

The (Abundant) State of the web

JAD JOUBRAN - JADJOUBRAN.IO

X.com/joubranjad instagram.com/Jad.of.all.Trades YouTube.com/JadJoubran



WHAT I DO FOR WORK

Learning platform

250,000+ students

LearnJavaScript.online

LearnTypeScript.online

LearnHTMLCSS.online

LearnProgramming.online

React-Tutorial.app

JavaScript/Web Performance Consulting



н	el	р	C)
		1 7	~	•

WHAT I DO FOR FUN

Snowboarding

Yoga, hiking, bouldering, and cycling



Home > Actueel > Blog > Dutch Mountain Trail: De enige echte bergwandeltocht in Nederland

DUTCH MOUNTAIN TRAIL: DE ENIGE ECHTE BERGWANDELTOCHT IN NEDERLAND



Op de Dutch Mountain Trail waan je je in de bergen, maar dan dichtbij huis. Een pittige bergwandeling langs de hoogste toppen in de regio. Een 101 km lange route door alpenweides, langs snelstromende beken, rotswanden en met spectaculaire vergezichten vanaf elke top. Oostenrijk? Nee, Zuid-Limburg!



TERUG NAAR OVERZICHT

ALLES OVER BERGWANDELEN



NKBV-LIDMAATSCHAP

REISVERZEKERING

TIPS VOOR BERGWANDELEN MET KINDEREN

Bergwandelen met kinderen!

Coderen is lead

Bekijk de whitepaper

>

>

>

>



























Source: deno.com/blog/history-of-javascript



Source: deno.com/blog/history-of-javascript

1995: Brendan Eich creates the very first version of JavaScript in 10 days

1996: Microsoft introduces JScript in Internet Explorer 3

1997: Netscape submits JavaScript to ECMA International (trademark issues)

1999: Microsoft releases IE 5 with even more proprietary technology



2003: Apple introduces Safari and WebKit

2004: Gmail Beta is released with asynchronous JavaScript "AJAX"

2006: jQuery is born

Source: deno.com/blog/history-of-javascript

2007: The first iPhone is released without Flash support

2009: Ryan Dahl begins work on Node.js

2012: Microsoft makes TypeScript 0.8 available for the public

2013: First version of React is released

Source: deno.com/blog/history-of-javascript

2008: Google releases Chrome browser, the fastest web browser at the time



2015: ECMAScript 6 (ES2015) is released

2022: Internet Explorer 11 is retired

Source: deno.com/blog/history-of-javascript

2020: JavaScript makes it into space with SpaceX Dragon

2024: The legal battle against Oracle to #FreeJavaScript begins

The Web has come a long way

Developer Experience





Native Capabilities



Developer Experience





<dialog>: The Dialog element

	This	Subgrid	
	beer <u>Lear</u>	Since Septem	Document Pic
	Learn more	Limited availability This feature is not Baselin	
			browsers. <u>Learn more</u> <u>See full cor</u>

Want to dive deeper? Check out <u>webstatus.dev</u>



light-dark() light-dark(light-color, dark-color)

Works in combination with the color-scheme property

```
:root {
    color-scheme: light dark;
}
body {
    background-color: light-dark(white, black);
}
```





CSS Layers

Declare cascade layers and define order of precedence

@layer base, component, page;

@import url("components/_base.css") layer(base);

@import url("components/typography.css") layer(component); @import url("components/helpers.css") layer(component); @import url("components/buttons.css") layer(component); @import url("components/forms.css") layer(component); @import url("components/cards.css") layer(component);

@import url("pages/signin.css") layer(page); @import url("pages/profile.css") layer(page);



Container queries

Style an element based on the size of its containing parent element

Card



Plan your vacation

next vacation!

Source: LearnHTMLCSS.online (Chapter 137)

Why not take some time off and go on vacation? Use our unique tools to plan your

÷





```
<div class="card-container">
    <div class="card"></div>
</div>
<style>
    .card-container {
        container: card / inline-size;
   @container card (max-width: 25rem) {
        .card {
            flex-direction: column;
</style>
```



Web Components

<app-button variant="floating">New</app-button>

Most prevalent use case: Share UI components between frameworks

Low-level primitives or use Lit (lit.dev), which costs 6kb (min+gzipped)





User Interface

<dialog> dialog.showModal()

::backdrop { }

Modal mode rendered in the Top Layer







:has() selector

Parent-level styling based on child or sibling content

Unlocks many interesting use cases

body:has(dialog[open]) { overflow: hidden; }

V Baseline 2023 NEWLY AVAILABLE





3 types: scrollable, snapped, and stuck

```
@container my-header scroll-state(stuck: top) {
    .my-header {
        opacity: 0.8;
    }
```





Customisable <select>

Finally. Yes. For real.

