



automatic web font optimisation with fontaine


Daniel Roe

daniel@roe.dev

🐦 @danielcroe

📧 @daniel@roe.dev

hello 🖐️

 nuxt.com •  nitro.unjs.io • page-speed.dev •
 regexp.dev  fontaine.sh •  elk.zone •  firstcommit.is •
 react-to-nuxt.com



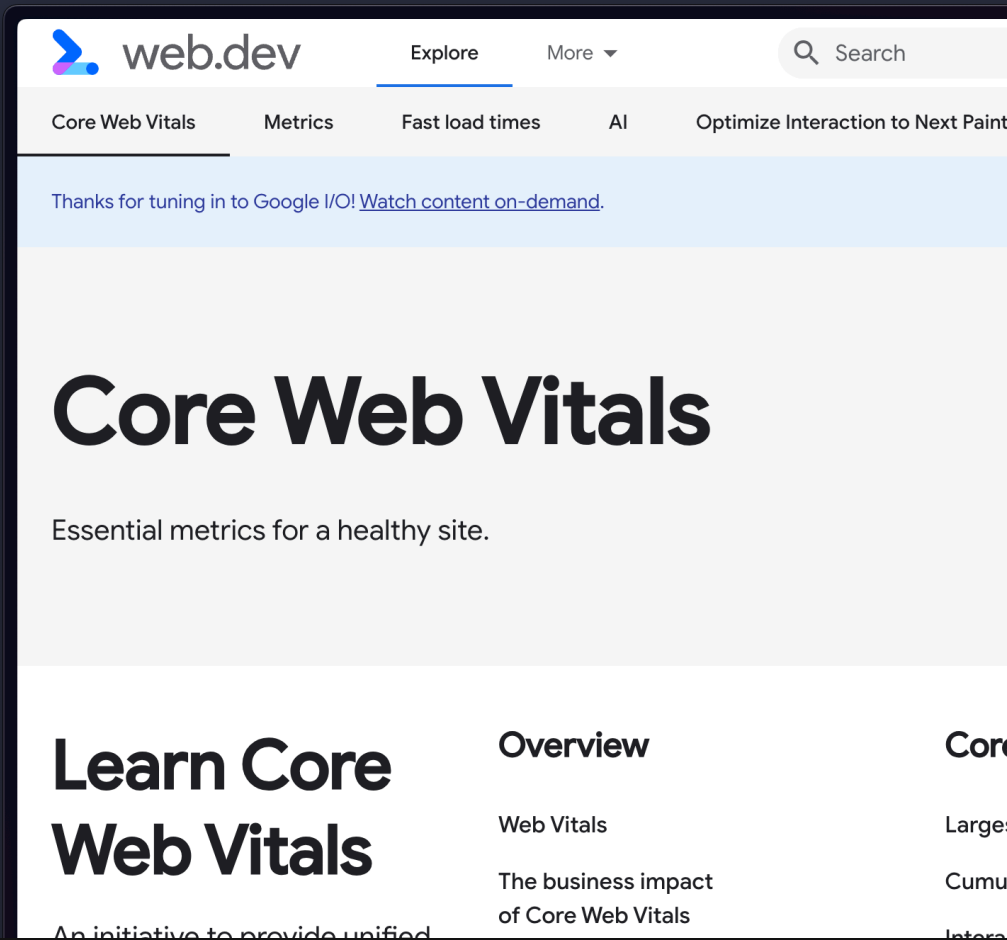




core web vitals

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

