**Unit 1- Introduction to HTML**

**HTML Introduction**

HTML is the standard markup language for creating Web pages.

What is HTML?

HTML stands for Hyper Text Markup Language

HTML is the standard markup language for creating Web pages

HTML describes the structure of a Web page

HTML consists of a series of elements

HTML elements tell the browser how to display the content

HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

**HTML Page Structure**

Below is a visualization of an HTML page structure:

<html>

<head>

<title>Page title</title>

</head>

<body>

<h1>This is a heading</h1>

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

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

</body>

</html>

The content inside the <body> section will be displayed in a browser. The content inside the <title> element will be shown in the browser's title bar or in the page's tab.

**History of HTML**

Tim Berners-Lee, a physicist at the CERN research institute in Switzerland invented in 1991. This first version consisted of 18 HTML tages. Now, there are currently about 140 HTML tags, although not all of them are supported by modern browsers.

1991- Tim Berners-Lee invents HTML 1.0

1993- HTML 1.0 is released. Not many developers are creating websites at this time.

1995- HTML 2.0 is published. This contains the features of HTML 1.0 plus new features. This remained the standard markup language for designing and creating websites until 1997.

1997- HTML 3.0 was invented. Here, Dave Raggett introduced a fresh draft on HTML, which improved new features of HTML and gave more powerful characteristics for webmasters in designing websites. Unfortunately, the powerful features slowed down the browser in applying further improvements.

1999- The widely-used HTML 4.0 comes out. It is very successful.

2014- HTML 5.0 is released and used worldwide. It is said to be the extended version of HTML 4.01 which was published in 2012.

**HTML Documents**

All HTML documents must start with a document type declaration: <!DOCTYPE html>.

The HTML document itself begins with <html> and ends with </html>.

The visible part of the HTML document is between <body> and </body>.

**Example**:

<!DOCTYPE html>

<html>

<body>

<h1>My First Heading</h1>

<p>My first paragraph.</p>

</body>

</html>

**Output**

**My First Heading**

My first paragraph.

**The <!DOCTYPE> Declaration**

The <!DOCTYPE> declaration represents the document type, and helps browsers to display web pages correctly.

It must only appear once, at the top of the page (before any HTML tags).

The <!DOCTYPE> declaration is not case sensitive.

The <!DOCTYPE> declaration for HTML5 is:

**<!DOCTYPE html>**

**HTML <a> Tag**

**Definition and Usage**

The <a> tag defines a hyperlink, which is used to link from one page to another.

The most important attribute of the <a> element is the href attribute, which indicates the link's destination.

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.

**Example**

Create a link to W3Schools.com:

<!DOCTYPE html>

<html>

<body>

<h1>The a element</h1>

<a href="https://www.w3schools.com">Visit W3Schools.com!</a>

</body>

</html>

**Output**

**The a element**

**Visit W3Schools.com!**

**Example**

How to use an image as a link:

<!DOCTYPE html>

<html>

<body>

<p>

An image as a link: <a href="https://www.w3schools.com">

<img border="0" alt="W3Schools" src="logo\_w3s.gif" width="100" height="100">

</a>

</p>

</body>

</html>

**Output**

An image as a link: 

**Example**

How to link to an email address:

<!DOCTYPE html>

<html>

<body>

<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>

**Output**

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:

Send email

**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.

**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:

<!DOCTYPE html>

<html>

<body>

<h2>The target Attribute</h2>

<a href="https://www.w3schools.com/" target="\_blank">Visit W3Schools!</a>

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

</body>

</html>

**Output**

**The target Attribute**

Visit W3Schools!

If target="\_blank", the link will open in a new browser window or tab.

**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**

<!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>

**Output**

**Absolute URLs**

W3C

Google

**Relative URLs**

HTML Images

CSS Tutorial

**HTML Links - Use an Image as a Link**

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

**Example**

<!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"><img src="smiley.gif" alt="HTML tutorial" style="width:42px;height:42px;"></a>

</body>

</html>

**Output**

**Image as a Link**

The image below is a link. Try to click on it.



**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):

**Example**

<!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>

**Output**

**Link to an Email Address**

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:

Send email

**Button as a Link**

To use an HTML button as a link, you have to add some JavaScript code.

JavaScript allows you to specify what happens at certain events, such as a click of a button:

**Example**

<!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>

**Output**

**Button as a Links**

Click the button to go to the HTML tutorial.

**HTML Tutorial**

**Link Titles**

The title attribute specifies extra information about an element. The information is most often shown as a tooltip text when the mouse moves over the element.

**Example**

<!DOCTYPE html>

<html lang="en-US">

<body>

<h2>Link Titles</h2>

<p>The title attribute specifies extra information about an element. The information is most often shown as a tooltip text when the mouse moves over the element.</p>

<a href="https://www.w3schools.com/html/" title="Go to W3Schools HTML section">Visit our HTML Tutorial</a>

</body>

</html>

**Output**

**Link Titles**

The title attribute specifies extra information about an element. The information is most often shown as a tooltip text when the mouse moves over the element.

Visit our HTML Tutorial

For a complete list of all available HTML tags, visit HTML Tag Reference @ <https://www.w3schools.com/html/>