
ZurichJS
magically optimising your fonts ✨

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hello 👋

nuxt.com • npmx.dev • nitro.build • page-speed.dev
regexp.dev • fontaine.sh • pangrum.com • elk.zone • firstcommit.is

Experts

Microsoft Most Valuable Professional

Vercel



have you used nuxt?

yes



roe.dev/v/yes

39

not yet



roe.dev/v/no

34

what is nuxt?

- a **progressive** framework built on **vue.js** and **nitro**
- **zero-effort** start with great dx
- **best practices** built-in
- fully **configurable** & easily **extensible**

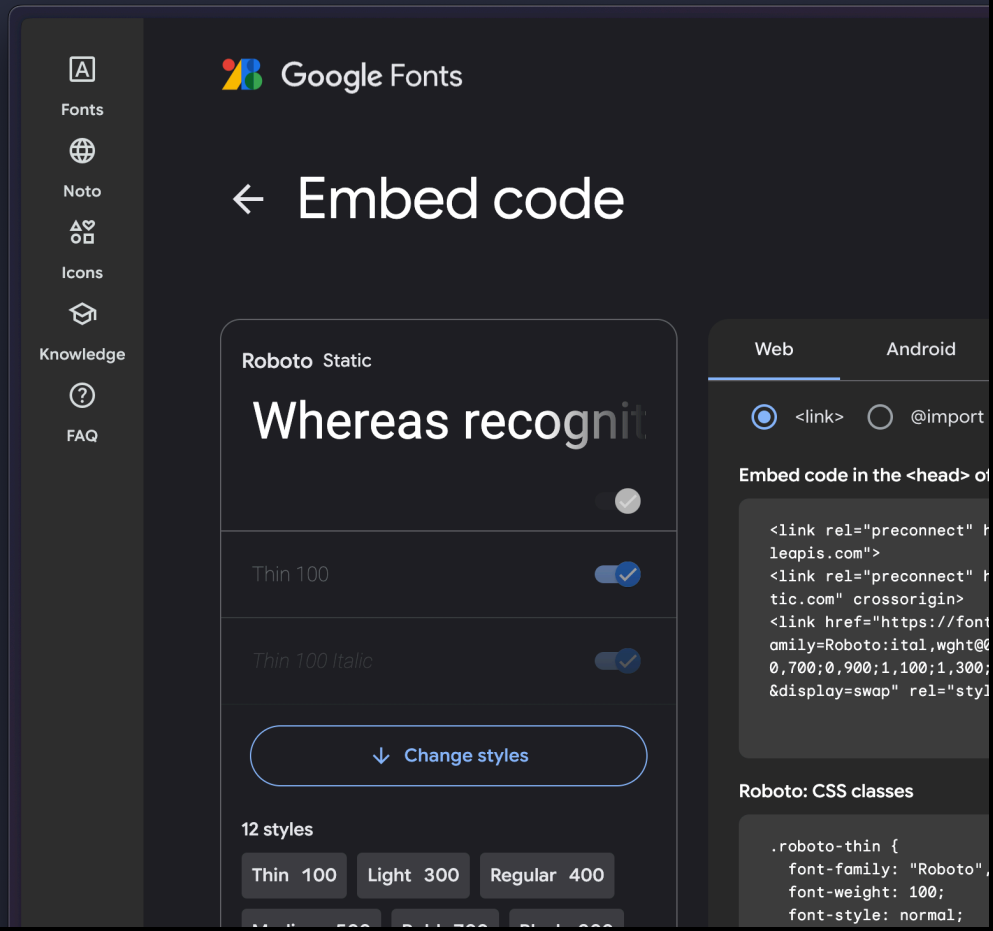


first commit	v1	v2	v3 first commit	v3	v4	v5
October 2016	January 2018	September 2018	July 2020	November 2022	July 2025	November 2026

