



Non-Microblogging Software Design on ActivityPub

On the Inherent Tradeoffs of Interoperability



Casey Kolderup • FOSDEM 2025 •
Social Web Devroom • February 1, 2025



INTRODUCTIONS



Casey Kolderup • FOSDEM 2025 •
Social Web Devroom • February 1, 2025

IT'S-A ME, CASEY



WHAT'S NEW

SEARCH

GTE

- At A GLANCE
- GTE WORLDWIDE
- WHAT WE CAN DO
- WORKING At GTE
- FORUM

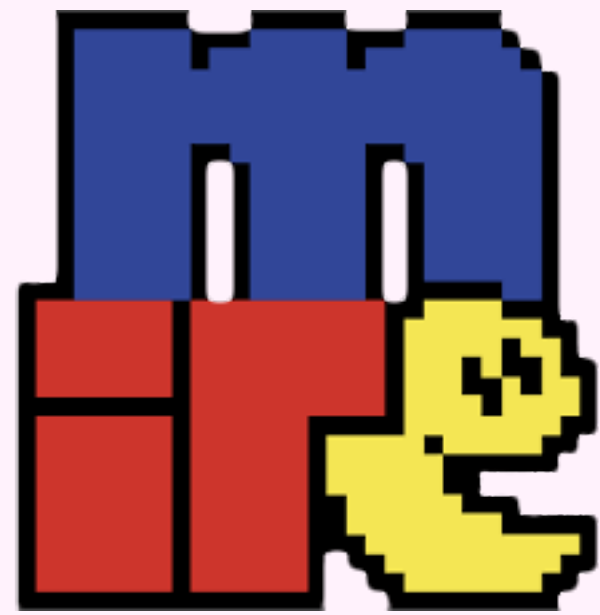
A navigation menu for the GTE website. The background is a globe. The "GTE" logo is in a large blue rounded rectangle. There are five menu items, each with a small icon in a rounded square: "At A GLANCE" (eye), "GTE WORLDWIDE" (globe), "WHAT WE CAN DO" (hand holding a telephone), "WORKING At GTE" (woman's head with gears), and "FORUM" (bulletin board). The text "WHAT'S NEW" and "SEARCH" are in the top left and right corners respectively.

OBLIGATORY EMPLOYER PLUG



Glitch is the friendly place where everyone builds the web. Start a [new blog](#), play with [React](#), or build new worlds with [WebXR](#).

THE WEB I'VE KNOWN



THE WEB I'VE LOVED



ARCHIVE STUMBLER

ENTER A
COLLECTION URL



https://archive.org/details/magazine_rack

[GO SEE SOMETHING](#)

you can open in a new tab
if you think you'll want more


POSTMARKS



- first released in 2023
- social bookmarking
- ...but with ActivityPub

A BOOKMARKING LINEAGE



 **del.icio.us / popular /**

popular | [help](#)
[login](#) | [register](#)

Today's popular items → view **all** | [fresh only](#)

Prototype Dissected
first posted by [codahale](#) on 2006-02-20 ... [and 606 other people](#) (162 recently)

Firefox Extension Development Tutorial :: Environment
first posted by [se77en11](#) on 2006-02-20 ... [and 338 other people](#) (77 recently)

How to Create a Standardized Web Site Development Workflow | Smiley Cat Web Design
first posted by [EntityX](#) on 2006-02-21 ... [and 88 other people](#) (75 recently)

73 Resources on Windows opensource and/or freeware - Listible!
first posted by [mylesb](#) on 2006-02-18 ... [and 295 other people](#) (75 recently)

Going dynamic with PHP
first posted by [benajnim](#) on 2006-02-20 ... [and 290 other people](#) (70 recently)

The Idiot's Guide to moo.fx
first posted by [izo](#) on 2006-02-17 ... [and 114 other people](#) (67 recently)

Teagames.com - Blueprint Game
first posted by [mersenne_twister](#) on 2006-02-13 ... [and 350 other people](#) (63 recently)

