain one or more of the following form elements:

- <input>

- <label>
- <select>
- <textarea>
- <button>
- <fieldset>
- <legend>
- <datalist>
- <output>
- <option>
- <optgroup>

How To Add CSS

When a browser reads a style sheet, it will format the HTML document according to the information in the style sheet.

Three Ways to Insert CSS

There are three ways of inserting a style sheet:

- Inline CSS
- Internal CSS
- External CSS

Inline CSS

An inline style may be used to apply a unique style for a single element. To use inline styles, add the style attribute to the relevant element. The style attribute can contain any CSS property.

```
<h1 style="color:blue;text-align:center;">This is a heading</h1>
<p style="color:red;">This is a paragraph.</p>
```

Lab Activities

Activity 1:

```
<!DOCTYPE html>
<html>

<body>

  <h2>The target Attribute</h2>

  <a href="https://www.google.com/" target="_blank">Visit Google</a>

  <p>If target="_blank", the link will open in a new browser window or tab.</p>

</body>

</html>
```

Activity 2:

```
<!DOCTYPE html>
<html>

<body>

  <h2>Absolute URLs</h2>
  <p><a href="https://www.w3.org/">W3C</a></p>
  <p><a href="https://www.google.com/">Google</a></p>

  <h2>Relative URLs</h2>
  <p><a href="html_images.asp">HTML Images</a></p>
  <p><a href="/css/default.asp">CSS Tutorial</a></p>

</body>

</html>
```

Activity 3:

```
<!DOCTYPE html>
<html>

<body>

  <h2>Image as a Link</h2>

  <p>The image below is a link. Try to click on it.</p>

  <a href="default.asp"></a>

</body>

</html>
```

Activity 4:

```
<!DOCTYPE html>
<html>

<body>

  <h2>Link to an Email Address</h2>

  <p>To create a link that opens in the user's email program (to let them send a new
email), use mailto: inside the
  href attribute:</p>

  <p><a href="mailto:someone@example.com">Send email</a></p>
```



```

</body>

</html>
<!DOCTYPE html>
<html>

<body>

    <h2>Button as a Links</h2>

    <p>Click the button to go to the HTML tutorial.</p>

    <button onclick="document.location='default.asp'">HTML Tutorial</button>

</body>

</html>

```

Activity 5:

```

<!DOCTYPE html>
<html>
<style>
    table,
    th,
    td {
        border: 1px solid black;
    }
</style>

<body>

    <h2>A basic HTML table</h2>

    <table style="width:100%">
        <tr>
            <th>Company</th>
            <th>Contact</th>
            <th>Country</th>
        </tr>
        <tr>
            <td>Honda</td>
            <td>anything</td>
            <td>Pakistan</td>
        </tr>
        <tr>
            <td>Toyota</td>
            <td>anything</td>
            <td>Pakistan</td>
        </tr>
    </table>

```

```
</body>
```

```
</html>
```

Activity 6:

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h2>Text input fields</h2>
```

```
<form>
```

```
<label for="fname">First name:</label><br>
```

```
<input type="text" id="fname" name="fname" value="Muhammad"><br>
```

```
<label for="lname">Last name:</label><br>
```

```
<input type="text" id="lname" name="lname" value="Nouman">
```

```
</form>
```

```
<p>Note that the form itself is not visible.</p>
```

```
<p>Also note that the default width of text input fields is 20 characters.</p>
```

```
</body>
```

```
</html>
```

Activity 7:

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h2>Radio Buttons</h2>
```

```
<p>Choose your favorite Web language:</p>
```

```
<form>
```

```
<input type="radio" id="html" name="fav_language" value="HTML">
```

```
<label for="html">HTML</label><br>
```

```
<input type="radio" id="css" name="fav_language" value="CSS">
```

```
<label for="css">CSS</label><br>
```

```
<input type="radio" id="javascript" name="fav_language" value="JavaScript">
```

```
<label for="javascript">JavaScript</label>
```

```
</form>
```

```
</body>
```

```
</html>
```

Activity 8:

```
<!DOCTYPE html>
<html>

<body>

  <h2>Checkboxes</h2>
  <p>The <strong>input type="checkbox"</strong> defines a checkbox:</p>

  <form action="/action_page.php">
    <input type="checkbox" id="vehicle1" name="vehicle1" value="Bike">
    <label for="vehicle1"> I have a bike</label><br>
    <input type="checkbox" id="vehicle2" name="vehicle2" value="Car">
    <label for="vehicle2"> I have a car</label><br>
    <input type="checkbox" id="vehicle3" name="vehicle3" value="Boat">
    <label for="vehicle3"> I have a boat</label><br><br>
    <input type="submit" value="Submit">
  </form>

</body>

</html>
```

Activity 9:

```
<!DOCTYPE html>
<html>

<body>

  <h1 style="color:blue;text-align:center;">This is a heading</h1>
  <p style="color:red;">This is a paragraph.</p>

</body>

</html>
```

Activity 10:

```
<!DOCTYPE html>
<html>
<body>
  <article>
    <p class="paragraph-one" style="color: darkmagenta; font-size: 2rem; text-align: center">
      <a href="freecodecamp.org" style="text-decoration: none; color: crimson">freeCodeCamp</a>
      is one of the best platforms to learn how to code
    </p>
```

```

<p>
  Learning to code is free on freeCodeCamp, that's why they call it
  freeCodeCamp
</p>
<p>
  freeCodeCamp generates money through donations inorder to pay
employees
  and maintain servers.
</p>
<p>
  If you're generous enough, consider joining others who have been
  donating to freeCodeCamp
</p>
<p>
  At freeCodeCamp, it's not all about typing on a code editor alone,
  there's a forum like StackOverflow, where you can ask questions about
  your coding problems and get answers from campers alike.
</p>
</article>
</body>
</html>

```

3. Lab Tasks

1. Create a table as given below

Schedule					
Time	Monday	Tuesday	Wednesday	Thursday	Friday
9:00	MAT 104		MAT 104		MAT 104
10:00		PHI 201		PHI 201	
11:00	SPA 207		SPA 207		SPA 207
Noon	LUNCH				

2. Create a simple form as shown below

a.

How it looks on your web page

Your name:

Your email:

Please rate this page:

☐ Poor ☐ OK ☐ Good

b.

Please enter your name: *how wide?*

The first line of your address: *how wide?*

Your district: *how wide?*

Your town: *how wide?*

Post-Code: *how wide? (Are all post-codes 6/7 characters wide with a space in the middle?)*

Telephone Number: *how wide? How many digits in a phone number?*

Email address: *how wide? How many characters should we allow for?*

Please select the item you want to buy: ☒ for T-shirts, Linen-shirts, Jeans, Jumpers, Jackets

Which size ? ☒ for X-Small, Small, Medium, Large, X-Large,

Which colour: *Menu for:* White, Navy blue, Black, Red, Green, Purple

Suggestions box: *how big?*

[Click here to clear the form if you want to order another item: Reset form here](#)

Submit your order: *Submit button here*