

Hello World

Come for react, stay for brunost




Sébastien Morel

 Backend/DevOps developer since 2001

 French living in California

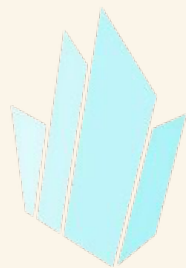
 Open Source Knight & Chess player *(decent)*

 Dad of a 2-year old

700 Millisecond hunter

  @plopix





Presented by

crystallize



Out of our home offices

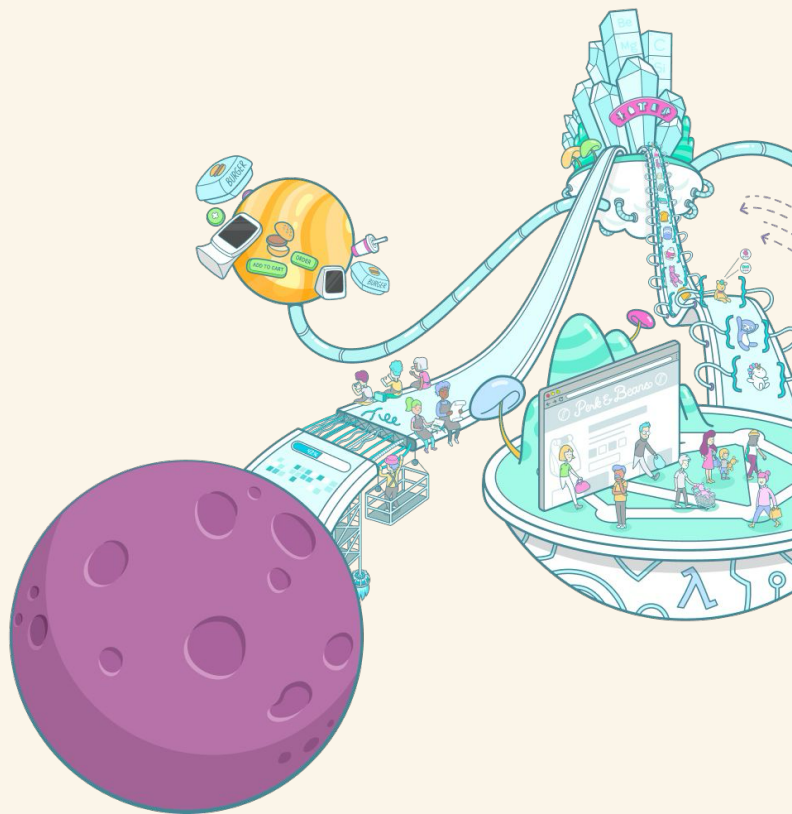
Why are we here?



What's Crystallize?

A complete headless eCommerce toolbox. We got your back(end).

- Content Management
- Product Information Management
- Assets Organizer
- Order Management
- Reporting & Analytics
- Search
- Subscriptions!
- Images and Videos optimizations and CDN





We are a backend as a service company


All driven by UI





Product **Baby T Coffee Machine** Pretty No Tax English Publish changes





- 

Baby T White
baby-t-1653331967654
White | Baby T Plus
43 in stock
3399 EUR
- 

Baby T Love Red
baby-t-1653332130160
3399 EUR
- 

Baby T Black
baby-t-1653333038498
3200 EUR
- 

Baby T Pistachio
baby-t-1653334299201
3399 EUR
- 

Baby T Kid Blue
baby-t-1653334733588
2199 EUR
- 

Baby T Sun Yellow
baby-t-1653334870085
2199 EUR

Product story

Baby T Coffee Machine

Multi-group, total PID control (coffee and steam), exceptional them

Create +

Product **Baby T Coffee Machine** Nerdy No Tax English Publish changes

Variants (7) Add to price lists Save changes

	Name	Images	Videos	Retail	No Retail	Sales	2B2C	Online	Online TBT	Oslo	Toronto	SKU	Color
1	Baby T Whi			3,399 EUR	NOK	EUR	EUR	43		0		baby-t-165333	White
2	Baby T Lov			3,399 EUR	NOK	EUR	EUR	56		0		baby-t-165333	Red
3	Baby T Blac			3,200 EUR	NOK	EUR	EUR	22		0		baby-t-165333	Black
4	Baby T Pist			3,399 EUR	NOK	EUR	EUR	21		0		baby-t-165333	Green
5	Baby T Kid			2,199 EUR	NOK	EUR	EUR	43		0		baby-t-165333	Blue
6	Baby T Sun			2,199 EUR	NOK	EUR	EUR	49		0		baby-t-165333	Yellow
7	Baby T Sun			599 EUR	NOK	EUR	EUR	49		0		baby-t-165333	Yellow

