

Coding FOUNDATION by Samuel from PLP

What is coding?

Coding is giving instructions to a computer then the computer follows those instructions. But how do we do this?

HTML

1. What is HTML? Language of the web.
2. What does it do? Creates contents on the webpage. Whatever you see on the webpage is called an element. (e.g. Button, paragraph, form, image etc.) Many webpages makes a website.
3. How do this work? Using HTML syntax
4. What is **syntax**? These are rules that the computer understands just like Grammer in English for humans. When you break the rule, the computer will not understand you unlike when you break the rules of Grammer bado tutakuelewa.
5. Any example? `<button>I am a button</button>` or `<p>I am a paragraph of text</p>`
6. Hoop! I don't understand that! It's simple.
Opening tag & closing tag formed using greater than symbol and less than symbol.
like beginning of something and end of something the difference is that the closing tag has a backward slash. However, there is an exemption to this rule for void elements. Such as an image.
7. Can HTML modify elements? yes using **Attributes** eg `href="youtube .com"`
8. How is HTML organized? Through HTML structure.

```
<!DOCTYPE html>
```

```
<html>
```

```
<head></head>
```

```
<body></body>
```

```
</html>
```

9. What are these now? Let me explain.

HTML STRUCTURE EXPLANATION

1. <!DOCTYPE html>

This line declares the document type and version of HTML being used. In this case, it's HTML5.

2. <html lang="en">

This line starts the HTML document and specifies the language of the document (English in this case).

3. <head> </head>

This line starts the head section of the HTML document. The head section contains metadata about the document, such as its title, character set, and links to external resources like stylesheets and scripts.

4. <meta charset="UTF-8">

This line specifies the character encoding used in the document. UTF-8 is a widely used character encoding that supports a wide range of characters from different languages.

5. <meta name="viewport" content="width=device-width, initial-scale"

This line sets the viewport properties for responsive web design. It ensures that the webpage renders properly on different devices and screen sizes.

6. <title>My Company</title>

This line sets the title of the webpage, which is displayed in the browser's title bar or tab.

7. <link rel="stylesheet" href="styles.css">

This line links an external stylesheet (styles.css) to the HTML document. Stylesheets are used to define the visual presentation and layout of the webpage.

8. </head>

This line closes the head section of the HTML document.

9. <body> </body>

This line starts the body section of the HTML document. The body section contains the content that is displayed on the webpage, such as text, images, and interactive elements.

10. <header>

This line defines the header section of the webpage, typically containing the logo, navigation menu, and other introductory content.

11. <h1>My Company</h1> There is h1 to h6

This line defines a level 1 heading (h1) and sets the text "Architecture Company" as the heading content.

12. <nav>

This line defines the navigation section of the webpage, typically containing links to different pages or sections within the same page.

**13. **

This line defines an unordered list, which is used to create a list of items without any specific order.

14. Projects

These lines define list items (li) within the unordered list (ul). Each list item contains a hyperlink (a) with a specific destination (href attribute), such as "#projects", "#services", "#about", and "#contact".

15. <section id="projects">

This line defines a section of the webpage with the id attribute "projects". IDs are used to uniquely identify elements within an HTML document.

16. <div class="container">

This line defines a division (div) with the class attribute "container". Classes are used to apply CSS styles to elements and group them for styling purposes.

**17. **

This line inserts an image (img) with the source (src) "project1.jpg" and an alternative text (alt) "Project 1". Alt text is displayed if the image fails to load and is also used for accessibility purposes.

18. <p>content</p>

This line defines a paragraph (p) with some placeholder text ("content")

19. <footer>

This line defines the footer section of the webpage, typically containing copyright information, contact details, and other supplementary information.

CSS

Modifies the elements html helps to creates. Eg by adding color, size, shape and form.