

Martin Grubinger. Svelte Vienna (#svienna) June 2025

## /me



Long time #Svienna visitor, first time speaker

Svelte enthusiast since ~2019 (Svelte 3)

Front end team lead at **Ceizhals** 



Sceenshot: phanpy mastodon client

Web: grooovinger.com

Mastodon: <a href="mastodon.social"><u>@grooovinger@mastodon.social</u></a>

Github: mgrubinger

# display: contents;

What is Geizhals?

Tech Stack at Geizhals

What we used before Svelte

Svelte at Geizhals

Why Svelte?

Svelte in Action

**Drawbacks and Limitations** 

# Svelte at Geizhals

Hardware Telefon

Video, Foto &

Audio &

Haushalt Drogerie

Sport & Freizeit

Baumarkt & Garten

Auto & Motorrad Spielzeug & Modellbau

Games

Filme Software

Büro & Schule

Vergleichsrechner

Geizhals.at

#### **Ist dein Basecamp** ready?

Ob Camping-Urlaub, Festival-Abenteuer oder Strand-Ausflug: Entdecke Zelte zu Bestpreisen!

Zu allen Zelten



**Coleman Darwin 4 Plus Kuppelzelt** 

ab € 132,07 •



**High Peak Trento 2.0** Vorzelt

ab **€ 179,90** 



**Grand Canyon Richmond 1 Tunnelzelt** blue grass

ab **€ 69,99** 



**High Peak Cadiz 80 Strandmuschel** aluminium/dunkelgrau

ab € **50,89** 



**Handys ohne Vertrag** 



**PCIe** 



**Notebooks** 



**Monitore** 





**Smartwatches & Sportuhren** 



**Kopfhörer & Headsets** 



Mainboards

#### □□ Hardware

Grafikkarten

Monitore

Festplatten & SSDs

Notebooks

Prozessoren (CPUs)

Mainboards

Eingabegeräte

Gehäuse

**Tablets** 

Arbeitsspeicher (RAM)