1 + Add variant Variant generator

Product story

Baby T Coffee Machine Title

Multi-group, total PID control (coffee and steam), exceptional thermal stability and energy efficient.qwewq Description

Create +

Role name **Translator** Create

Roles

- Billing
- Content manager
- Tenant Admin

Catalogue

- Tree**: Publish, Unpublish, Create, Update, Delete
- Topics**: Create, Update, Delete
- Grids**: Publish, Unpublish, Create, Update, Delete

Commerce

- Orders**: Create, Update, Delete
- Customers**: Create, Update, Delete
- Pipelines**: Create, Update, Delete
- Reports**: Create, Update, Delete

Build

- Shapes**: Create, Update, Delete
- Webhooks**: Create, Update, Delete
- Price variants**: Create, Update, Delete
- Subscription plans**: Create, Update, Delete
- Subscription contracts**: Create, Update, Delete
- Language**: Create, Update, Delete

Orders

Thu 01 Jun

- William Wallace 17:51 **3,551.00 EUR**
- Bård Farstad 13:44 **0.00 EUR**
- Bård Farstad 13:12 **52.00 EUR**

Mon 29 May 2023

- Dhaiya Dwivedi 21:51 **13.00 EUR**
- Dhaiya Dwivedi 21:47 **11.00 EUR**

Thu 25 May 2023

- Bård Farstad 11:24 **681.00 EUR**

Tue 23 May 2023

- Bård Farstad 16:17 **733.00 EUR**
- Dhaiya Dwivedi 12:40 **18.00 EUR**
- Bård Farstad 12:12 **681.00 EUR**
- Bård Farstad 11:20 **694.00 EUR**

Customer **William Wallace** Order ID **6478be8cdab7913ed73ee9db** Date **01.06.2023** Time **17:51** Go to customer

Customer

Name **William Wallace** Identifier **william.wallace@knight.fr**

Shipping address **Scotland, 12345, Lübeck, Scotland** william.wallace@knight.fr

Billing address **Scotland, 12345, Lübeck, Scotland** william.wallace@knight.fr

Payment information

amount **3551.00**

cardId **32c532b0-20a5-418d-a7ae-f3d02053c72e**

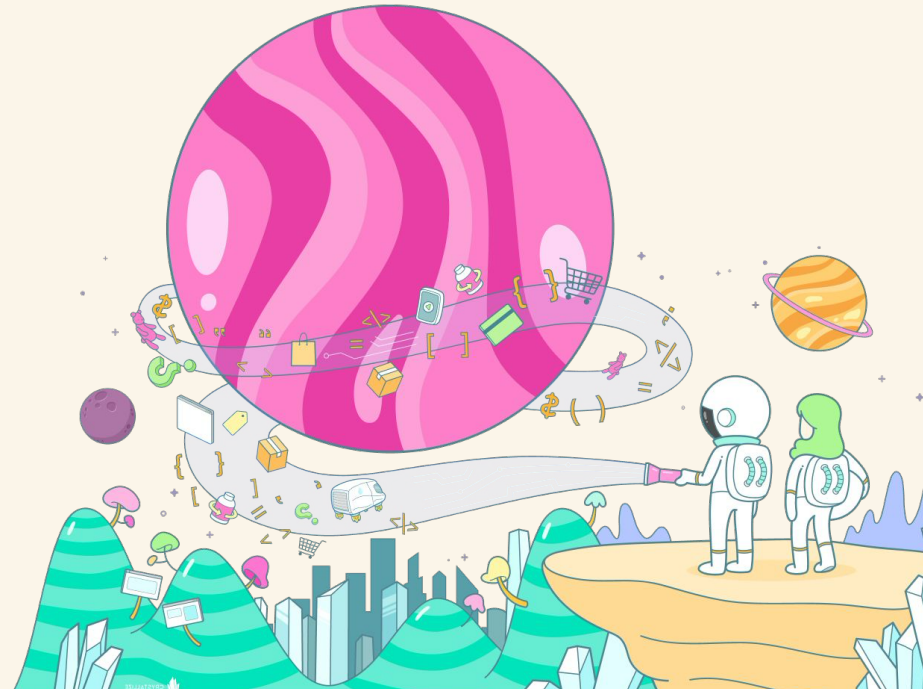
payment_method **Crystalline Coin**

Order items (6)

