A webpage is like a 🎂 with 3 layers

1. HTML = structure and content
2. CSS = design or look and feel
3. JavaScript = interaction and behaviour

Each technology has its responsibility.

HTML

HTML is a markup language. It's not a programming language because it doesn't understand logic. It simply contains information about the structure and display of a document.

- The bottom layer.
- This layer is all about structure, semantics, meaning.
- Used to tell people and machines how the page is structured.

Examples:

- `<h1>` = this is the most important title

- `<h2>` = this is a subtitle

- `<p>` = just a paragraph

- HTML is very important for machines (software, computers).

- If HTML is used properly, a search engine (like Google) can understand the structure of the document. For example, if the search engine sees `<h1>` tags, it know that this text is important.

You can easily abuse HTML and use it for design. A classic bad example is using HTML tables to make columns in the page.

A good web designer never uses HTML for design.

CSS

CSS, or Cascading Style Sheets, is used to apply visual design to HTML elements. Cascading refers to the parent-child structure of CSS. A style set on a parent element will also apply to its child elements, unless a child has style rules that override that of the parent.

- CSS = aka 'stylesheets'.
- CSS determines what the page looks like.

CSS is not required to make a webpage. If you don't add a stylesheet yourself, the browser's default stylesheet will be used.

JavaScript

- JS: used for interaction
- For example: animations, popups, form validation, …