**CODE LIKE ADA DAY 2: HTML LESSON**

HyperText Markup Language uses a special syntax or notation to describe the structure of a webpage to the browser. HTML elements usually have opening and closing tags that surround and give meaning to content.

HTML tags are written inside of angle brackets. Opening tags have the syntax of <tag>, while closing tags have the syntax of </tag>.

For example, different elements can describe text as a heading, paragraph or list item.

The first element in an .html file is the <html> element. This comes after the doctype declaration (<!doctype HTML). The html element is the parent of all other elements in the file and is also known as the root element.

The direct descendants of the html element are the <head> and <body> elements. The head element contains the metadata about the document such as its scripts, style sheets, title, etc. and the body element represents the content of the HTML document, which is what gets rendered in the browser window.

The head element can contain the <title> element (tells the browser the title of the document), the <link> element (this points the browser to an external resource, such as a style sheet file or an icon for the home screen), the <script> element (contains scripts to be run for site interactivity), the <style> element (specifies the styling for the site), and/or the <meta> element (which contains additional metadata that cannot be represented by the other elements aforementioned). The browser reads the contents of the head element before it loads the content of the body element.

The body element contains all other elements in the document. Below listed are the elements that were discussed in the morning segment which will be used over the course of building your portfolio:

* <h\*>: There are 6 different heading elements of varying sizes. The “\*” may be replaced with any number from 1 to 6 depending on the hierarchy of the heading to be used.
* <p>: The p element represents a paragraph. Paragraphs are block elements, which means that they are rendered on their own line, independent of the element preceding or following them.
* <a>: The anchor element creates a hyperlink to anything a URL can address, such as webpages, email-addresses, or even sections of the same webpage. The a element requires a href attribute to specify where the hyperlink redirects to. The default setting is for the link to open in the same tab. To prevent this, you can add an attribute called “target” and set it to “\_blank”.

example: <a href=“https://www.google.com” target=“\_blank”>Link to Google</a>

* <img>: The img element simply embeds an image into the document. Its “src” attribute points to the source of the image, whether that be a folder on your PC or the image link to an image on the internet.
* <ol>/<ul> {<li>}: Lists can be rendered as either ordered or unordered. The ol element renders ordered lists, numbering them in ascending order starting from one. The ul element renders unordered lists, such as the one in this document. Inside the list element (ordered or unordered) the list elements are indicated using the li element.
* <div> & <span>: These elements have no special meaning in HTML. The difference between them is that while div elements are block elements, span elements are inline. This means that div elements are rendered in a block independent of the preceding and succeeding elements, while span elements are rendered as part of the line. When block elements occur within another element that contains text, the block elements begin on a new line, while inline elements will continue on the same line, hence the name.
* <strong>, <em> & <u>: These elements are used to indicate font face (bold or italics) and text decoration (underline). Strong tags make text bold; em tags italicize text for emphasis and u tags underline texts.
* <hr>: This makes a horizontal line, good for making demarcations.
* <form>: The form element represents the section of the document containing interactive functionality for users to submit information.
* <label>: The label element as the name suggests simply contains a caption for the item it is for.
* <input>: This element is used to create interactive controls for web-based forms in order to accept data from the user.

ASSIGNMENT

1. Research 5 HTML elements not included in the handout or discussed during the morning session, including 5 attributes that may be applied to one of more of them.
2. In your portfolio index.html file, declare your doctype and set up your html, head and body elements, including your meta and title elements in your head element. In your body element, include a header, and a form with fields for inputting name, age and contact information. Your form should include a submit button, labels and at least 3 input fields. Include your 5 elements (and attributes) in your file (get creative).
3. Assignment should be submitted before 10:00am tomorrow to Kelechi on Telegram. Private message.