

A / HTML Introduction

1- Basic Structure :

An HTML document consists of two important parts:

-Document Creation (What the users will see)

-Tags (How they will see it)

Tag <html> is considered to be the head of the family. It is from this tag that the browser recognizes that it is an HTML document.

PS: For every opening tag there is a closing tag like this : </html>

Tag <html> is followed by the <head> tag. This is a special one, and the content written inside is not displayed on the webpage; it comprises of the title (of the browser window) or any other instructions, which you want to provide to the web browser. For example:

```
<head>
  <title>Welcome to jungle!</title>
</head>
```

The <head> tag is followed by the <body> tag, where the actual content is visible on the webpage is written. Like headings, paragraphs, images etc.

The basic structure of an HTML document:

```
<html>
  <head>
  </head>
  <body>
  </body>
</html>
```

2- Something to Ponder:

Before moving forward, certain questions must be answered:

-Question 1: How do Web Browsers interact with HTML?

→ Browsers do not and cannot read the content directly from the place where it is stored. To settle this conflict, web servers are used. A Web Server acts like an intermediate, it listens to the browser's request and executes it for us. The document delivered to the browser contains the HTML text, which is displayed just by identifying the tag <html> from the document.

-Question 2: What makes HTML so powerful?

→ As it turns out, HTML is a very friendly language. It is not needy and works out well using a simple text editor. It is the least complicated when it comes to search engines.

-Question 3: Why HTML is not a programming language?

→ HTML only controls the presentation, structure and layout the data on a webpage. It does not contain any functional or programming logic. Manipulating data is not its nature, neither does it perform tasks like; event handling, taking input and displaying output.

-Question 4: What is a self-closing tag?

→ The opening and closing are both included under same tag. Not all tags can be used in such a manner. Identified by the forward slash towards the end.

B / First Webpage:

1- What is a Webpage?

A Web Server can be hardware / software that lets you deliver the webpage to the browser. Browsers just have to read and decode the instructions, displaying exciting content on the screen.

2- First Webpage:

-Open an IDLE (VS code...) or a simple text editor like Notepad, TextEdit, etc.

-The basic structure to follow:

```
<html>
  <head>
</head>
  <body>
    My First Web Page
  </body>
</html>
```

-Save the text file as .html or .htm file.

-Open the file in the web browser

If you notice in the last code, something was added. Inside the body Tag.

Indentation made it easy to understand. The Tags were written using lower case. So correct capitalization should be used throughout the code. Indentation is an art of providing space from the margin, to provide structure to the code.

C / HTML Tags

1- Paragraph Tag:

As coffee is to morning, a paragraph is to the <body> in a webpage.

-**Denotation:** <p> & </p>

-**Location:** It is placed inside the body tag.

-**Usage:** Make new paragraphs.

-**Visibility:** The text placed inside this tag will be visible on the main webpage.

```
<html>
  <head>
</head>
  <body>
    My First Web Page
    <p>
      That's a paragraph
    </p>
  </body>
</html>
```

PS: Putting one tag inside another one is called Nesting.

2- The break Tag

Writing sentences in a new line provides symmetry to the writing. The break tag lets you start a sentence from a new line in HTML.

-Denotation:

-Location: It is placed inside the body tag.

-Usage: Start a new line.

-Special Characteristic: It is a self-closing HTML Tag.

Example:

```
<html>
  <head>
  </head>
  <body>
    My First Web Page
    <p>
      That's a paragraph<br>
      That's a line break
    </p>
  </body>
</html>
```

3- Headings in HTML

In order to prioritize the important stuff, we use headings in HTML.

-Denotation: <h1></h1> ; <h2></h2> ; <h3></h3> ; <h4></h4> ; <h5></h5> ; <h6></h6>

-Location: It is placed inside the body tag.

-Usage: <h1> to <h6> arranged on basis of priority (<h1> is the highest).

-Visibility: The text placed inside this tag will be visible on the main webpage.

Example:

```
<html>
  <head>
  </head>
  <body>
    <h1> I'm heading 1</h1>
    <h2> I'm heading 2</h2>
    <h3> I'm heading 3</h3>
    <h4> I'm heading 4</h4>
    <h5> I'm heading 5</h5>
    <h6> I'm heading 6</h6>
  </body>
</html>
```

4- Bold, Italics Underline

There are different tags present to format the content on a webpage.

a- The bold Tag:

-**Denotation:**

-**Location:** It is placed inside the body tag.

