

1.

What is JavaScript?

JavaScript is the programming language of HTML and the Web

We talked about the three essentials of Web Development being HTML, CSS, JS. Now we are going to add that last 3rd part.

HTML (markup language) – effects content (What's your headline, how many divisions are in your page, how many paragraphs do you have, what are the contents of those paragraphs?)

CSS (style sheet language) – effects presentation (What font does the headline use, what's the background color of the page, what's the width of the div that the paragraphs are in?)

JavaScript (programming language) – effects behavior and interactivity (What happens when you mouse over a menu, what happens when you type the wrong value in a form field, how long does a photo slideshow take to move from one image to the next?)

2.

A **scripting** or **script language** is a programming **language** that supports scripts, programs written for a special run-time environment. It's a programming language designed for integrating and communicating with other programming languages. JS is found alongside HTML. **Scripting languages** are often interpreted (rather than compiled). So instead of compiled all at once, it is interpreted one command at a time.

Not a stand-alone programming language. It has to run inside a Web Browser. It has limitations but does exactly what it supposed to do. It's not about accessing files, or getting input or output, it's not a general purpose language it's designed to manipulate web pages.

3.

History

JavaScript and Java are completely different languages, both in concept and design. It just so happened that Java was very popular when JavaScript came out and the name was just a ploy to ride on that wave of popularity, but don't confuse the two. Java does not rely on a browser to run. You can use it for app development however.

JS was invented by Brendan Eich at Netscape in 1995 and first appeared in that company's Navigator 2.0 browser. And it became an ECMA standard in 1997.

ECMA-262 is the official name. ECMAScript 11th edition was released in 2020.

ECMA-262 is the JS international standard.

*(It acquired its current name in 1994, when the **European Computer Manufacturers Association** (ECMA) changed its name to reflect the organization's global reach and activities. As a consequence, the name is no longer considered an acronym.)*

4.

Purpose – make web pages more interactive

With JS you can now make web applications and web apps, not just sites.

Pg 4 and 5 text.

1. Access Content

Selecting elements of the page, users can input values and JS can access them

2. Modify Content

Add attributes to elements, add text to pages, change css class for new css rules

3. Program Rules

Define different steps for computer to follow, make calculations, determine which image grows larger when clicked, make sure an animation always starts at the bottom of a page not matter what device the user is on

4. React to Events

Button pressed, img clicked, hover, info from a form, when the page loads

5.

JS is front-end development and is best for front-end developers and designers. Meaning the code runs on the user's computer by their browser. The browser interprets the code. As opposed to a back-end language like PHP where the code is run on the server before it's sent to the browser.