WebDev Trends <2022/>

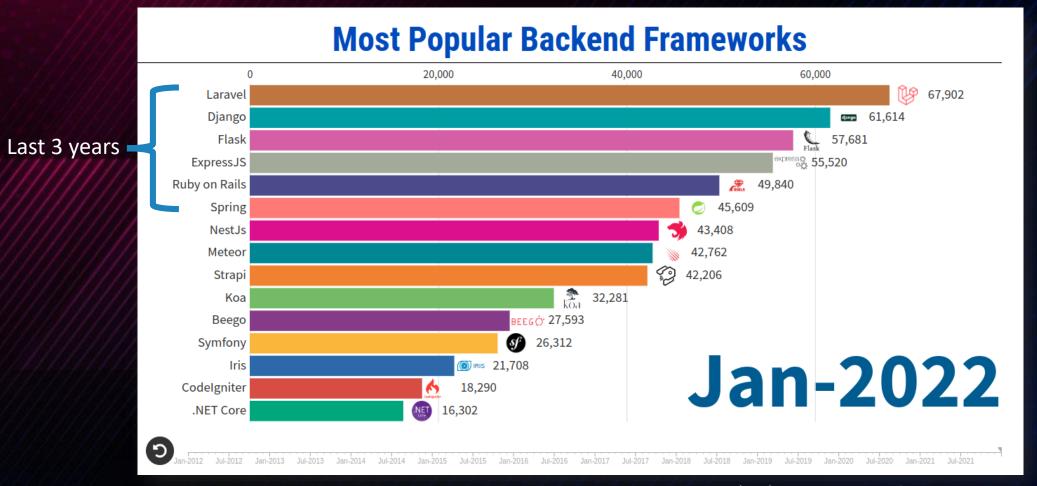
By Elizaveta Ragozina

CERN IT Lightning Talks #23

https://indico.cern.ch/event/1197994/



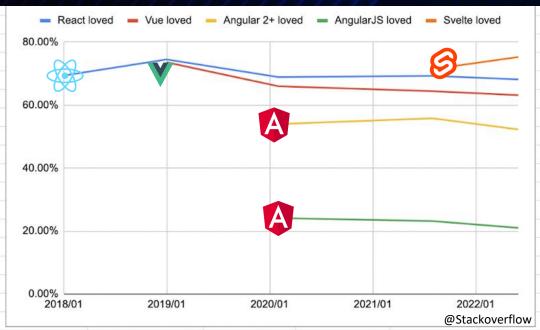
Frameworks » Backend



Frameworks » Frontend

React, Vue keep winning popularity



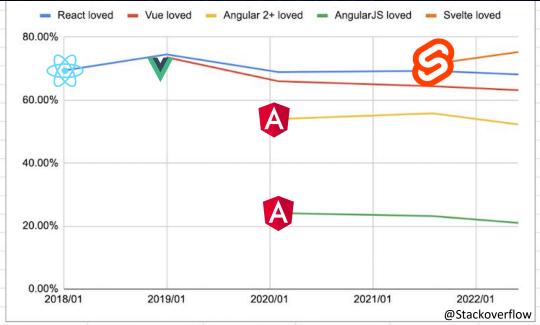


Frameworks » Frontend

- React, Vue keep winning popularity
- Sudden new love: Svelte









Compiler

Framework/library







Super small bundle

Better performance and memory usage

Small community

Very simple syntax

Small bundle

Good performance, memory usage

Large communities

Own syntax

- 1 <script>
- 2 let name = 'world';
- 3 </script>
- 4
- 5 <h1>Hello {name}!</h1>

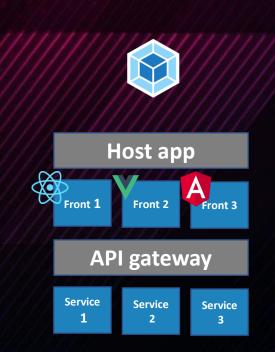
Architecture » Microfrontends

Microfrontends Microservices Frontend-Backend Host app **Frontend Frontend** Monolith Front 1 Front 2 Front 3 **API** gateway **API** gateway Monolith **Backend** Service Service Service Service Service Service