the challenge of web fonts

the challenge of web fonts

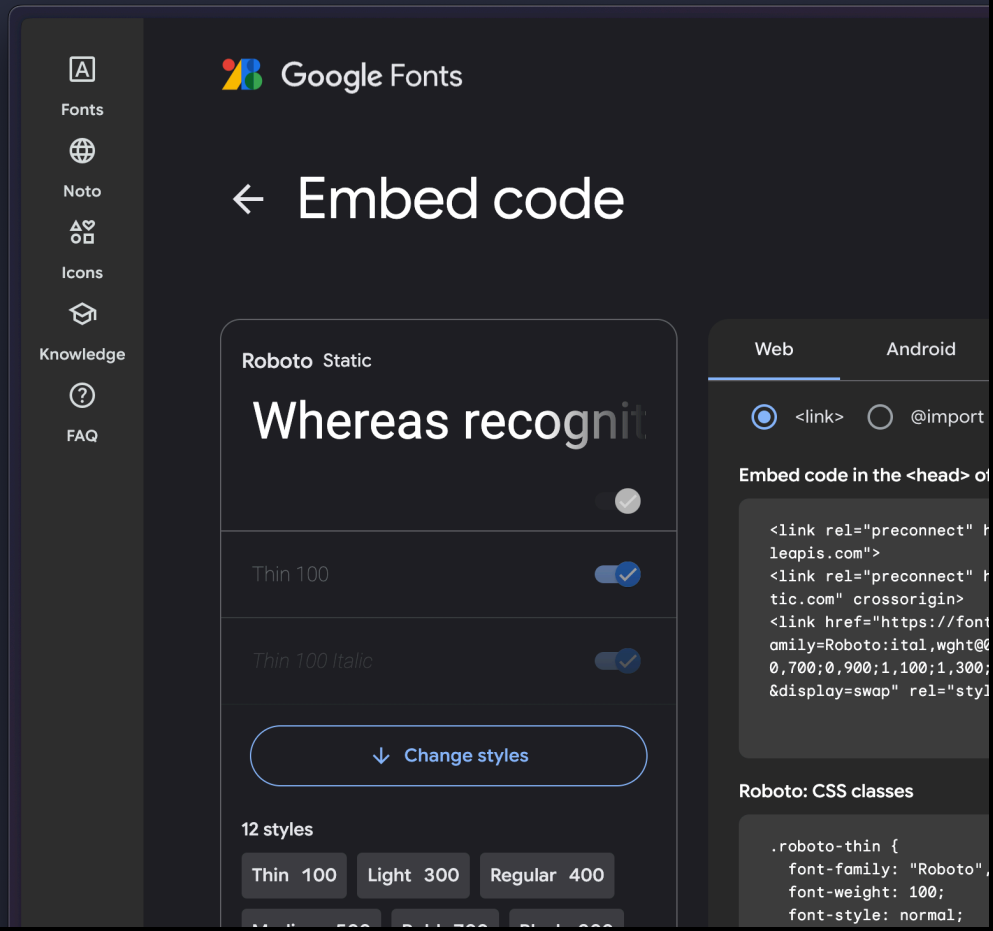
font providers



the challenge of web fonts

font providers

- ✦ **Google Fonts**
- ✦ **Adobe Fonts**
- ✦ **Fontshare**
- ✦ **Fontsource**
- ✦ npm packages (**Cal Sans** or **Geist**)
- ✦ local fonts