-**Usage:** Mark the text bold to showcase importance.

b- The Italic Tag:

-**Denotation:** <i></i>

-**Location:** It is placed inside the body tag.

-**Usage:** Mark the text in italic font.

c- The Underline Tag:

-**Denotation:** <u></u>

-**Location:** It is placed inside the body tag.

-**Usage:** Underline text.

Example:

```
<html>
  <head>
  </head>
  <body>
    <p>
      <b>I'm bold text</b>
    </p>
    <p>
      <i>I'm Italic text</i>
    </p>
    <p>
      <u>I'm underlined Text</u>
    </p>
  </body>
</html>
```

Quiz

- a- Correct HTML tag for the Largest heading is?
.<heading>
.<head>
.<h1>
.<text>
- b- The correct HTML tag for inserting a line break.
*<break>
*

*<new>
- c- Which of theses have pair tags?

<body> ; <head> ; ; all of them

D / Special Tags

1- Image Tag

-Denotation:

-Location: It is placed inside the body tag.

-Usage: Add an image to the page.

-Formula:

src is an attribute to include image's path. The image path can also be a URL

An attribute provides additional information about html tag.

Exemple:

```
<html>
  <head>
  </head>
  <body>
    
  </body>
</html>
```

2- The Division Tag

-Denotation: <div></div>

-Location: It is placed inside the body tag.

-Usage: Divide page into sections.

Exemple :

```
<html>
  <head>
  </head>
  <body>
    Can I meet my other half?
    <div>
      <p>
        I'll meet you soon
      </p>
    </div>
  </body>
</html>
```

3- The title Tag

-Denotation: <title></title>

-Location: It is placed inside the head tag.

-Usage: Provide special instructions to webpage

-Visibility: Not on the main webpage.

Example:

```
<html>
  <head>
    <title>Can you see me</title>
  </head>
  <body>
  </body>
</html>
```

4- The anchor Tag

-Denotation: <a>

-Location: It is placed inside the body tag.

-Usage: Linking between webpages.

Example:

```
<html>
  <head>
  </head>
  <body>
    <a href="www.google.com"> Click here</a>
  </body>
</html>
```

href is another attribute used to define the link.

Quiz

Question 1: Write your name on a tag to display it on browser window.

→

Question 2: Tag that helps to create sections in web page.

→

Question 3: What is the attribute of a (anchor tag)?

→

E / HTML Attributes

1- What is an Attribute?

An attribute gives extra information about the HTML element to the browser. It can be a property related to width, height, or color of an object. The attribute is made up of two parts:

- a- Attribute name
- b- Attribute Value

= is used to set value, and the value is placed inside double quotes “. Example:

Attribute= “Value”

2- The Basic Attributes

a- Anchor

href forms the same passage between the two webpages / documents. In layman terms, it lets you provide the link of the web page to allow the user to connect to other webpages.

```
<a href="www.google.com"> Click here</a>
```

b- Image

The src attribute lets you provide the path for the image in a webpage. It instructs the browser where to look for the image.

```

```

We can define a width, height etc for an image using attributes:

- alt**: Defines text/name for an image. Just in case it cannot be displayed.
- width: An optional attribute to set the width of the image.
- height: An optional attribute to set the height of the image.

3- The style Attribute

The style attribute does the final touch up of the HTML elements. It lets you change, or add different styles to it. It can be in the form of background color, size, etc.

Simple syntax: style= "property:value"

The property implies basic color, the font-size gives the property of an element.

```
<h4 style="color: green;"> Can we change this to red</h4>  
<h4 style="font-size: 200%;"> No green looks better </h4>
```

F / Final Webpage

1- Our journey So Far

HTML – Hyper Text Markup Language. We came across the lifeline of the HTML language. The Tags.

Some turned out to be the roots -<html>, <head>, <body>. Some turned to be the branches -<p>, <h1>..

######

Some turned out to be the special fruits -<div>, <a>, <image>, <title>.

2- Practice

- Open the text editing documents.
- Save it as mywebpage.html or any name.
- For simplicity, save all files and images in one folder.
- Write the basic structure.

```
<html>  
  <head>  
  </head>  
  <body>  
  </body>  
</html>
```