Bloggng for Beginners: ProBlogger Blog Tips
first posted by [jaro](#) on 2006-02-13 ... [and 188 other people](#) (53 recently)

popular tags
» [see more tags](#)

- [design](#)
- [blog](#)
- [programming](#)
- [reference](#)
- [music](#)
- [software](#)
- [web](#)
- [css](#)
- [tools](#)
- [news](#)
- [webdesign](#)
- [web2.0](#)
- [javascript](#)
- [linux](#)
- [tutorial](#)
- [blogs](#)
- [ajax](#)
- [art](#)
- [video](#)
- [mac](#)
- [books](#)

A BOOKMARKING LINEAGE



Pinboard

0.224 s

web

RSS

Found 304904 results.

[« earlier](#)

[Groupon Voice Guide](#)

"This public Groupon Voice guide is a simplified version of our larger style guide. These principles are intended to help new and applying writers learn Groupon's signature writing style."

[inspiration](#) [writing guide](#) [voice](#) [web](#)

46 minutes ago by [santiesteban](#)

[copy to mine](#)

[A Comprehensive Guide to CSS Resets](#)

[design](#) [web_design](#) [web](#) [html](#) [html5](#) [css](#) [css3](#) [development](#) [resets](#) [code](#) [web_2.0](#) [useful guides](#)

59 minutes ago by [mewmew](#)

[copy to mine](#)

[A call for quality HTML5 demo markup ☆ Mozilla Hacks – the Web developer blog](#)

[html5](#) [markup](#) [web programming](#)

1 hour ago by [ironymark](#)

[copy to mine](#)

[Electronic Frontier Foundation:](#)

Google is poised to radically expand its book service, monitoring the digital books you search, the pages you read, how long you spend on various pages, and even what you write down in the margins. Google could then combine your reading habits with other information it has about you from other Google services, creating a massive "digital dossier" about you, your interests, and your concerns. With numerous reports of government efforts to compel online and offline booksellers to turn over records about readers, the time is now for Google to pledge to protect reader privacy.

[EFF](#) [Google](#) [privacy](#) [surveillance](#) [reading](#) [web](#) [books](#) [big data](#) [mining](#) [Doctorow](#)

A BOOKMARKING LINEAGE



Postmarks

[About](#) [Search](#) [Login](#)

[#activitypub](#)
[#blog_posts](#)
[#changelog](#)
[#default](#)
[#foss](#)
[#github](#)
[#postmarks](#)

Latest bookmarks

[Postmarks One-Month Update](#)

5 Oct 2023 • motd.co

A blog post with updates about Postmarks in its first month of public availability, a complete changelog, and some discussions of future work

[#blog_posts](#) [#changelog](#) [#postmarks](#)

[Postmarks on Github](#)

12 Sep 2023 • github.com

The current home for Postmarks' source code & development process

[#activitypub](#) [#foss](#) [#github](#) [#postmarks](#)

[Postmarks - Getting Started](#)

1 Sep 2023 • casey.kolderup.org

Some notes on setup and acknowledgements

[#default](#) [#postmarks](#)

[Postmarks - Ethos](#)

1 Sep 2023 • casey.kolderup.org

A short writeup about the influences and goals that led to the creation of Postmarks

[#default](#) [#postmarks](#)



PRODUCT PRINCIPLES

PRODUCT PRINCIPLES



single-user instances

PRODUCT PRINCIPLES



"old web" architecture

PRODUCT PRINCIPLES



interoperability with "the Fediverse"

SINGLE-USER INSTANCE

ADVANTAGES

- organizing as a group on a website takes work
- inevitably, there is growth and decay
- Fediverse data migration is a work in progress



SINGLE-USER INSTANCE

ADVANTAGES

- bookmarks should be durable
- hosting one user strips away many kinds of complexity



"OLD WEB" ARCHITECTURE

ADVANTAGES

- server-side HTML generation
- HTML forms, minimal client JS
- no external services or dependencies