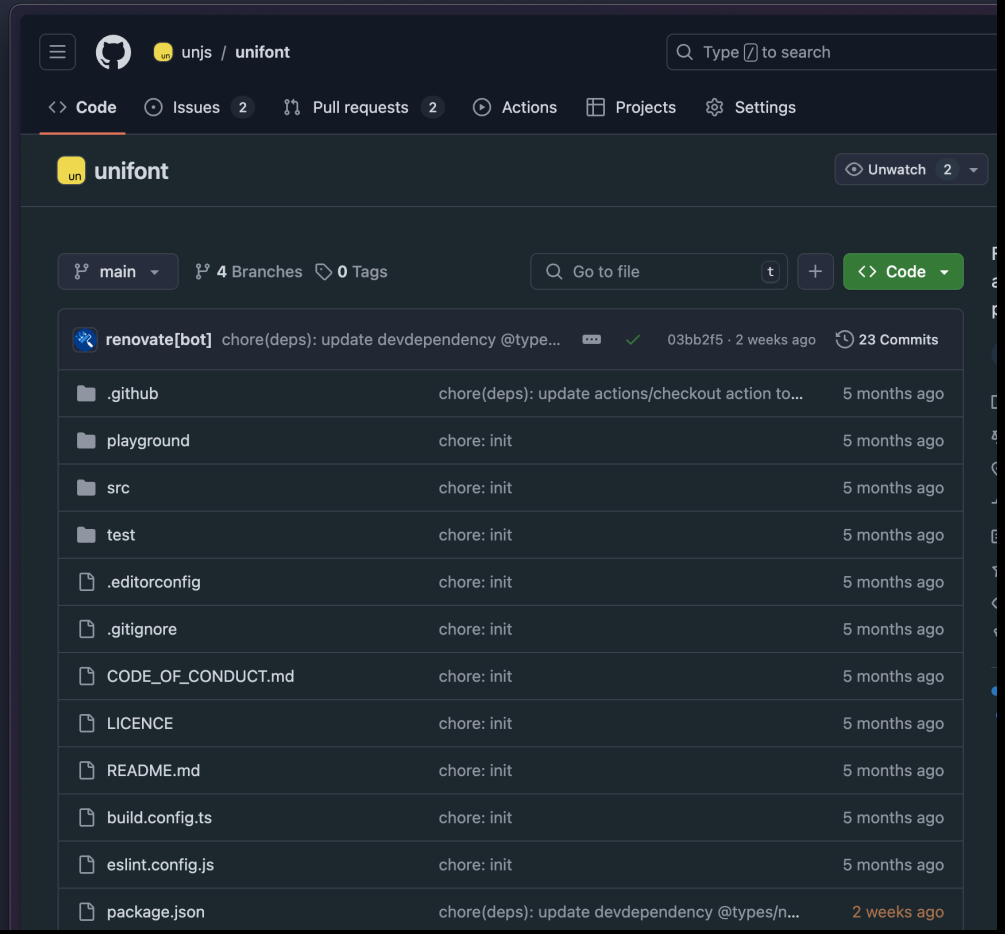


the challenge of web fonts

getting

unjs/unifont

- ✦ 🧱 font provider APIs
- ✦ ⚡ caching and lookup mechanisms
- ✦ ⚗️ hosted proxy for browsers
- ✦ ... and more



