

A woman with long brown hair, wearing a black leather jacket, is shown in profile from the chest up. She is holding a glowing, multi-colored orb in her hands. The background is dark with out-of-focus warm lights, creating a magical atmosphere.

magically optimising your fonts ✨

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hello 🖐️

🔺 nuxt.com • 🌀 nitro.unjs.io • 🕒 page-speed.dev • 🦄 regexp.dev
📖 fontaine.sh • 🦌 elk.zone • 📄 fc firstcommit.is • 🏠 react-to-nuxt.com





the challenge of web fonts

the challenge of web fonts

The screenshot displays the Google Fonts interface for the Roboto Static font family. On the left is a dark sidebar with navigation links: Fonts, Noto, Icons, Knowledge, and FAQ. The main content area is titled 'Embed code' and shows the 'Roboto Static' font family. It lists two styles: 'Thin 100' and 'Thin 100 Italic', both of which are selected with blue checkmarks. Below the styles is a button labeled 'Change styles'. At the bottom, there are buttons for '12 styles', 'Thin 100', 'Light 300', and 'Regular 400'. On the right side, there are two tabs: 'Web' and 'Android'. The 'Web' tab is active, showing a radio button selection for '<link>' and a code block containing the HTML code for embedding the font. The 'Android' tab is also visible, showing a radio button selection for '@import' and a code block containing the CSS code for embedding the font.

Google Fonts

← Embed code

Roboto Static

Whereas recognit

Thin 100

Thin 100 Italic

↓ Change styles

12 styles

Thin 100 Light 300 Regular 400

Web Android

☒ <link> ☐ @import

Embed code in the <head> of

```
<link rel="preconnect" href="https://fonts.googleapis.com">
<link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
<link href="https://fonts.googleapis.com/css?family=Roboto:ital,wght@0,100;0,300;0,400;0,700;0,900;1,100;1,300;1,400;1,700;1,900&display=swap" rel="stylesheet">
```

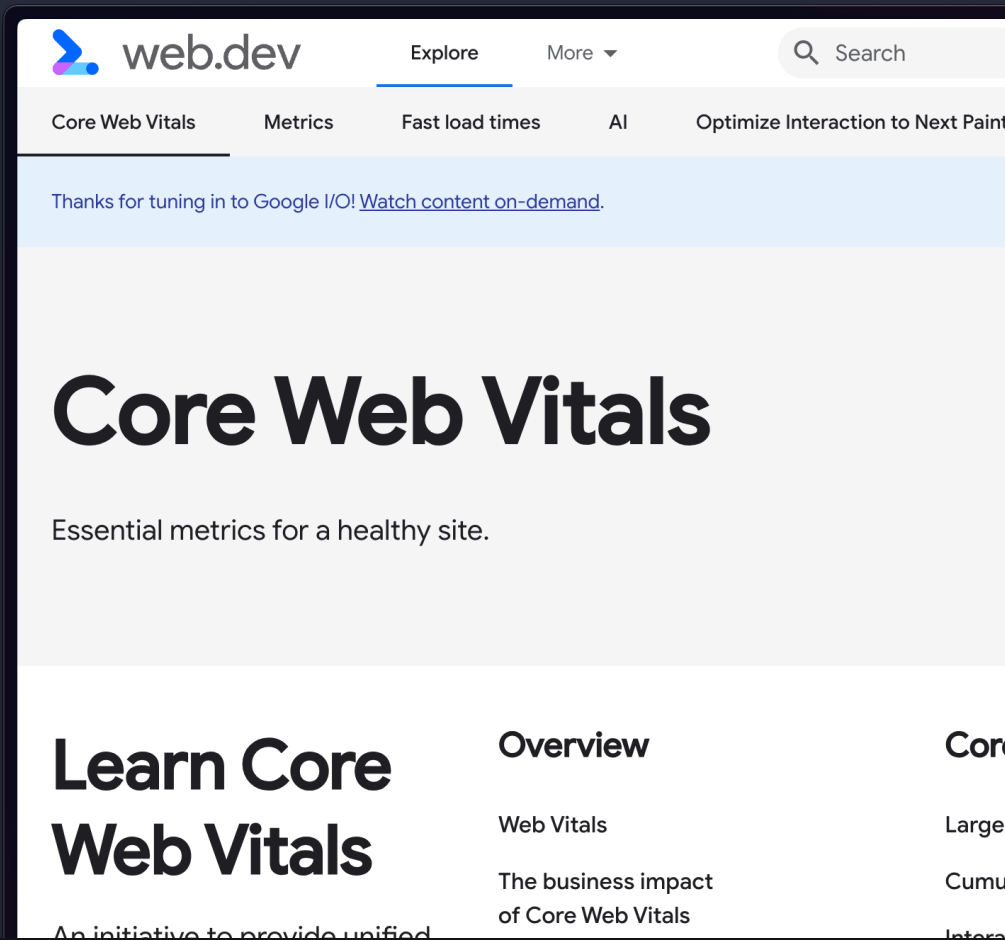
Roboto: CSS classes

```
.roboto-thin {
  font-family: "Roboto",
  font-weight: 100;
  font-style: normal;
```