Netzwerk

Luftkühlung

Netzteile & USV

Systeme

#### **Telefon**

Handy & Smartphones Smartwatches



#### Video, Foto & TV

Fernseher

Fotografie

Foto-/Videozubehör



#### **Haushalt**

Kühlen & Heizen

Staubsaugen & Reinigen

Küchenkleingeräte

Kühlen & Gefrieren

Kochen & Backen

Waschen & Trocknen

Kaffee & Tee

Besteck & Geschirr

Geschirrspülen

#### റ്റ് Sport & Freizeit

Outdoor

Sportschuhe

Bekleidung

Fahrradzubehör

Fahrräder

Fahrradkomponenten

Wintersport

Rollsport

Sportuhren



#### **Baumarkt & Garten**

Maschinen

Gebäudeautomation &

Sicherheit

Gartenmaschinen

Stromerzeugung & -speicherung

Werkstattausstattung

Werkzeugzubehör & Verbrauchsmaterial

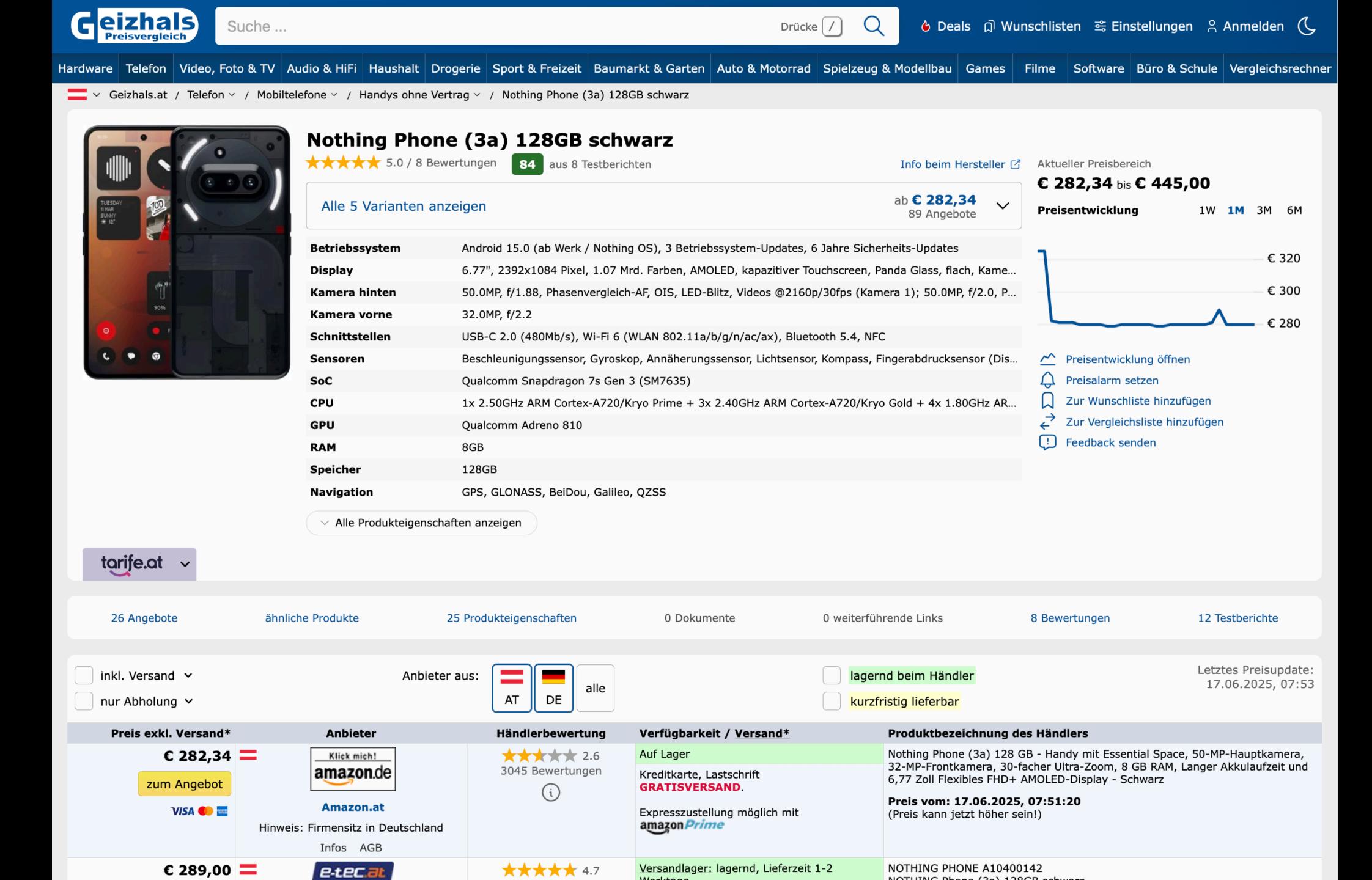
Tierbedarf

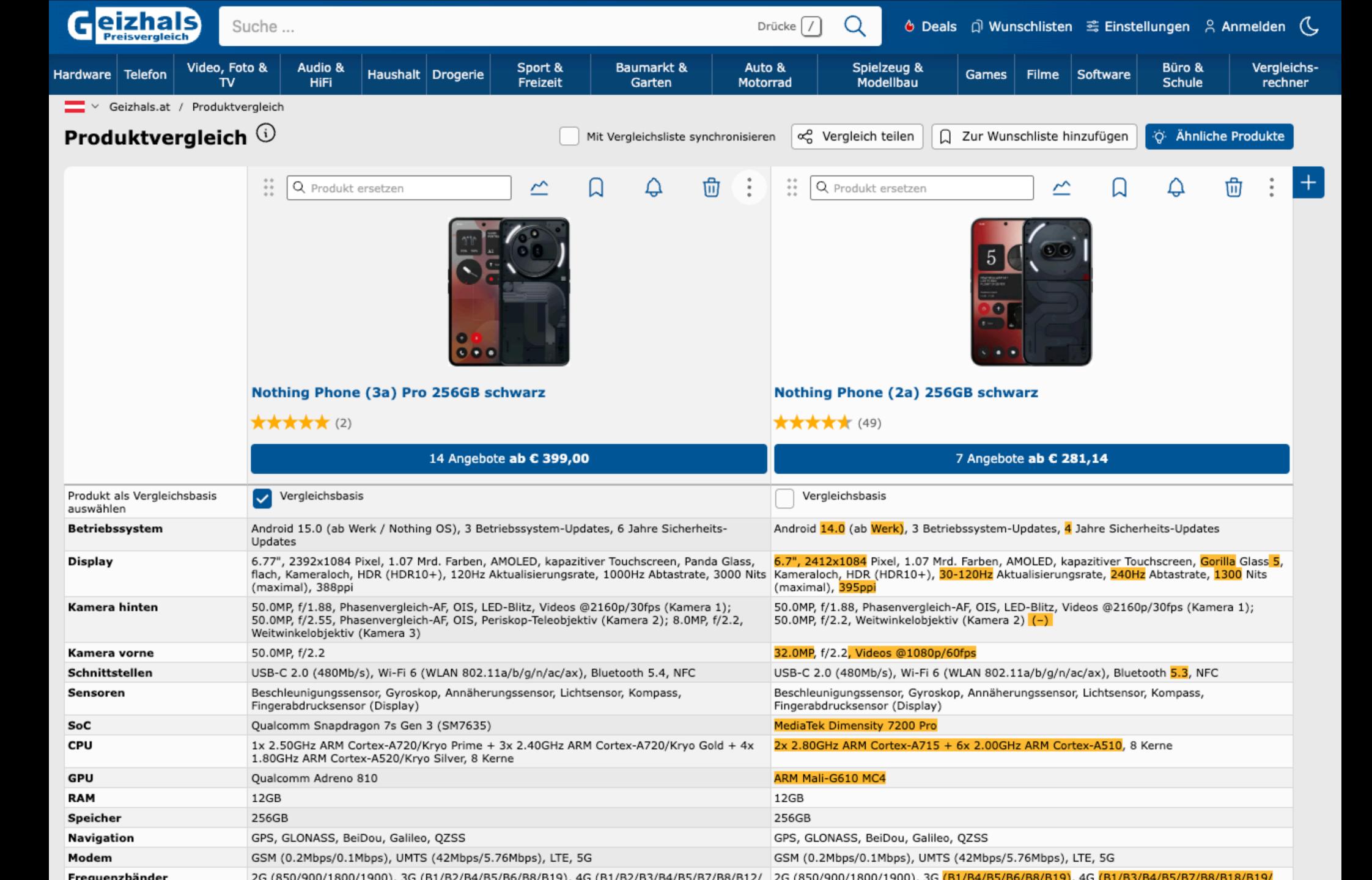
Elektroinstallation





**⊘** Drogerie





### Geizhals

#1 price comparison website in Austria

- > 4 mio monthly unique users
- > 3.5 mio manually managed products
- ~ 280 mio up-to-date prices
- 25 years in business

### Tech Stack

### for the Geizhals Preisvergleich website

Backend: Perl with Postgres

Templating: XSlate

Most pages are server rendered, with widgets ("islands" 3.) rendered on the client

#### Frontend:

LESS CSS Preprocessor

POJS (Plain Old JavaScript – without TS, but JSDoc)