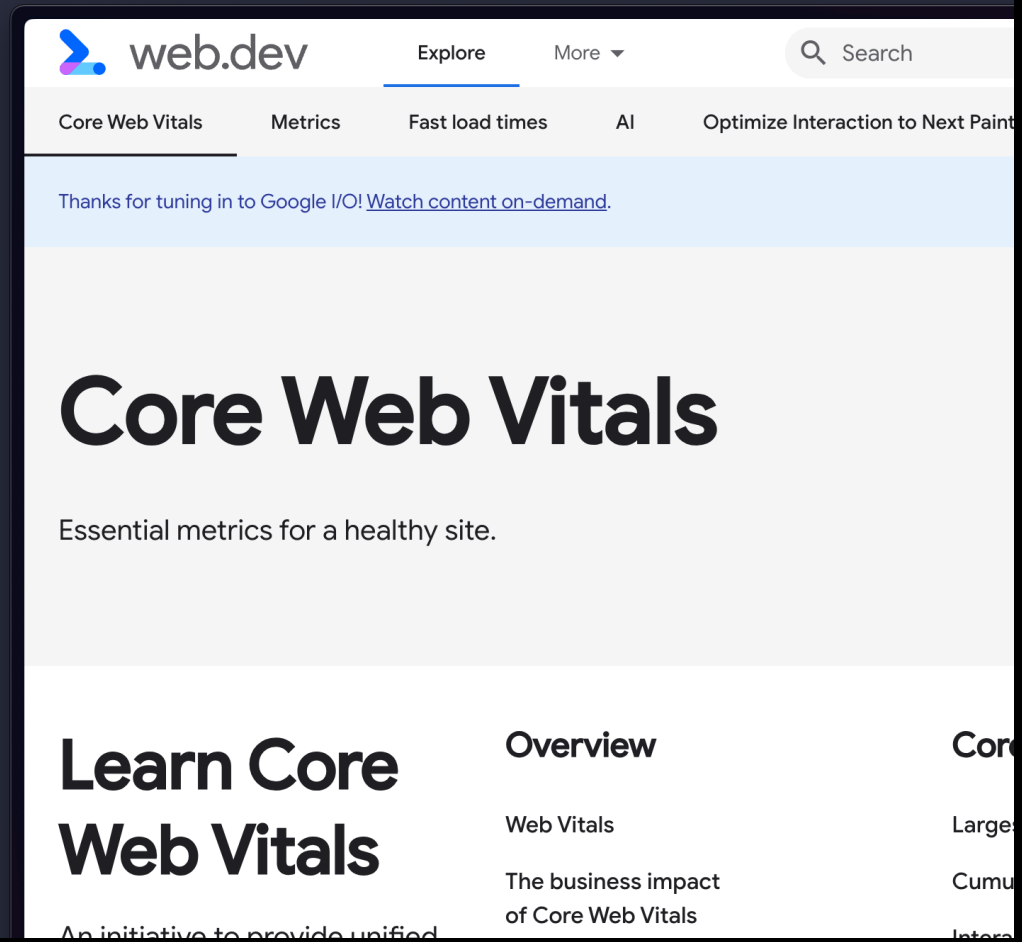


unifont.dev

core web vitals

web.dev/explore/learn-core-web-vitals

- ✦ largest contentful paint · **LCP**
- ✦ cumulative layout shift · **CLS**
- ✦ interaction to next paint · **INP**

