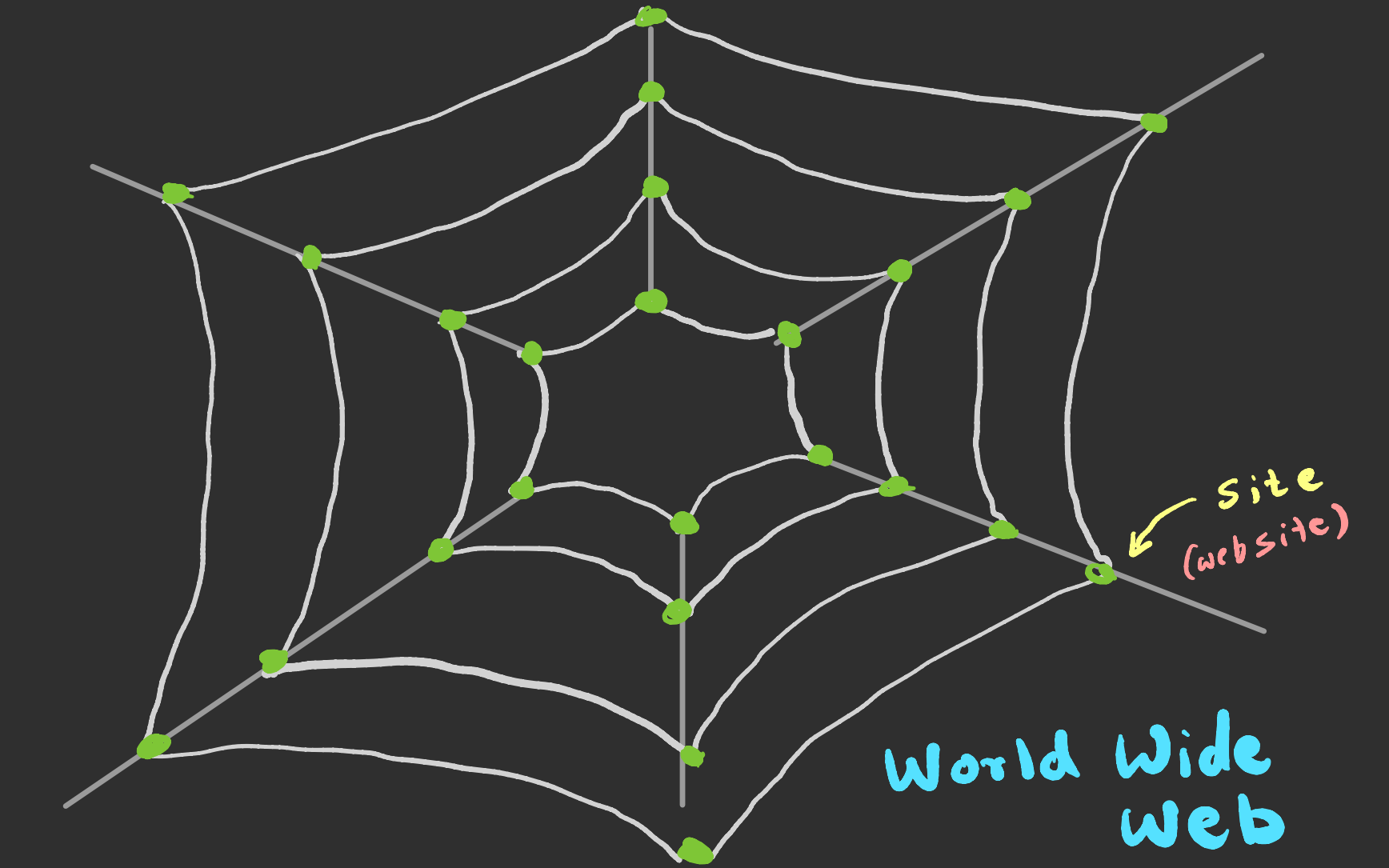
JavaScript

History

The concept of WWW was born in 1989. First browser and server was created by Tim Berner Lee in 1990.

The internet is much older than world wide web


Site
(website)
World Wide
Web

Initially, Internet was primarily a collection of static HTML pages.

Have you seen the oldest web page?

HTML: HyperText Markup Language

```
<a href="https://premium.mysirg.com">
    My website
</a>
```

HTML gives structuring to the content of page and hypertext to link different webpages stored on various servers around the globe, but they lacked the ability to handle user interactions, perform calculations on the client side or update content dynamically without requiring a full page reload from the servers

Netscape

Netscape communications, with its navigator browser dominating the market, was at the forefront of web innovation.

They recognised the need for a scripting language that could run directly in the browser, allowing developers to add dynamic features and intelligence to webpages

In early 1995, Netscape hired Brendan Eich with the goal of embedding a scheme interpreter in the navigator browser

Scheme was a language

However, strategic decisions and market pressures quickly shifted the direction

Sun Microsystem’s, Java programming language was gaining significant traction at the time positioned as a language for building more complex, applet based web components. Netscape saw an opportunity to create a complementary scripting language that would be easier to learn and use than Java, targeting a broader audience of web designers and scripters who were not necessarily experienced programmers.

Under pressure to have a scripting language ready for the upcoming release of Netscape navigator 2.0, Brendan Eich was tasked with creating this new language. The initial project was code named “Mocha” .

In May 1995, Brendan act worked intensely for just 10 days to create the first prototype of mocha.
The mandate was to make the language “look like Java” syntactically as a marketing strategy to leverage Java‘s popularity, but to keep it simple and accessible

Eich took inspiration from Scheme, Self, Awk and Perl.

The result was a language that was dynamically typed, object based (using prototypes rather than classes like Java) and had a C like syntax

Renaming

As the language developed and got closer to being included in the Netscape navigator 2.0, its name was changed from mocha to LiveScript in September 1995 .

However, in a key marketing move, Netscape and Sun Microsystems entered into a partnership to capitalise on the immense popularity of Java, LiveScript was strategically renamed JavaScript in December 1995, coinciding with the release of Netscape navigator 2.0 .

Microsoft

The success of JavaScript in Netscape navigator prompted Microsoft to develop its own implementation of a client-site scripting language for its internet explorer browser. This implementation was called JScript and was included in the internet explorer 3.0 released in 1996 .

The existence of two slightly different versions of the similar scripting language in the two major browsers of the time created compatibility, issues for web developers, leading to the era of browser wars, and the need to write code that could work across different browsers

In November 1996, work began on standardising JavaScript under ECMA International technical committee.
Because Sun Microsystems held the trademark of the name, JavaScript, the standardised language was officially named ECMAScript

European Computer Manufacturers Association

Implementer	Engine
Mozilla's	SpiderMonkey
Google's	V8
Apple's	JavaScriptCore or Nitro or SquirrelFish

Evolution beyond the Browser

A major turning point came with the creation of node.js by Ryan Dahl in 2009, which allowed Java script to be run on the server-side, opening up entirely new possibilities for full stack development

node.js is JavaScript RunTime to execute JS code without the help of browsers.

Popular JavaScript Full Stacks

MERN

MongoDB Express.js React Node.js

MEVN

MongoDB Express.js Vue.js Node.js

MEAN

MongoDB Express.js Angular Node.js

Next.js

Any DB (MongoDB, PostgreSQL, etc)

React + SSR + API Routes + Static generation

Deployed on Vercel or Netlify

T3 Stack

TypeScript (Typed JS), Tailwind (CSS styling), tRPC (typesafe API), Next.js (FE + BE), Prisma (ORM)

JamStack