core web vitals

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

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



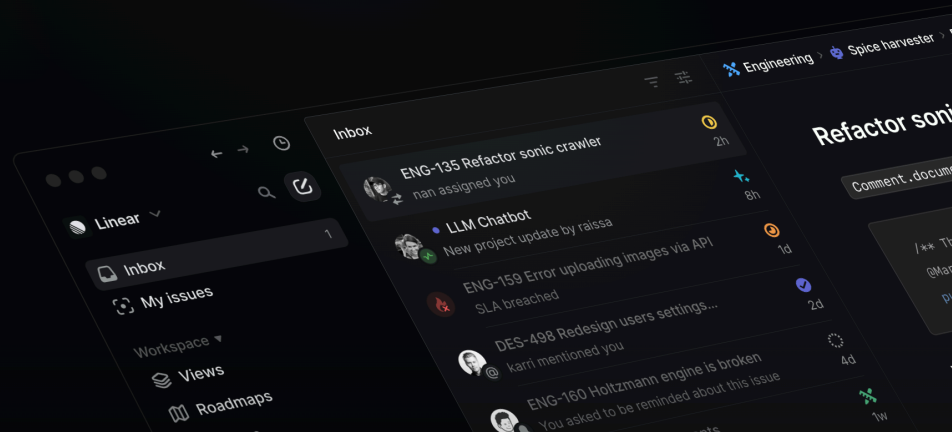


web fonts

... and our friend cumulative layout shift

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

Open Sans



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

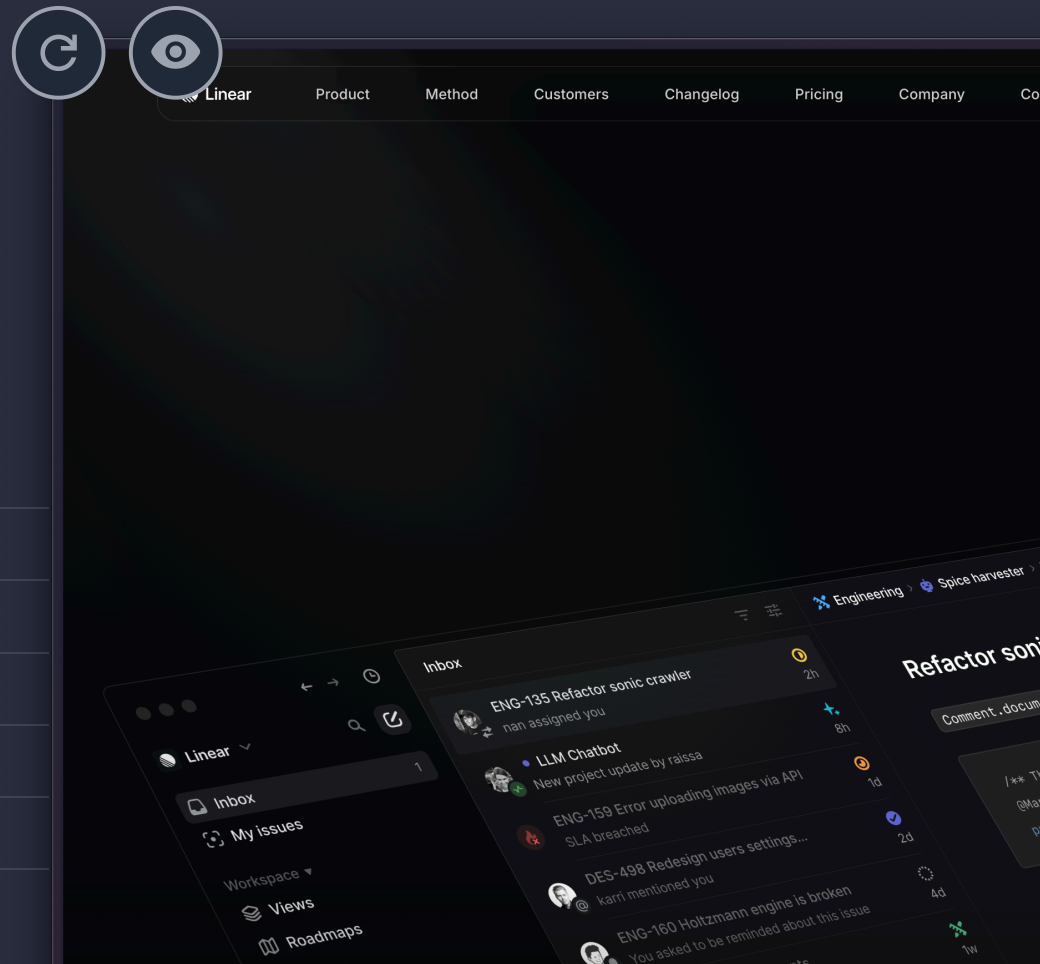
```
h1 {