Built with <del>webpack</del> ▶ vite



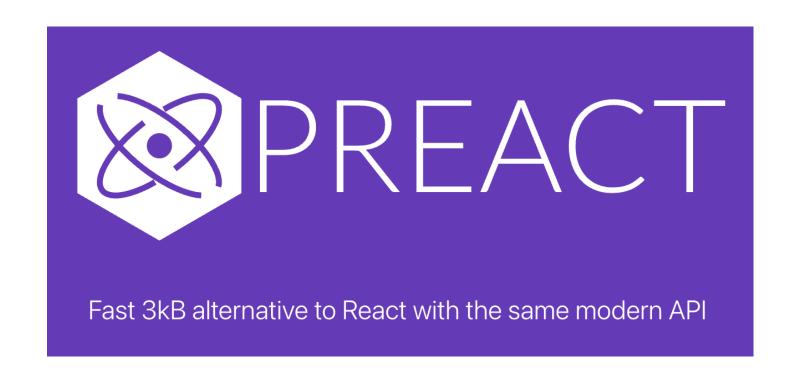
# Syste at Geizhals

| Name                                  | Status    | Туре   |
|---------------------------------------|-----------|--------|
| preact-et-al-DOtFB79G.js gzhls.at/gsa | 200<br>OK | script |

| Name  | Status    | Туре   | 1        |
|---|-----------|--------|----------|
| redux-saga-effects.esm-C_SJobaF.js gzhls.at/gsa | 200<br>OK | script | <u>C</u> |

### Svelte Preact at Geizhals

Before switching to Svelte, we used Preact for interaction-heavy widgets



Still in use for

- main navigation on desktop
- Compare Page on desktop

#### tl;dr

- + better performance than React (no virtual dom, no virtual events...)
- + same API as React
- same API as React
- same limitations (global state, styling, animations, ...)