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



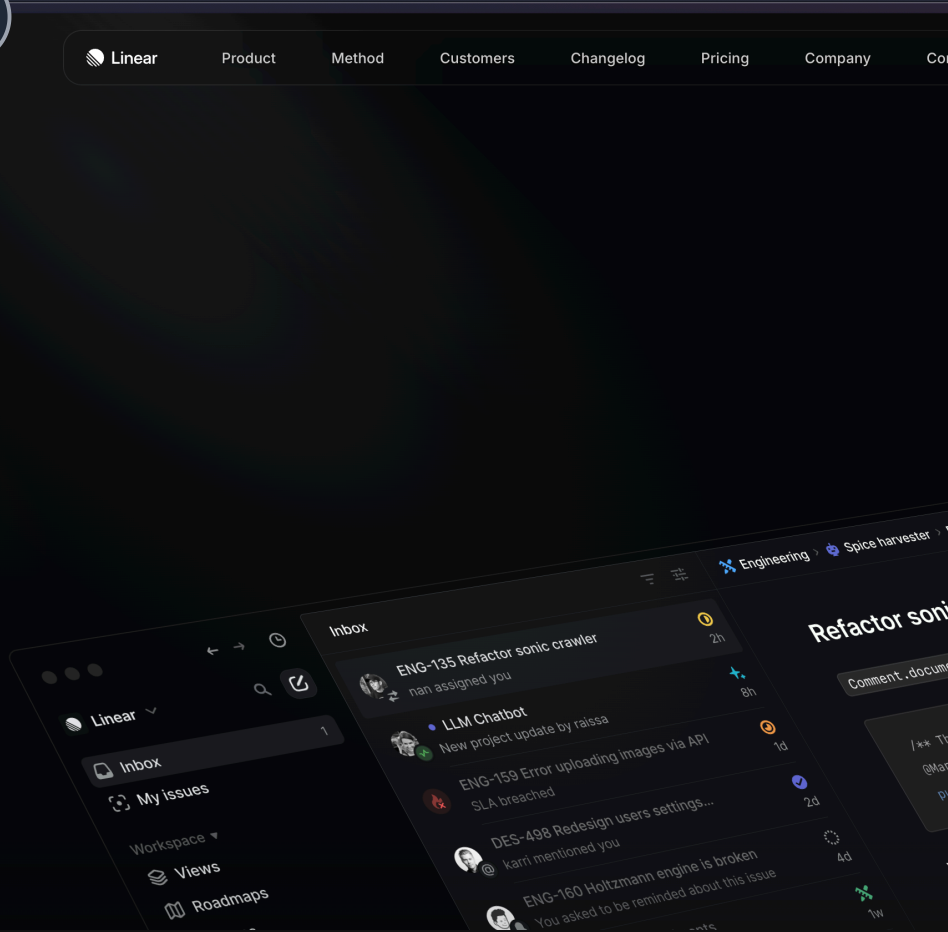


web fonts

... 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%;
}
```

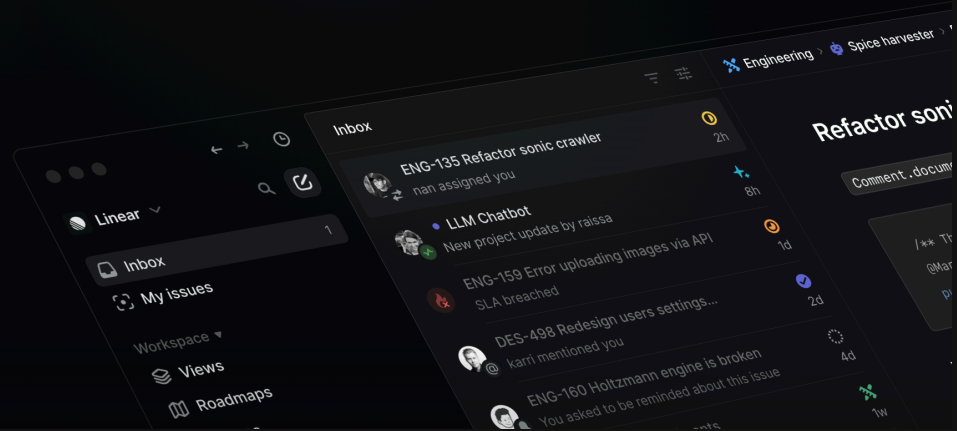


Linear Product Method Customers Changelog Pricing Company

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](https://github.com/seek-oss/capsize) - typography in CSS