Product	Details	Qty	Tax	Net	Gross
Monstera Minima a-unique-sku-839229930364556		1	- EUR	12 EUR	12 EUR
Dracaena Fragrans Large dracaena-fragrans-1652182752910		1	- EUR	- EUR	- EUR
Dendrobium Large dendrobium-1651759470096		1	- EUR	40 EUR	40 EUR
Monstera Deliciosa Medium monstera-deliciosa-1651759336775		1	- EUR	20 EUR	20 EUR
Smeg Robot Pastel Green Standard smeg-robot-pasten-green-standard-447046785		1	- EUR	599 EUR	599 EUR
Baby T Black		1	- EUR	2880 EUR	2880 EUR

To push the boundaries of

Internet Craftsmanship



Frontend developers are
our users



Why are we here?

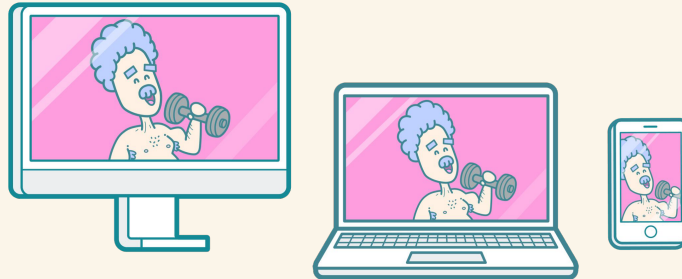


To meet awesome people and
to network



To learn and to get better

at building amazing customer experience



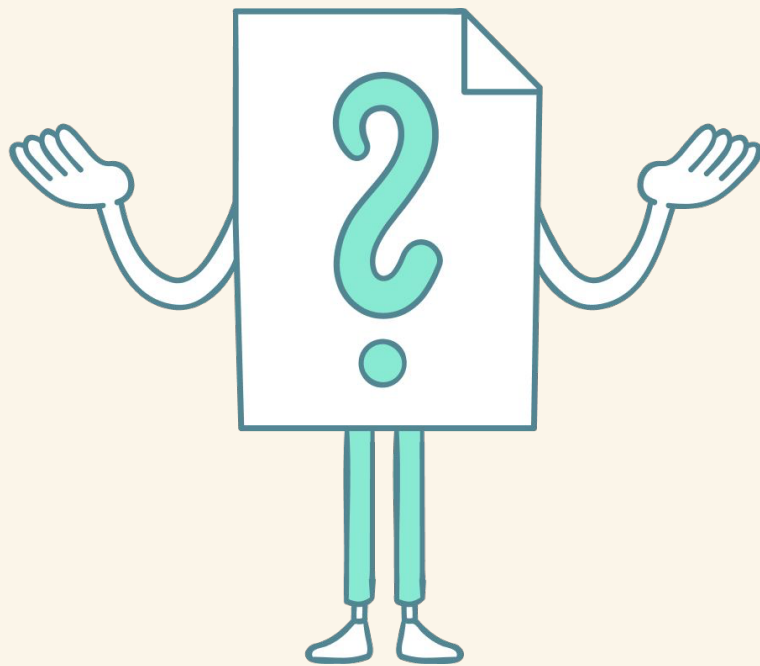
and of course
have fun

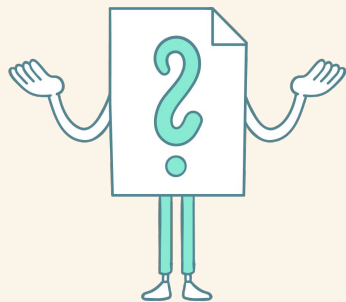


Times are changing

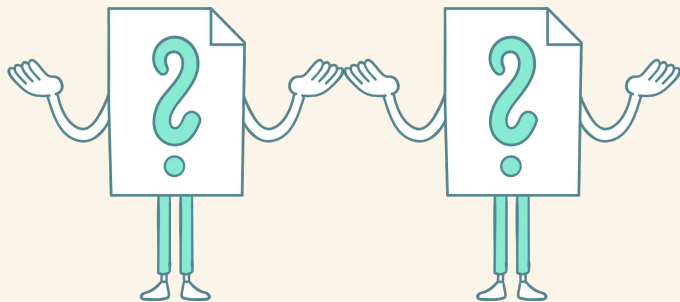
And so is React!