We have a problem.



# Why Svelte?

Matches our performance-minded approach

Easy to integrate other third party modules

Easier to understand for non-frontend developers than JSX

Superior templating

Actions can easily be used for plain JS as well

Does not get in the way

→ No more juggling with state management libraries

Scoped CSS, Accessibility warnings, Animations, ... backed in

## Svelte in Action use:attachment

Autocomplete

Startpage: browse history and custom deals

Auth modal

Wishlists

Pricealerts

Ratings

Manufacturer filter

• • • •

Demo

https://geizhals.at

### Svelte in Action

Svelte 5, but Svelte 4 syntax (with a few exceptions)

Client rendered (with a few exceptions)

Custom stores

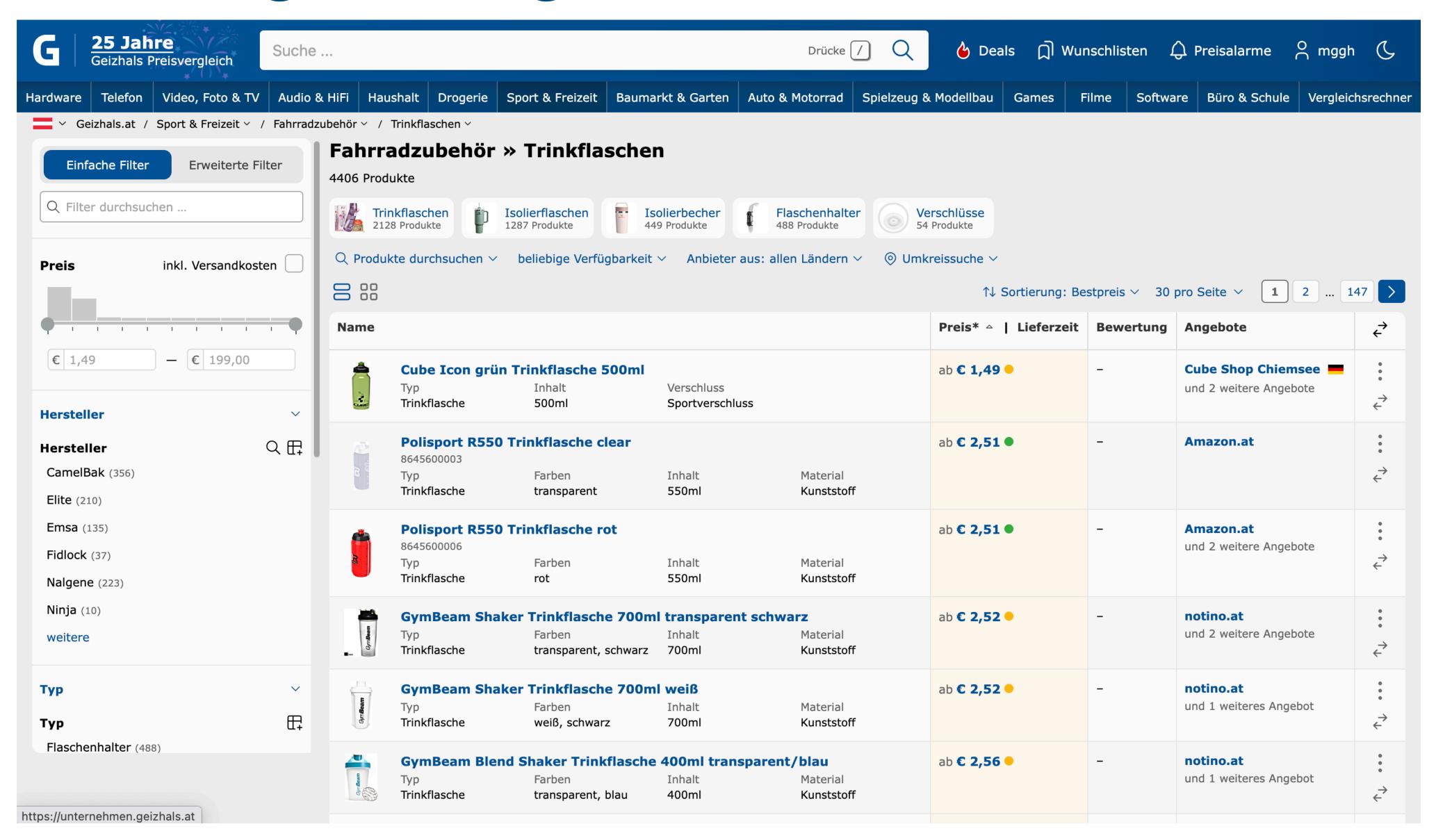
Set of reusable Components (<Select>, <Icon>, <Dialog>, ...)

