HTML

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 was created by *Sir Tim Berners-Lee* in late *1991* but was not released officially, which was published in 1995 as HTML 2.0.
- HTML 4.01 was published in late 1999 and was a major version of HTML.
- *HTML 1.0* was released in *1993* with the intention of sharing information which can be readable and accessible via web browsers. But not much of the developers were involved in creating websites. So the language was also not growing.
- Then comes the *HTML 2.0*, published in *1995*; which contains all the features of HTML 1.0 along with that few additional features; which remained as the standard markup language for designing and creating websites until January 1997 and refined various core features of HTML.
- Then comes the *HTML 3.0*, where *Dave Raggett* who introduced a fresh paper or draft on HTML. It included improved new features of HTML, giving more powerful characteristics for webmasters in designing web pages. But these powerful features of new HTML slowed down the browser in applying further improvements.
- Then comes the *HTML 4.01* which is widely used and was a successful version of HTML before *HTML 5.0*, which is currently released and used worldwide. HTML 5 can be said for as an extended version of HTML 4.01 which was published in the year *2012*.

An HTML element is defined by a start tag, some content, and an end tag:

<tagname>Content goes here...</tagname>

The HTML element is everything from the start tag to the end tag:
<h1>My First Heading</h1>
<p>My first paragraph.</p>

Start tag	Element content	End tag
<h1>	My First Heading	</h1>
<p>	My first paragraph.	</p>
 	none	none

Some HTML elements have no content (like the <br> element). These elements are called empty elements. Empty elements do not have an end tag!

```
<!DOCTYPE html>
<html>
    <head>
        <title>Page Title</title>
    </head>
    <body>
        <h1>My First Heading</h1>
        <p>My first paragraph</p>
    </body>
</html>
```

Note: HTML is not case sensitive.

```
<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>
```

Tags	Description
<!DOCTYPE>	Represents the document type, and helps browsers to display web pages correctly.
<html>	Defines the root of an HTML document
<head>	
<body>	Defines the document's body
<h1>	HTML headings are defined with the <h1> to <h6> tags.
<p>	HTML paragraphs are defined with the <p> tag:
<a>	HTML links are defined with the <a> tag:
 	The tag defines a line break, and is an empty element without a closing tag:

- All HTML elements can have **attributes**

- **Attributes** provide **additional information** about elements

- **Attributes** are always specified in **the start tag**

- **Attributes** usually come in name/value pairs like: **name="value"**

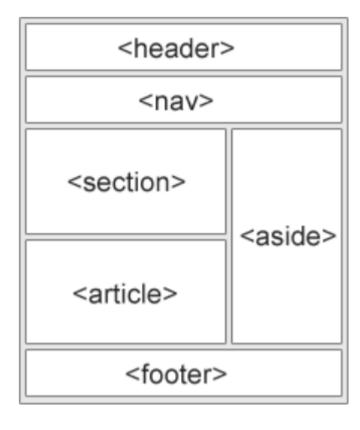| Block Level Elements	Inline Elements
It is used to divide the blocks and called as "Block Level Elements"	It is also used to divide the blocks and called as "Inline Elements"
It takes the Entire width	It only takes the Element width
Examples: ▢ \<section\> ▢ \<paragraph\> ▢ \<Div\> ▢ \<table\> ▢ \<form\>	Examples: ▢ \<a\> , ▢ \<span\> ▢ \<input\> ▢ \<bold\> ▢ \<italic\> ▢ \<Superset\> ▢ \<strong\> ▢ \<subset\>

- Semantic elements = elements with a meaning.
- A semantic element clearly describes its meaning to both the browser and the developer.
- Examples of non-semantic elements: <div> and <span> - Tells nothing about its content.
- Examples of semantic elements: <form>, <table>, and <article> - Clearly defines its content.
- Many web sites contain HTML code like: <div id="nav"> <div class="header"> <div id="footer"> to indicate navigation, header and footer
- In HTML there are some semantic elements that can be used to define different parts of a web page:

Example:
<article>, aside, <details>, <figcaption>, <figure>, <footer>, <header>, <main>, <mark>, <nav>, <section>, <summary>. <time>

- <header> - Defines a header for a document or a section
- <nav> - Defines a set of navigation links
- <section> - Defines a section in a document
- <article> - Defines an independent, self-contained content
- <aside> - Defines content aside from the content (like a sidebar)
- <footer> - Defines a footer for a document or a section
- <details> - Defines additional details that the user can open and close on demand
- <summary> - Defines a heading for the <details> element

HTML Attributes

Attribute Name	Description and Example
href	The <a> tag defines a hyperlink. The href attribute specifies the URL of the page the link goes to:
	Visit Google Search Page
src	The <img> tag is used to embed an image in an HTML page. The src attribute specifies the path to the image to be displayed:
	<img src="img_girl.jpg">
width and height	The <img> tag should also contain the width and height attributes, which specifies the width and height of the image (in pixels):
	<img src="img_girl.jpg" width="500" height="600">
alt	The required alt attribute for the <img> tag specifies an alternate text for an image, if the image for some reason cannot be displayed. This can be due to slow connection, or an error in the src attribute, or if the user uses a screen reader.
	<img src="img_girl.jpg" alt="Girl with a jacket">

Attribute Name	Description and Example
style	The style attribute is used to add styles to an element, such as color, font, size, and more.
	This is a red paragraph.
lang	You should always include the lang attribute inside the <html> tag, to declare the language of the Web page. This is meant to assist search engines and browsers. The following example specifies English as the language
	<!DOCTYPE html> <html lang="en"> <body> ... </body> </html>

Formatting elements were designed to display special types of text:

- ** - Bold text**
- ** - Important text**
- **<i> - Italic text**
- **<em> - Emphasized text**
- **<mark> - Marked text**
- **<small> - Smaller text**
- **<del> - Deleted text**
- **<ins> - Inserted text**
- **<sub> - Subscript text**
- **<sup> - Superscript text**

HTML Formatting Elements

Attribute Name	Description and Example
	The HTML element defines bold text, without any extra importance.
	This text is bold
	The HTML element defines text with strong importance. The content inside is typically displayed in bold.
	This text is important!
<i>, <em>	The HTML <i> element defines a part of text in an alternate voice or mood. The content inside is typically displayed in italic.
	<i>This text is italic</i>
<small>	The HTML <small> element defines smaller text
	This is some smaller text.
<mark>	The HTML <mark> element defines text that should be marked or highlighted:
	Do not forget to buy <mark>milk</mark> today.

Attribute Name	Description and Example
<sub>	The HTML <sub> element defines subscript text. Subscript text appears half a character below the normal line, and is sometimes rendered in a smaller font. Subscript text can be used for chemical formulas, like H_2O
	This is _{subscripted} text.
<sup>	The HTML <sup> element defines superscript text. Superscript text appears half a character above the normal line, and is sometimes rendered in a smaller font. Superscript text can be used for footnotes, like WWW[1]:
	This is ^{superscripted} text.
<ins>	The HTML <ins> element defines a text that has been inserted into a document. Browsers will usually underline inserted text:
	My favorite color is ~~blue~~ <ins>red</ins>.

TESTYANTRA
SOFTWARE SOLUTIONS (INDIA) PVT. LTD.

Thank You !!!

No.01, 3rd Cross Basappa Layout, Gavipuram Extension,
Kempegowda Nagar, Bengaluru, Karnataka 560019

praveen.d@testyantra.com

www.testyantra.com

EXPERIENTIAL
learning factory