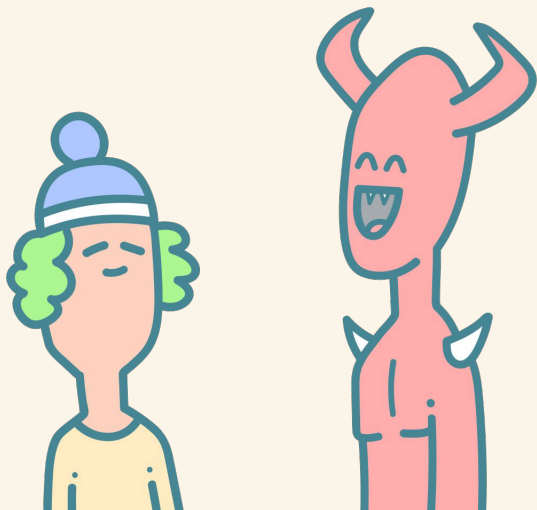


React JS on the Server

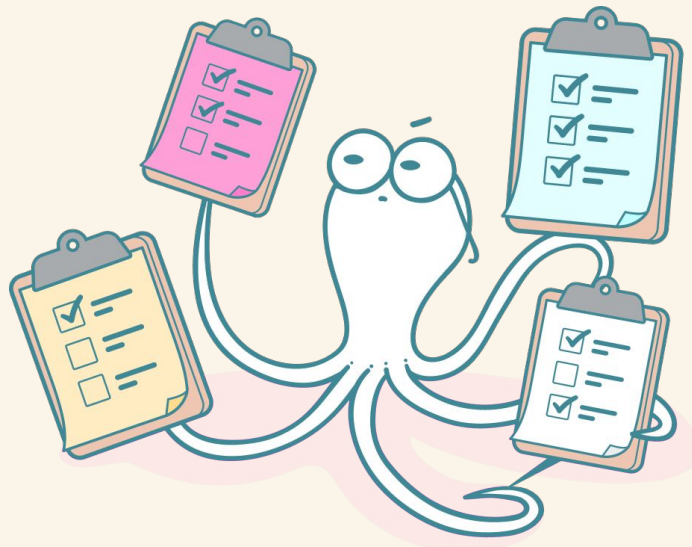


**“use client” to
use it client-side**

useEffect
the Devil?



Frameworks



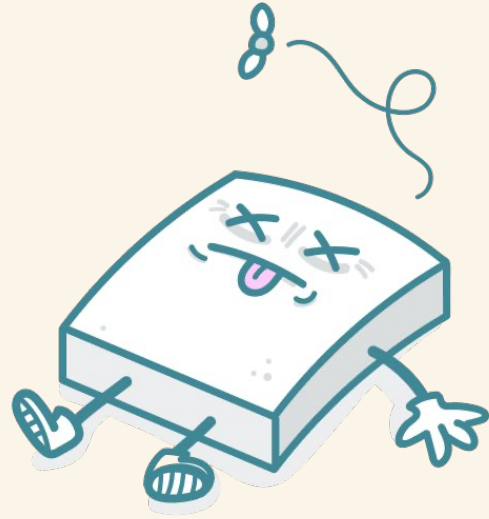


**Next JS, Remix Run,
Gatsby, CRA, Astro,
Fresh, Quik, SolidJS?**

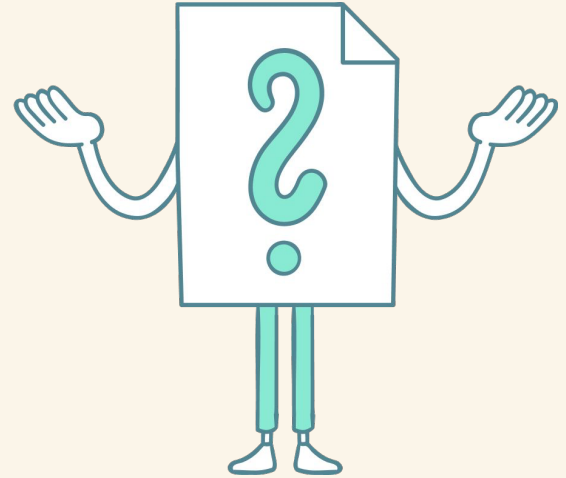
UI = fn(state)

UI = fn(state)

Using javascript ?