"Micro apps" that can be built, tested, deployed independently

Architecture » Microfrontends

Game- changer: Webpack 5 Module Federation

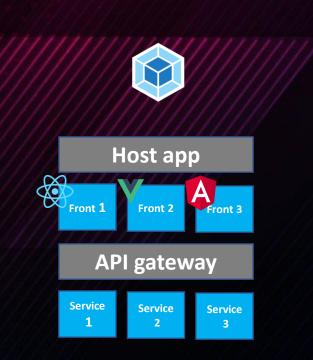


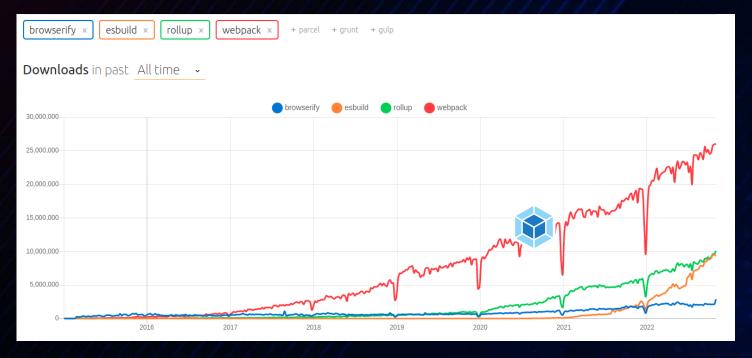
- Loading of separately compiled mf's at runtime
- Minimized dependency duplication
- Nesting, circular dependencies between containers possible
- Routing & history

- More tech stack flexibility
- Makes sense by huge apps

Architecture » Microfrontends

Game- changer: Webpack 5 Module Federation

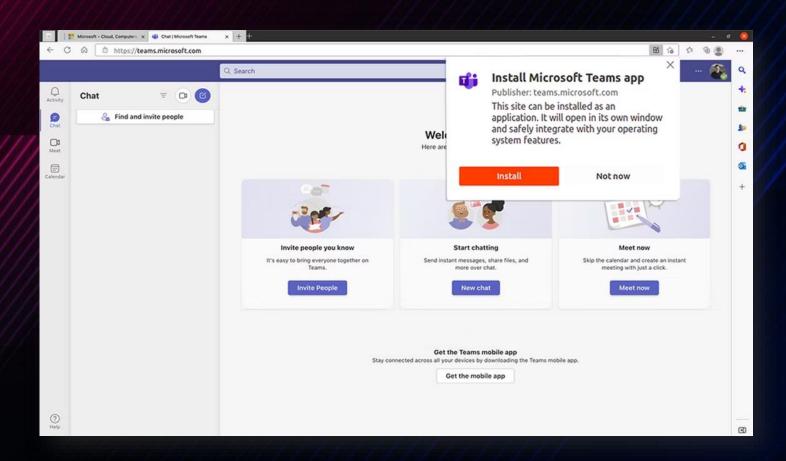




npmtrends.com

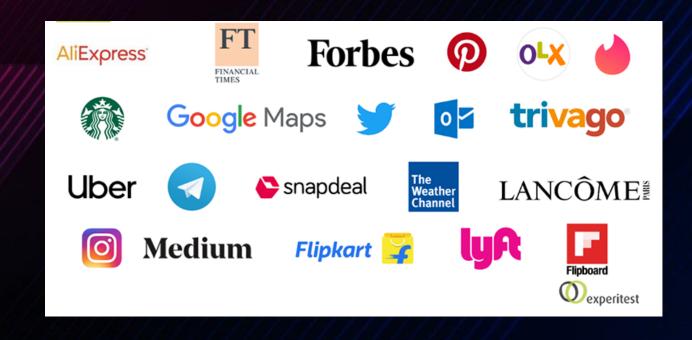
Progressive Web Apps





Progressive Web Apps





Progressive Web Apps





App that can operate as web page and mobile app

- Platform independent
- Fast
- Works offline
- Sends push notifications
- Use of user device features
- Better SEO (indexed by Google)

IOS limitations, no access to some sensors

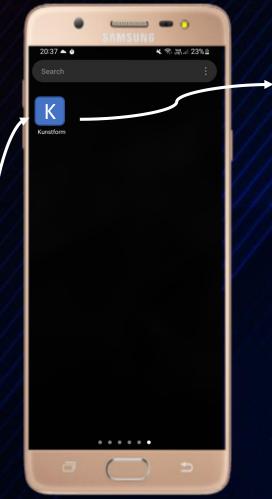
Shortest cookbook: build app out of web page

1. Add web app manifest.json with metadata to the code

Voilà

... add service workers for offline mode, push notifications etc...







WebDev – constant (R)evolution

Images

- https://www.vecteezy.com/vector-art/1987723-abstract-banner-technology-stripes-geometric-diagonal-pink-blue-background
- Svelte meme: https://devrant.com/rants/2189694/svelte
- PWA
- https://www.cignex.com/sites/default/files/Progressive%20Web%20 Apps Twitter.png

• PWA companies: https://cms.webcreatify.com/gallery/28958-webapp6.png