```
import { createStyleObject } from '@capsizecss/core'  
import arialMetrics from '@capsizecss/metrics/arial'  
  
const capsizesStyles = createStyleObject({  
  fontSize: 16,  
  leading: 24,  
  fontMetrics: arialMetrics,  
})
```


making it extensible

unjs/unplugin - unified bundler plugin architecture.

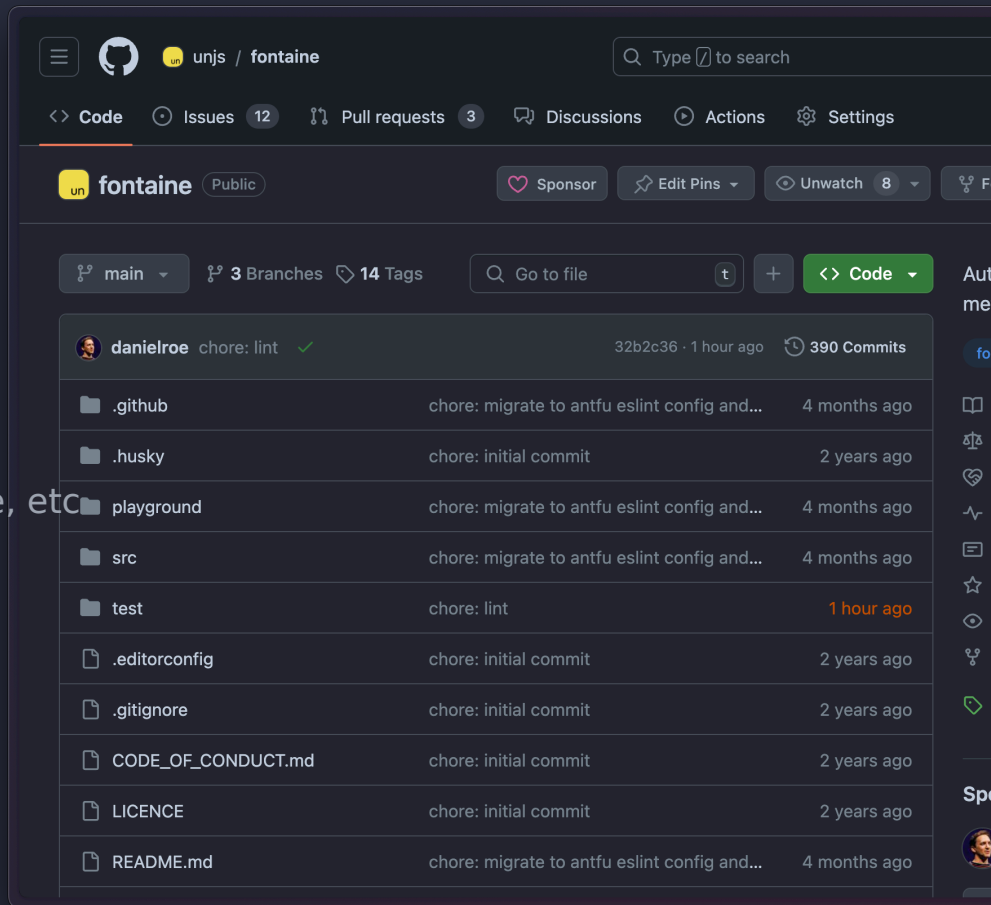
- ✦ webpack
- ✦ rollup
- ✦ vite
- ✦ esbuild
- ✦ rspack
- ✦ ... rolldown, farm

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

introducing fontaine

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



Daniel Roe

daniel@roe.dev

 @danielcroe

 @daniel@roe.dev

Interested ... ?

- ✦ check out [unjs/fontaine](#)
- ✦ read <https://docs.google.com/document/d/e/2PACX->