Query the DB in React?

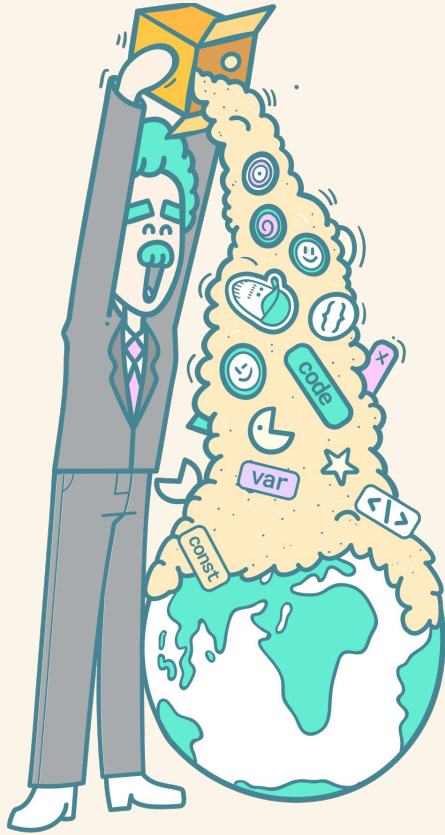


Query the DB in React?

```
export default function App() {
  const notes = db.query('select * from notes').rows;
  return (
    <ul>
      {notes.map(note =>
        <li key={note.id}>
          {note.body}
        </li>
      )}
    </ul>
  );
}
```

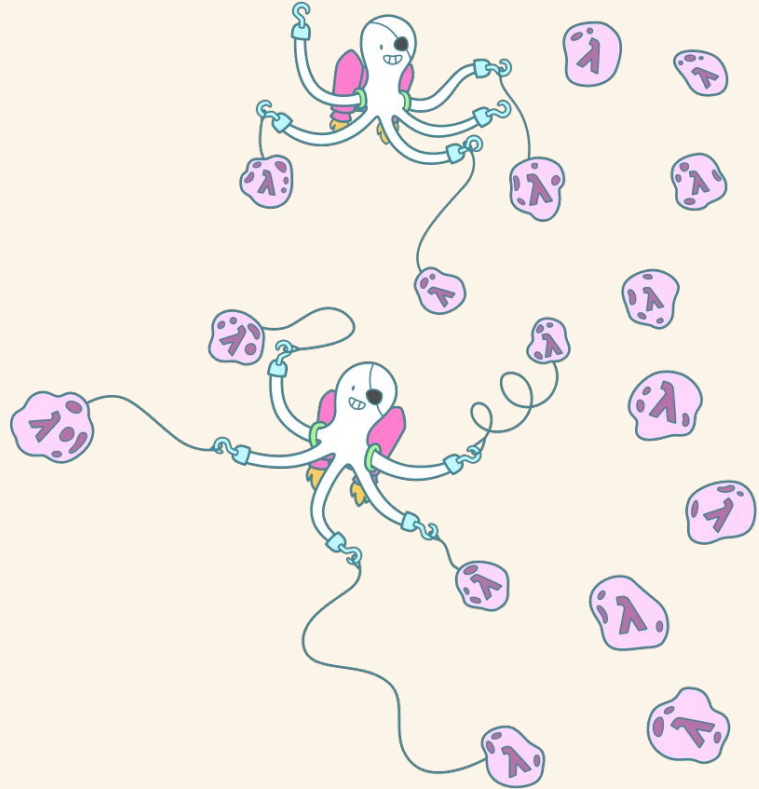
Hosting





**Netlify, Vercel, Fy.io,
Platform.sh,
Render.com, Railway,
AWS, GCP, etc. etc.**

**Is serverless
obsolete?**



Edge First

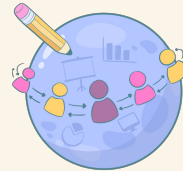
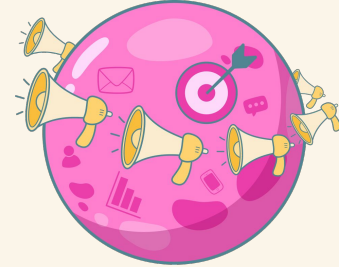
JS Runtimes

3+ browsers

5+ servers



**Edge First Runtime
must be close to
the data!**



Why ?