<u>Live demo</u> from Una Kravets



Limited availability



Native carousels

What? Really? Yes.

Live demo from Adam Argyle







Scroll-driven animations

Animate properties based on a scroll-based timeline

Progress indicator + code from Bramus van Damme

<u>Cover to fixed header + code</u> from Bramus van Damme

<u>Shrinking header + code</u> from Bramus van Damme





Native capabilities





Decent SPA support. Limited MPA support.

Demo from Jake Archibald

document.startViewTransition(() \Rightarrow { heroImg.classList.add("full-size"); });

Efficiently create animated transitions between two different states.









Use case by yours truly

Source: developer.chrome.com/blog/document-pip-use-case

Open a floating, always-on-top window that can display arbitrary HTML







Source: LearnJavaScript.online





File System Access API

Live demo by Mehmet

button.addEventListener("click", async () \Rightarrow { const [fileHandle] = await window.showOpenFilePicker(); const file = await fileHandle.getFile(); const contents = await file.text(); });



Interact with files on the user's local device (IDE, photo/video editor, etc.)







Varying requirements and browser support

Apple's Declarative API enforces the userVisibleOnly promise

Source: webkit.org/blog/16535/meet-declarative-web-push/





What does this all mean?

Beyond the inflection point

We went from scarcity to abundance

We are no longer constrained by the web

The web has unprecedented power in reaching the customers of today & tomorrow

Inflection point in the age of Al

It has become easier than ever to build a website/webapp

You must work harder on your Unique Value Proposition

All these features open a wide variety of use cases



How to learn all of this in the age of AI?

It's important to be educated on the capabilities of the web

Syntax has become less important

Wide knowledge is still important (Performance, UX, Accessibility)

(Progressive) Web Apps

Apple implemented "Web Apps" with Web Push support

We're in an ecosystem where no single platform has won (android/iOS/web)

The web continues evolving beyond a collection of pages into a platform for rich, app-like experiences.







Live code or it didn't happen...

gemini.google.com/app/57a1d08193be76f7

Gemini

 \equiv

Ľ

2.5 Pro (preview) 💌

Create a landing page for the Dutch Mountain Trail where there's a section for each...



Show thinking $~\checkmark~$

Okay, I can help you create a modern and sleek landing page for the Dutch Mountain Trail! This page will highlight the "Seven Summits" of the trail, each with a brief description, and will be built using HTML and Tailwind CSS for a responsive and accessible design.

I'll use a deep green as the primary color, evoking nature, and a warm amber as an accent color. The design will be minimal and

focus on readability and a pleasant user.

		\sim								
21	1	(-;	ρ	r	n	H.	r	1	L	
0	N.	Ч	ç							

💾 Video

4	Dutch

 \sim



Gemini can make mistakes, including about people, so double-check it. Your privacy & Gemini

🔞 Deep Research

Ð

۹

3



Dutch Mountain Trail

Discover the "Seven Summits" of the Netherlands

Dutch Scenery

About the Trail

The Dutch Mountain Trail is a challenging 101 km long-distance hike winding through the stunning landscapes of South Limburg. Renowned for its (by Dutch standards) steep climbs and beautiful vistas, it's an adventure that takes you over seven distinct peaks, offering a true taste of the Netherlands' most hilly and scenic region.













Live code...

What's next?

What's next?

Popover + anchor positioning + interesttarget

CSS Scoped styles

CSS if() conditions and custom functions

Typed attr()

What's next?

Project Fugu



our top three priorities

#AppleBrowserBan

Apple's ban of third party browsers on iOS is deeply anti-competitive, starves the Safari/WebKit team of funding and has stalled innovation for the past 10 years and prevented Web Apps from taking off on mobile.

2 Deep System Integration

Web Apps need to become just Apps. Apps built with the free and open web need equal treatment and integration. Closed and heavily taxed proprietary ecosystems should not receive any preference.



Web App Equality

All artifical barriers placed by gatekeepers must be removed. Web Apps if allowed can offer equivalent functionality with greater privacy and security for demanding use-cases.

Source: open-web-advocacy.org

Questions?

InSummery

for rich, app-like experiences.

The fundamental limitations of the Web will most likely stay.

However, the fundamental benefits are still undefeated.

The web has unprecedented power in reaching the customers of today & tomorrow.

The web continues evolving beyond a collection of pages into a platform



THANK YOU!

Add link here



JAD JOUBRAN - JADJOUBRAN.IO

X.com/joubranjad

instagram.com/Jad.of.all.Trades

YouTube.com/JadJoubran