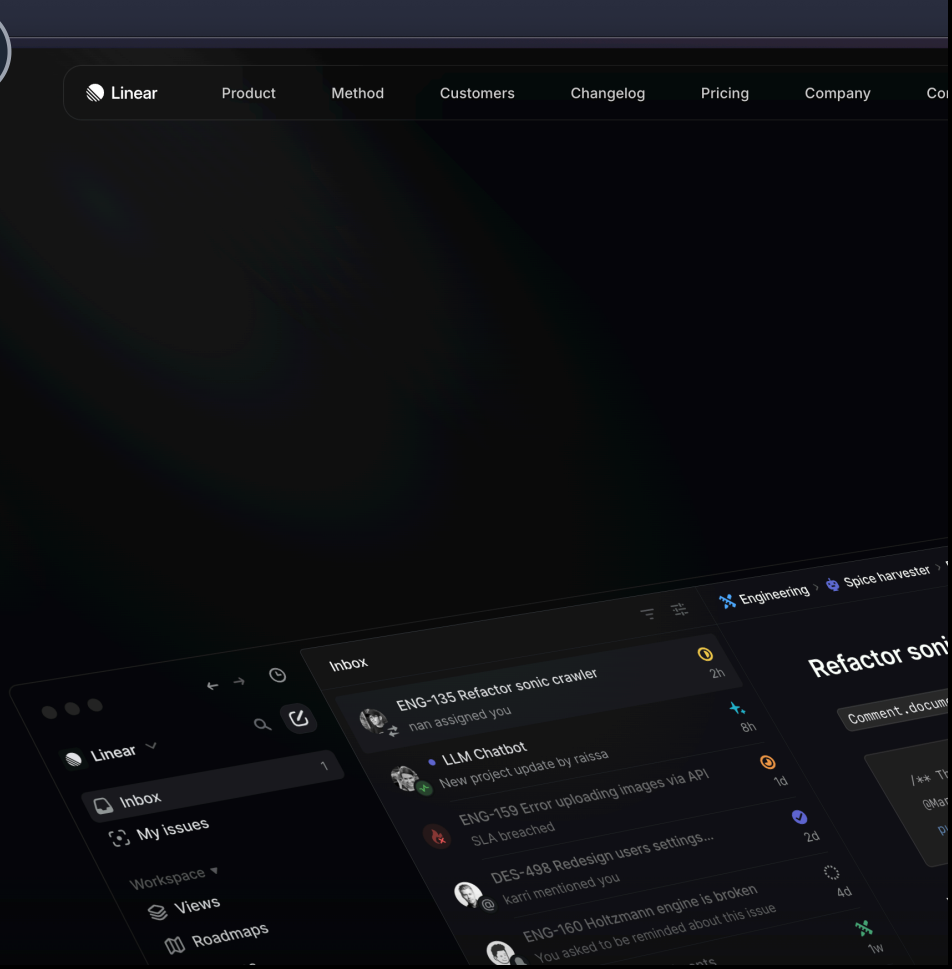


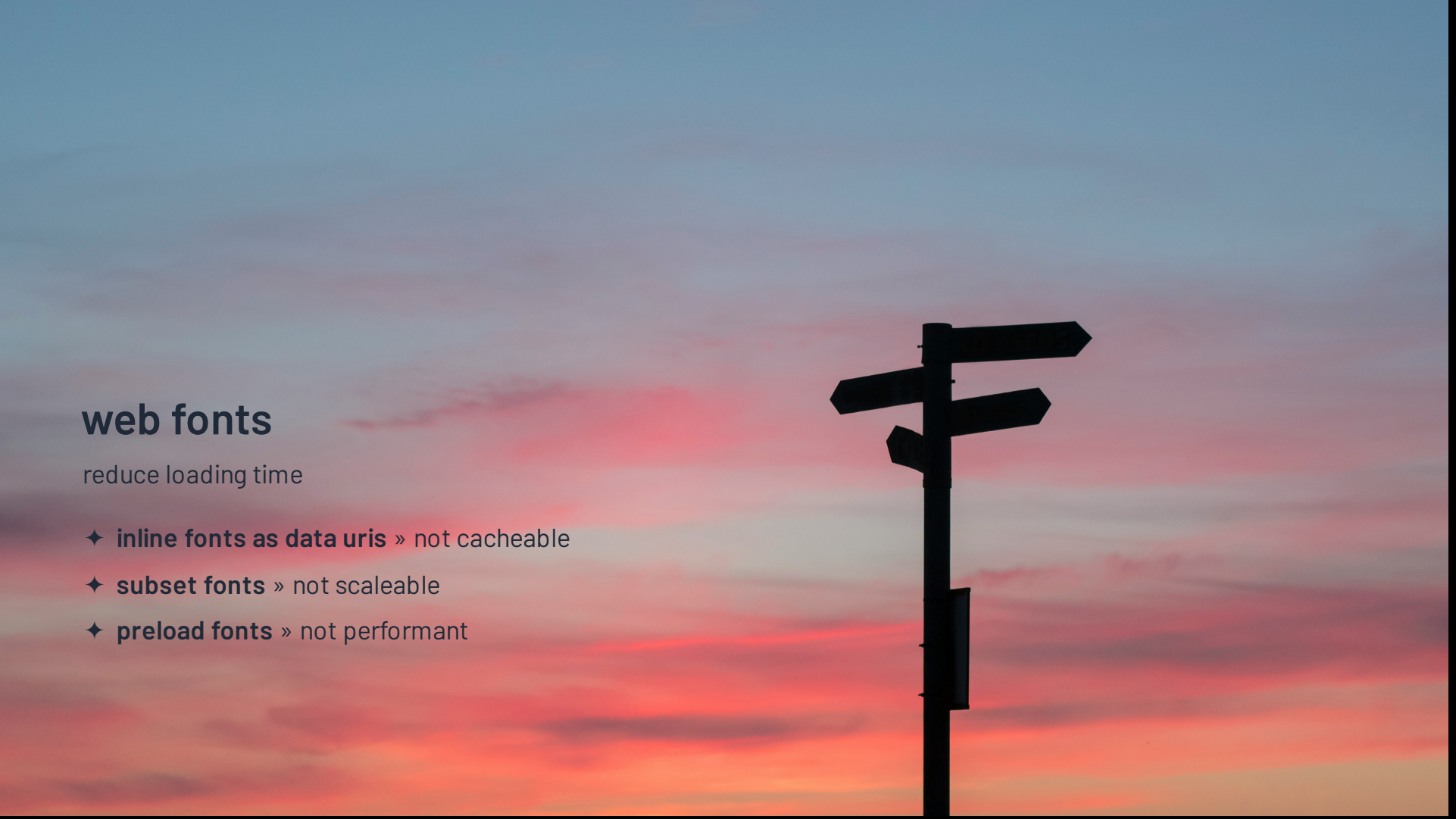
web fonts

... and our friend cumulative layout shift

- `font-display: block;`
- `font-display: swap;`
- with 'native' fallback

Oswald





web fonts

reduce loading time

- ✦ **inline fonts as data uris** » not cacheable
- ✦ **subset fonts** » not scaleable
- ✦ **preload fonts** » not performant