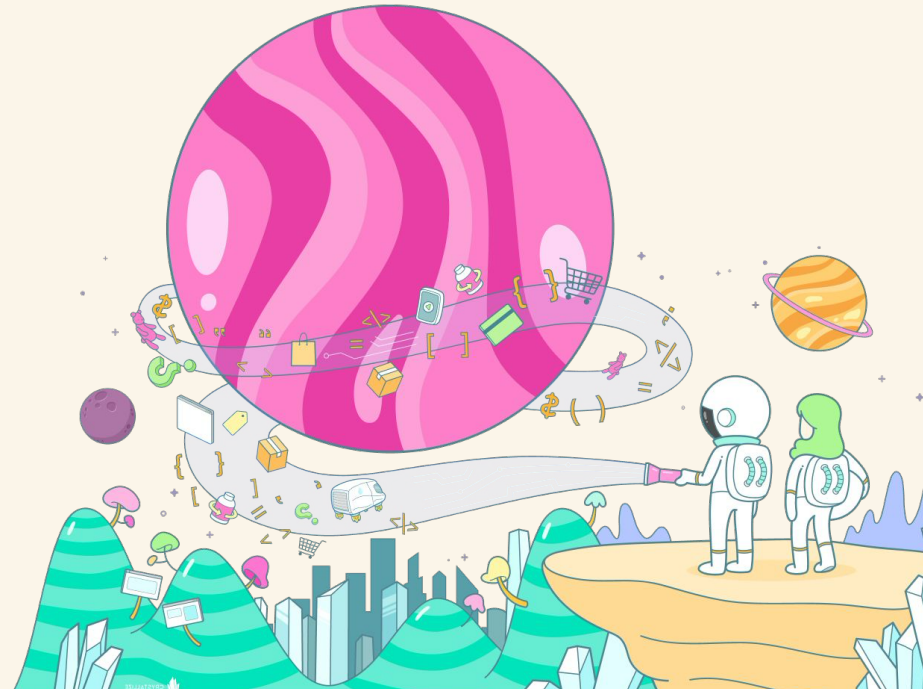


Innovation, Performance & DX



To push the boundaries of

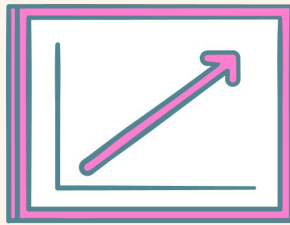
Internet Craftsmanship



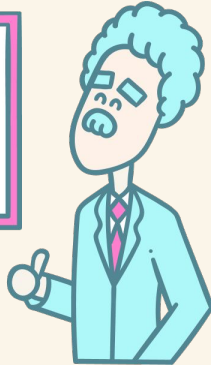
Performance

speed and efficiency at which web pages are downloaded and displayed on a user's web browser.





STONKS





Diagnose performance issues



Performance



Accessibility



Best Practices



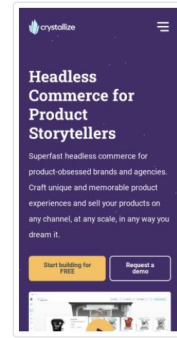
SEO



Performance

Values are estimated and may vary. The [performance score is calculated](#) directly from these metrics. [See calculator.](#)

▲ 0-49 ■ 50-89 ● 90-100



METRICS

[Expand view](#)