### **Custom Stores**

#### Co-located data storage and fetching

```
function createAccountWishlistStore() {
let { subscribe, update, set } = writable(null);
  return {
   subscribe,
   set,
  · update,
 • new: async (...) => {
····//·...call·API·and·update()
• fetch: async (...) => {
····//·call·API·and·update()
```

# New category page



# New category page

Aims to make the UI easier for new users, but at least equally as powerful for "pro" users

Aims to provide a more interactive UI without page reloads

New data endpoints allow for more detail and granular control

Serverside rendered SvelteKit app, embedded into the main DOM at request time

~ 80 Components

Incrementally introduced (not yet active for every category), ongoing iterative improvements

Fun fact: Development started way before SvelteKit 1.0 (but post-Sapper)

Fun fact 2: Launched long after other Svelte apps on the Geizhals website

#### Demo

https://geizhals.at/?cat=spradtrink

### Drawbacks

### of embedding a SvelteKit app in a monolith

SvelteKit server is not accessible from the public, so SvelteKit router can not be used

Rolled our own client side router

Dev-Server needed a bit of tinkering (using hooks.server.js) to manipulate paths

Handling Query Parameters cumbersome (once on Perl Backend, again in SvelteKits +page.server.js and in the client router)

# Ratgeber ("Guides")

https://geizhals.at/ratgeber

Longform content about categories or products

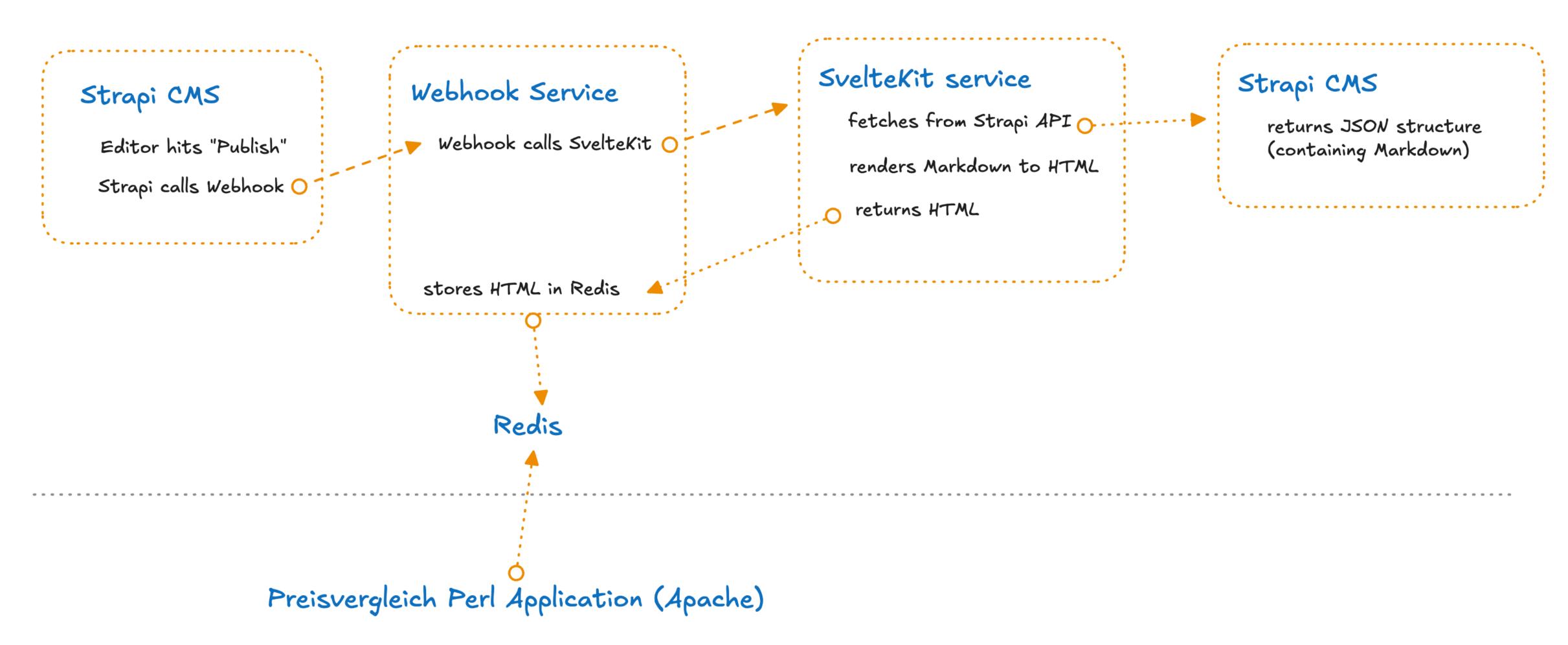
Edited by our in-house content editorial team (real humans, no AI)

Statically pre-rendered SvelteKit routes (markdown -> html -> redis)

Rendering is triggered by Strapi publish hooks

# Ratgeber

(Simplified)



# Ratgeber

#### Pro:

Very fast delivery (redis lookup by category name and locale)

Strapi CMS and SvelteKit Node server not exposed to public

#### **Drawback:**

When CSS or Components change, we need to re-render every Ratgeber page (in every language)

Live: <a href="https://geizhals.at/ratgeber">https://geizhals.at/ratgeber</a>

# MerchantService Self-Service App

(Sneak peek)

Standard SvelteKit application

Consumes 2 different APIs

Strapi CMS, GH MerchantService API

Merchants can edit their company data, view ratings, stats, FAQ, ...