font metrics to the rescue

credits to **Katie Hempenius** KHEMPENIUS

Ascent	1050
Descent	350
Line gap	100
EM size	1000
Line height @ 100px	150

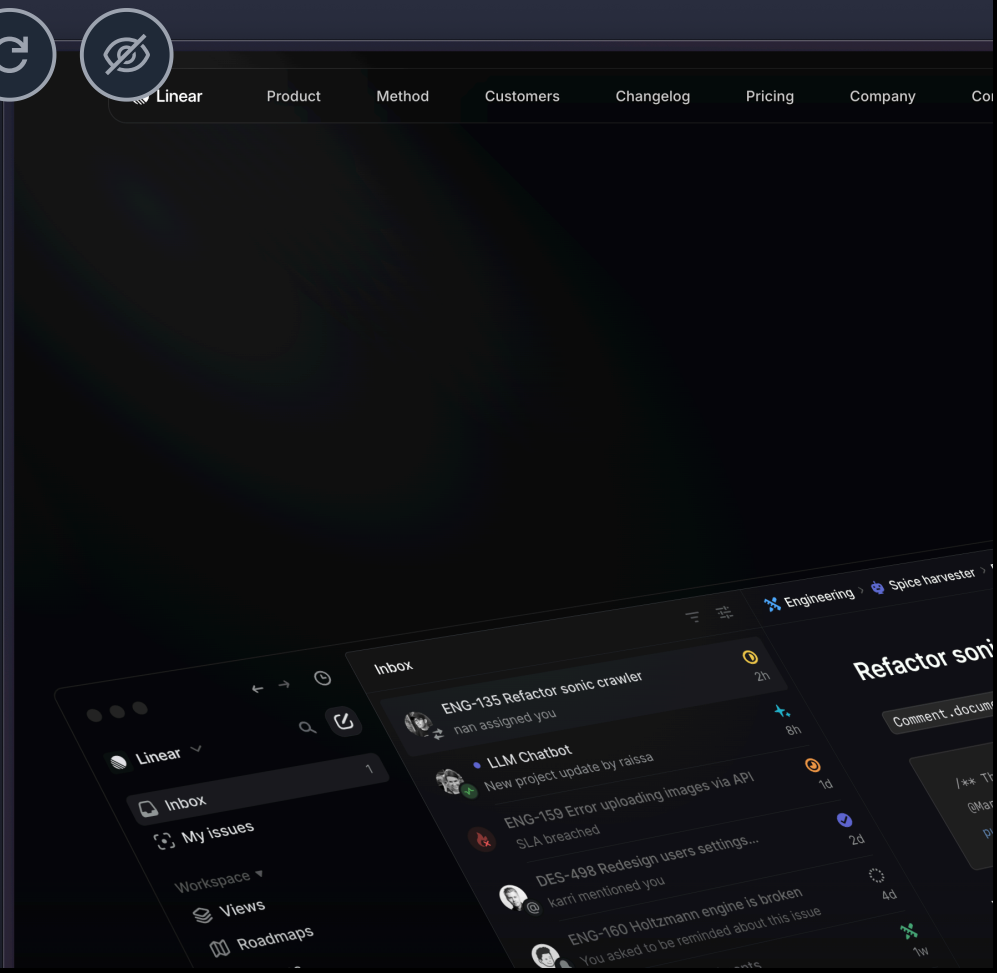
```css
h1 {
  font-family: 'Poppins', poppins-fallback;
  font-size: 100px;
}

@font-face {
  font-family: poppins-fallback;
  src: local("Arial"), local("Verdana");
  ascent-override: 105%;
  descent-override: 35%;
  line-gap-override: 10%;
}
```