● First Contentful Paint
1.0 s

● Total Blocking Time
130 ms

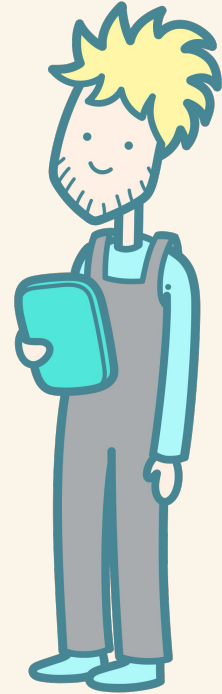
● Speed Index
1.2 s

● Largest Contentful Paint
1.2 s

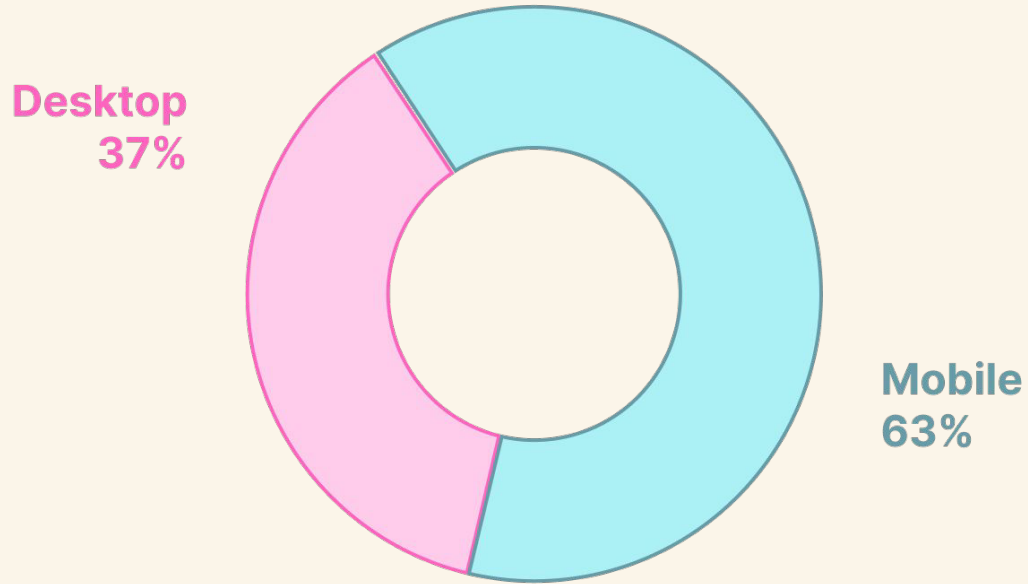
● Cumulative Layout Shift
0.009

Some numbers

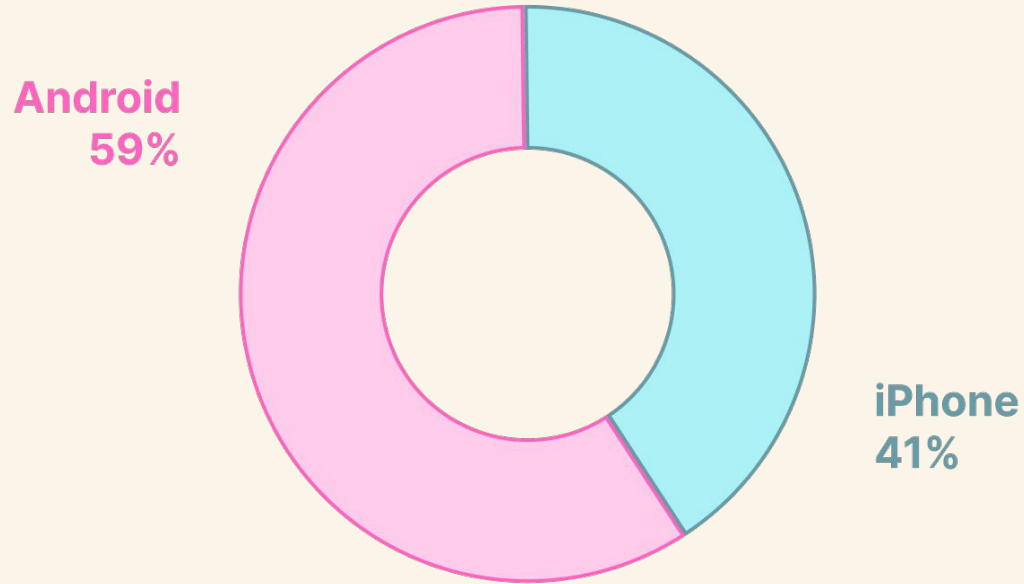
thanks @henrihelvetica



Mobile World



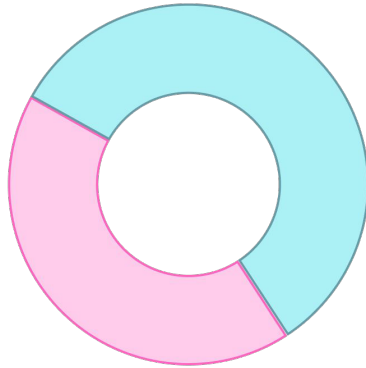
Mobile World



Largest Contentful Paint (LCP)