  font-family: 'Poppins', poppins-fallback;
  font-size: 100px;
}

@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,  
})
```

making it extensible

unjs/unplugin - unified bundler plugin architecture.

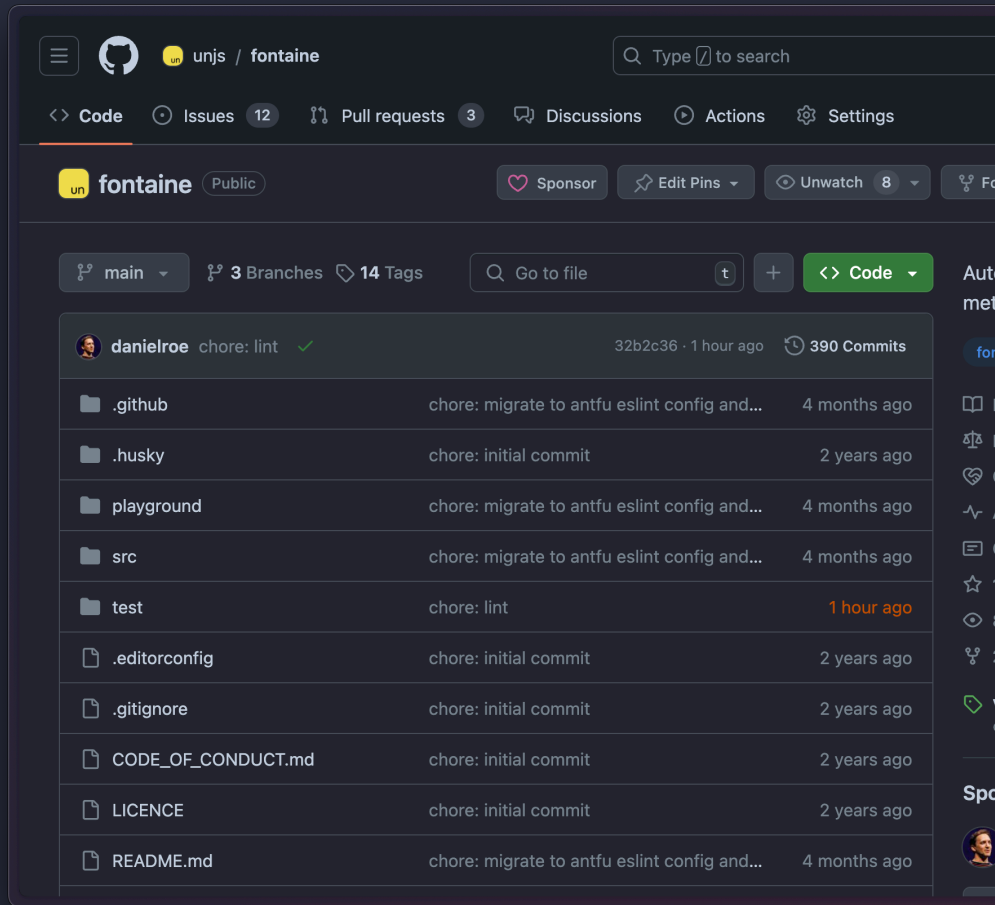
- ✦ webpack
- ✦ rollup
- ✦ vite
- ✦ esbuild
- ✦ rspack
- ✦ ... rolldown, farm

```
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, '')
    }
  }
})
```

