JAVASCRIPT.PROGRAMMERS.IM

The third official web language

HTML gives the page its meaning. CSS gives it a look. JavaScript makes it move.

MDN's beginner course calls JavaScript "the third layer of the layer cake of standard web technologies," after HTML and CSS.[1] Here is what each official layer does, in MDN's own words, and how the three work together on a single button.

1. HTML — structure and meaning
HTML is the markup language that we use to structure and give meaning to our web content, for example defining paragraphs, headings, and data tables, or embedding images and videos in the page.[1]

2. CSS — style and layout
CSS is a language of style rules that we use to apply styling to our HTML content, for example setting background colors and fonts, and laying out our content in multiple columns.[1]

3. JavaScript — behaviour
JavaScript is a scripting language that enables you to create dynamically updating content, control multimedia, animate images, and pretty much everything else. (Okay, not everything, but it is amazing what you can achieve with a few lines of JavaScript code.)[1]

How the three layers build a button

MDN walks through a labelled button. HTML gives it structure and purpose, CSS makes it look like a control, and JavaScript changes the name when you click.[1]

HTML

```
<button>Player 1: Chris</button>
```

Mark the button up so it has structure and purpose.

CSS

```
button {
  font-family: "Helvetica Neue", sans-serif;
  text-transform: uppercase;
  border: 2px solid rgb(200 200 0 / 60%);
  background-color: rgb(0 217 217 / 60%);
  color: rgb(100 0 0 / 100%);
}
```

Add style rules so the button looks like a control.

JS

```
function updateName() {
  const name = prompt("Enter a new name");
  button.textContent = `Player 1: ${name}`;
}
const button = document.querySelector("button");
button.addEventListener("click", updateName);
```

Add behaviour: on a click, ask for a name and update the label.

Which layer would you use?

Tick the layer, then check the answers below.

- ☐ Add a heading and a paragraph to a page. *HTML / CSS / JavaScript*
- ☐ Set the font and put the content in two columns. *HTML / CSS / JavaScript*
- ☐ Update the text on the page when someone clicks. *HTML / CSS / JavaScript*

Answers. Heading and paragraph: HTML. Font and columns: CSS. Updating text after a click: JavaScript.[1]

Source, checked 17 November 2026. All wording and the button example are from one document: MDN Web Docs, Learn web development, "What is JavaScript?" https://developer.mozilla.org/en-US/docs/Learn_web_development/Core/Scripting/What_is_JavaScript

ReallyByte — Fun. Educational. Useless.™ · javascript.programmers.im · Free educational fact sheet. Not affiliated with MDN or Mozilla. The sample CSS is shortened slightly to fit; the official page has the full rule set.