~70% based on your images management

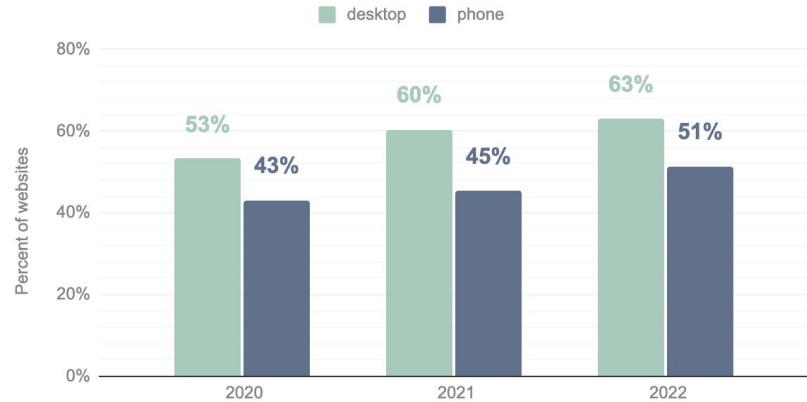
Poor / Bad
42.3%



Good
57.7%

Good LCP by device

Web Almanac 2022: Performance (Chrome UX Report)



Interaction to Next Paint (INP)

Good

Needs improvement

Poor

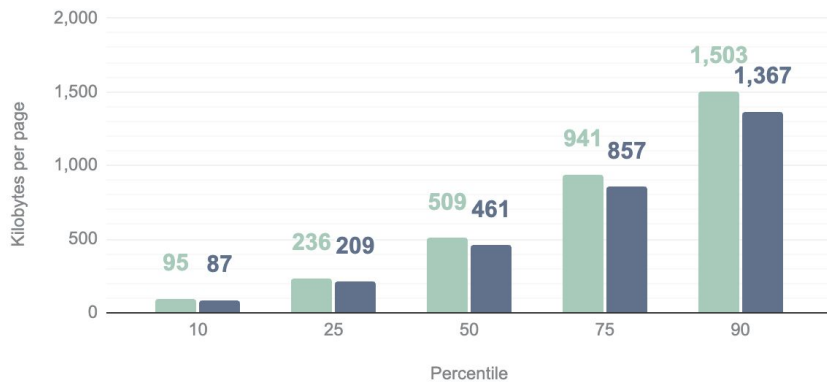
200ms

500ms

Distribution of JavaScript kilobytes per page

Web Almanac 2022: JavaScript

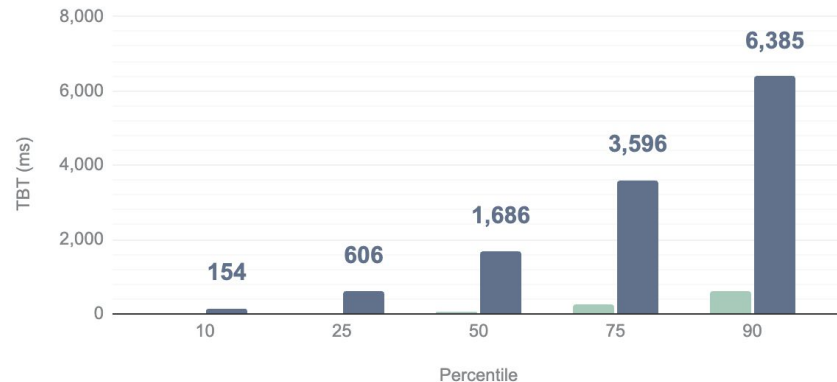
desktop mobile



Distribution of TBT

Web Almanac 2022: JavaScript

desktop mobile



#millisecondmatters

Finance: **micro seconds**

Gaming: **< 100ms**

Telecommunications: **< 150ms**

E-commerce: **< 100ms**

Mobile Applications: **< 100ms**

Satellite Communication: **Starlink aims <20ms**

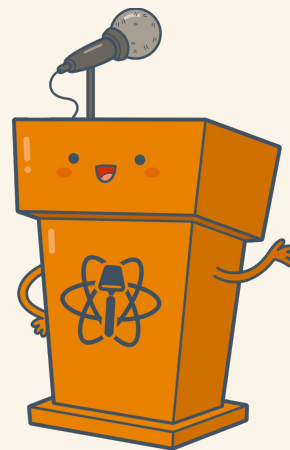
Cloudflare Workers advertises globally: 50ms!



**There is space to
improve!**

Advice for performance

- care about it from day 1
- don't monitor, profile
- be conservative to what you send
- Go to conferences 🧐



  @plopix