font metrics to the rescue

credits to **Katie Hempenius** KHEMPENIUS

Ascent	1050
Descent	350
Line gap	100
EM size	1000
Line height @ 100px	150



making it repeatable

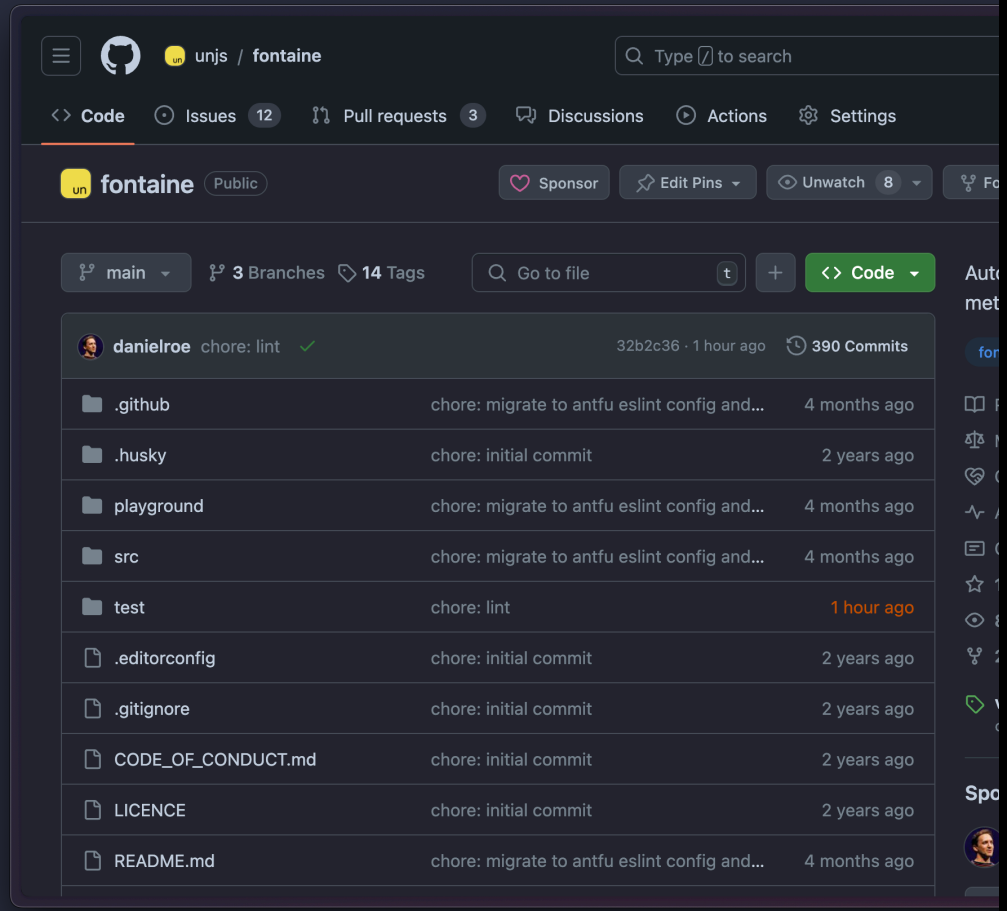
seek-oss/capsize - typography in CSS

```
import { createStyleObject } from '@capsizecss/core'
import arialMetrics from '@capsizecss/metrics/arial'

const capsizeStyles = createStyleObject({
  fontSize: 16,
  leading: 24,
  fontMetrics: arialMetrics,
})
```

unjs/fontaine

- ✦ 🌎 bundler-agnostic · astro, docusaurus, vite, etc
- ✦ ⚡ pure CSS · lightweight
- ✦ 🔥 build-time · zero runtime overhead



making it extensible

unjs/unplugin - unified bundler plugin architecture.

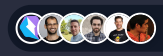
- ✦ webpack
- ✦ rollup
- ✦ vite
- ✦ esbuild
- ✦ rspack
- ✦ ... rolldown, farm

```ts
import { createUnplugin } from 'unplugin'

export default createUnplugin(() => {
  return {
    name: 'i-love-nuxt',
    enforce: 'pre',
    transformInclude: id => id.endsWith('.vue'),
    transform(code) {
      return code.replace(/<!--.*-->/g, '')
    }
  }
})
```

fontless

unjs/fontaine#main/packages/fontless

- ✦ 📦 **zero runtime overhead**
- ✦ 🫂 collaboration with  QWIKDEV · DAMIANPUMAR · GIOBOA · THEJACKSHELTON · SHAIREZ · HI-OGAWA
- ✦ 📏 **metric-based fallbacks + zero-config subsetting**
- ✦ 🔤 **multiple providers**
- ✦ 🎯 **framework agnostic**
  - ▸ Vue, React, Solid, Svelte, Qwik, etc.

how it works

```
<template>
  <h1> Hello World </h1>
</template>

<style scoped>
h1 {
  font-family: 'Poppins', sans-serif;
}
</style>
```