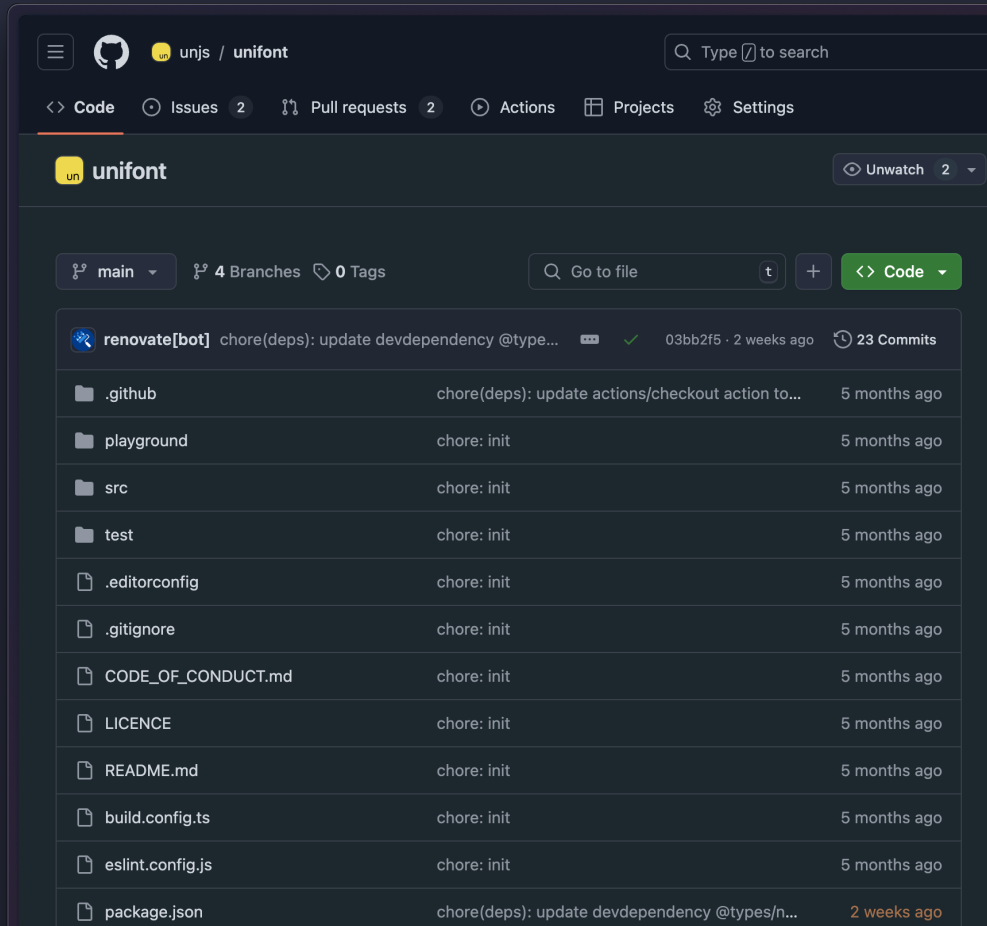
unjs/fontaine

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



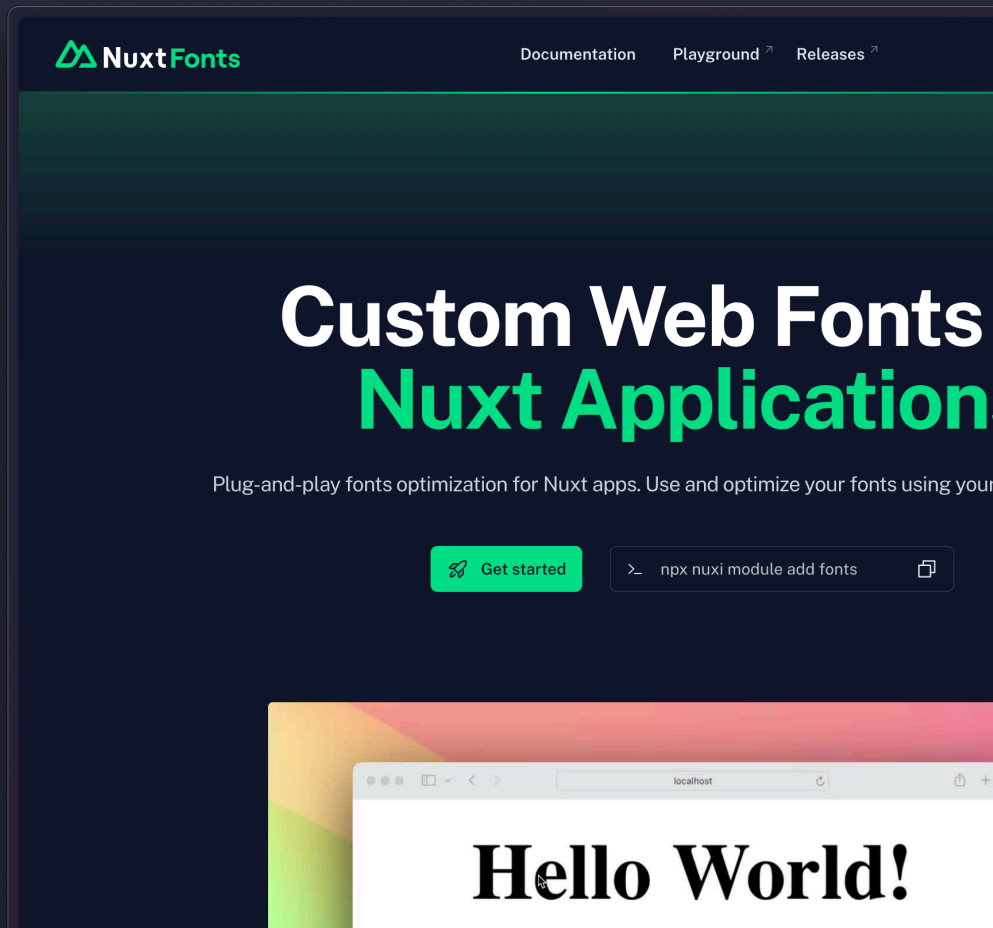
unjs/unifont

- ✦ 🧱 font provider APIs
- ✦ ⚡ caching and lookup mechanisms
- ✦ ... and more



nuxt/fonts

- ✦ ✨ zero config required
- ✦ 🙋 privacy first
- ✦ ⚡ performance optimised



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 the docs on nuxt.com and fonts.nuxt.com
- ✦ follow [@nuxt.com](https://nuxt.com) on Bluesky or [@nuxt_js](https://twitter.com/nuxt_js) on Twitter
- ✦ join chat.nuxt.dev to discuss
- ✦ and a final offer 🙏

roe.dev/chat