CSS: Bootstrap 🙀 🚀

Leaning heavily into state via forms and GET parameters

-> Save favorite views/filters for direct access via dashboard



https://merchantserv

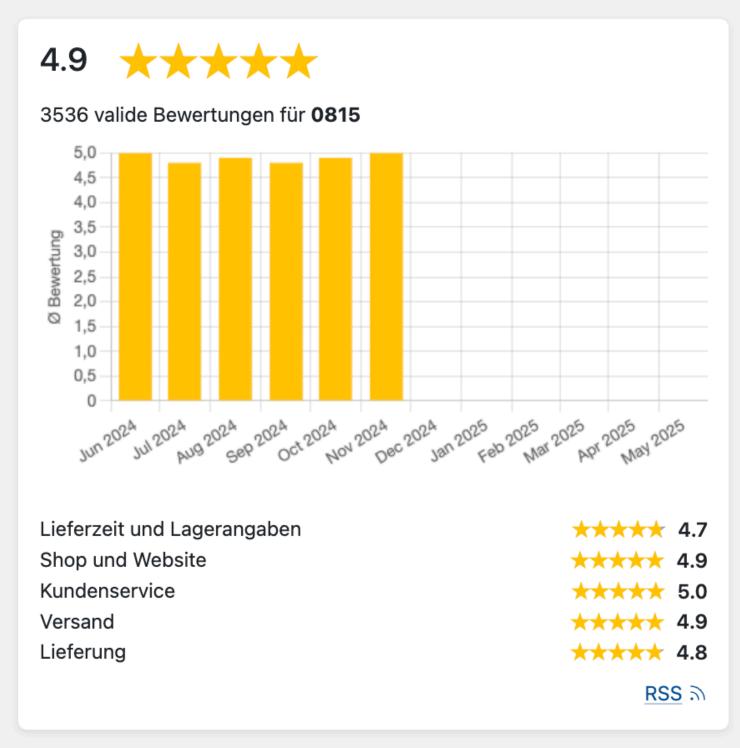
Händlerservice / Bewertungen / Bewertungsübersicht

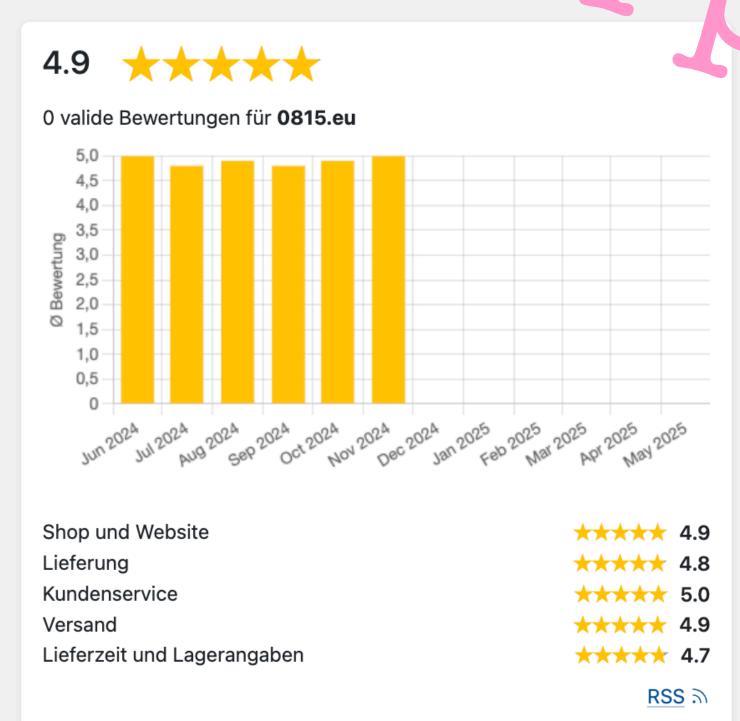
#### Bewertungsübersicht

Shops:

Alle ∨

Alle Bewertungen





)6.2025 13:37:55

Deutsch ∨

Deutsch ∨

Meine Preislisten sehen

nd, jedoch noch nicht in unsere

Alle Weiterleitungen sehen

21.06.2025

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Über Geizhals

Allgemeine Geschäftsbedingungen
Geizhals

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### Conclusion

### (Personal)

- Overall pretty happy with Svelte (Performance, Ergonomics, Pace)
- Svelte 5
  - Chore to update existing apps (starting at leaf components helps)
  - Early returns in \$effect derives me nuts
  - runes makes code more explicit (
- Much faster iteration and less "why does this (not) re-render?" performance footguns
- Co-locating CSS is mostly a blessing, but can make reusing LESS mixins difficult (scoping).





Slides at grooovinger.com

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