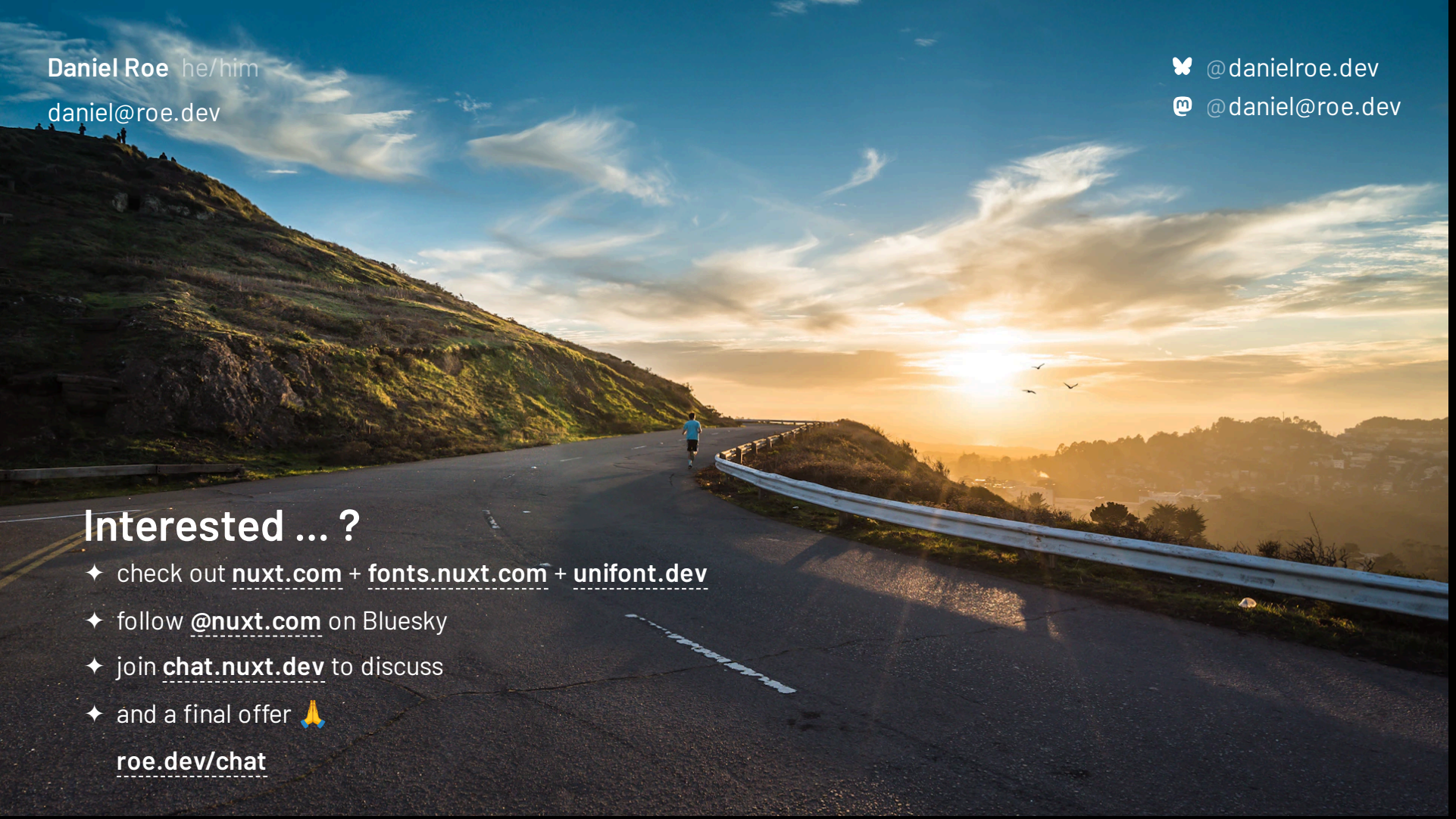
how it works

```
@font-face {
  font-family: 'Poppins';
  src: local("Poppins Regular"), local("Poppins"),
    url("/_fonts/<hash>.woff2") format(woff2);
  font-display: swap;
  unicode-range: U+0100-02AF,U+0304,<more>,
  font-weight: 400;
  font-style: normal;
}

@font-face {
  font-family: "Poppins Fallback: Arial";
  src: local("Arial");
  size-adjust: 112.1577%;
  ascent-override: 93.6182%;
  descent-override: 31.2061%;
  line-gap-override: 8.916%;
}

h1 {
  font-family: 'Poppins', 'Poppins Fallback: Arial', sans-serif;
}
```





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Interested ... ?

- ✦ check out **nuxt.com** + **fonts.nuxt.com** + **unifont.dev**
- ✦ follow **@nuxt.com** on Bluesky
- ✦ join **chat.nuxt.dev** to discuss
- ✦ and a final offer 🙏

  roe.dev/chat