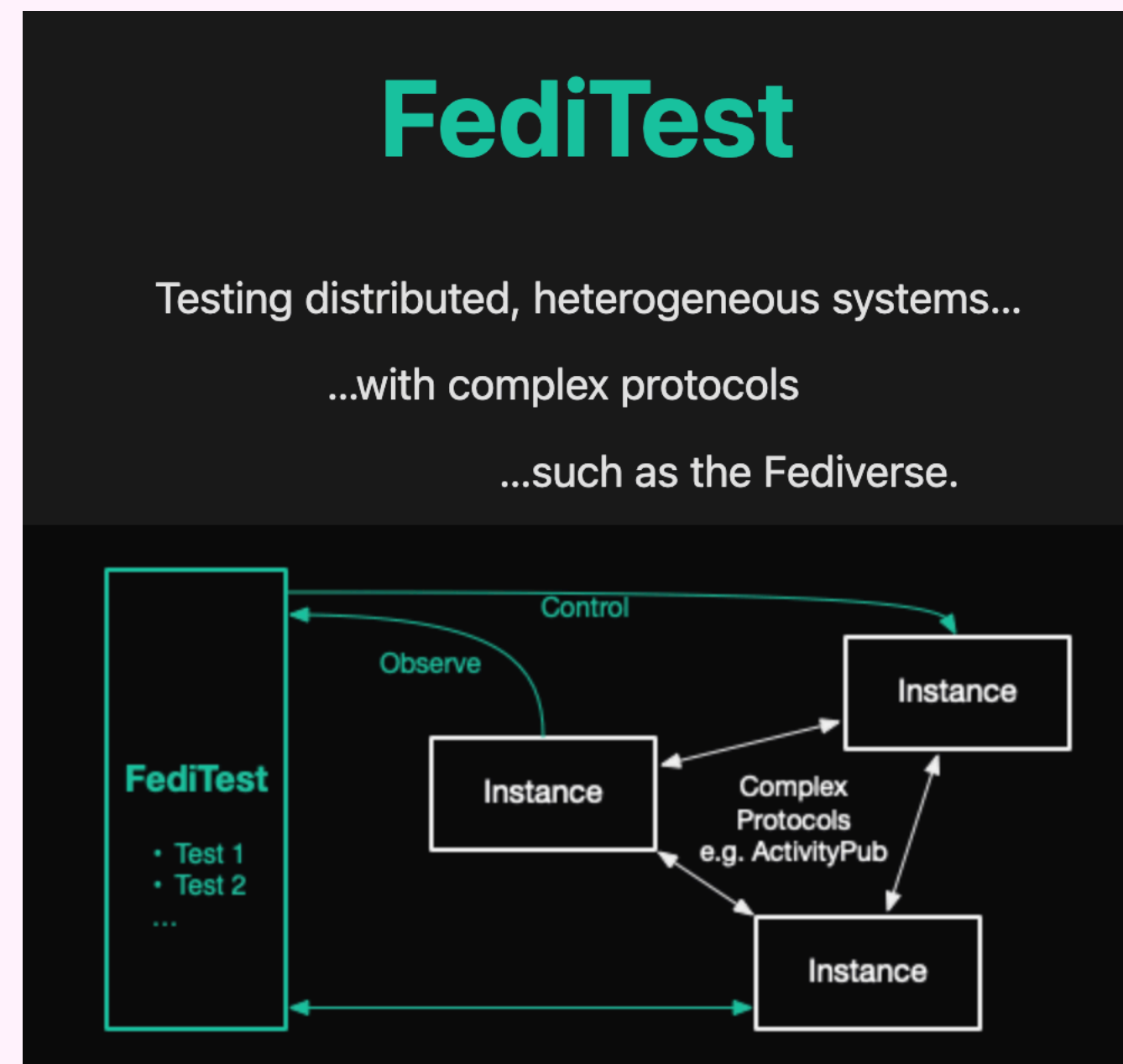
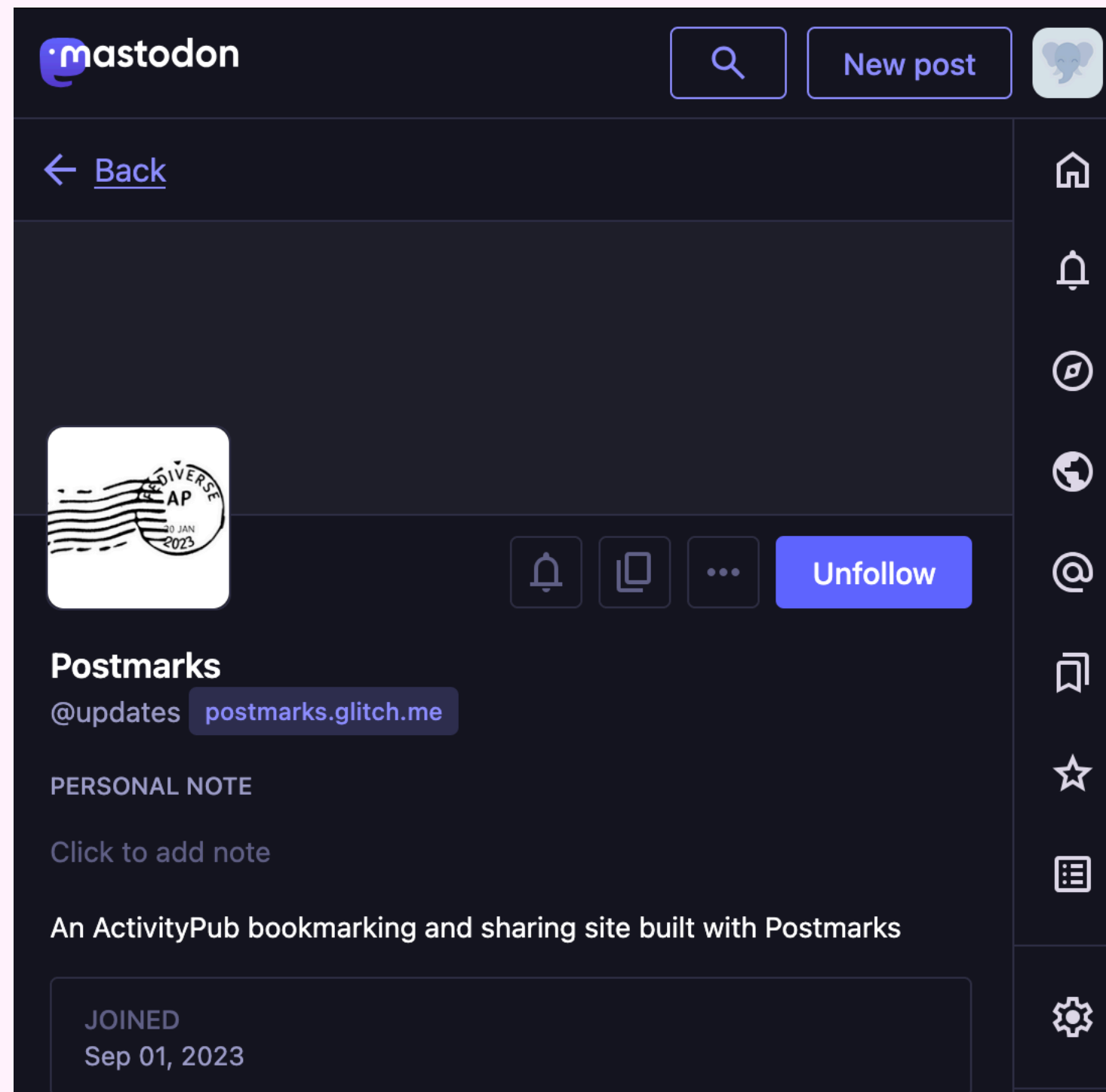
"OLD WEB" ARCHITECTURE

ADVANTAGES

- worked well for Glitch development!
- provided a public hostname on the web



INTEROPERABILITY ADVANTAGES



INTEROPERABILITY

ADVANTAGES



- Potential new features like reviving the "Network" page

INTEROPERABILITY COMPLEXITIES

- increased visibility
- but unlike the other two principles, increases complexity



INTEROPERABILITY COMPLEXITIES

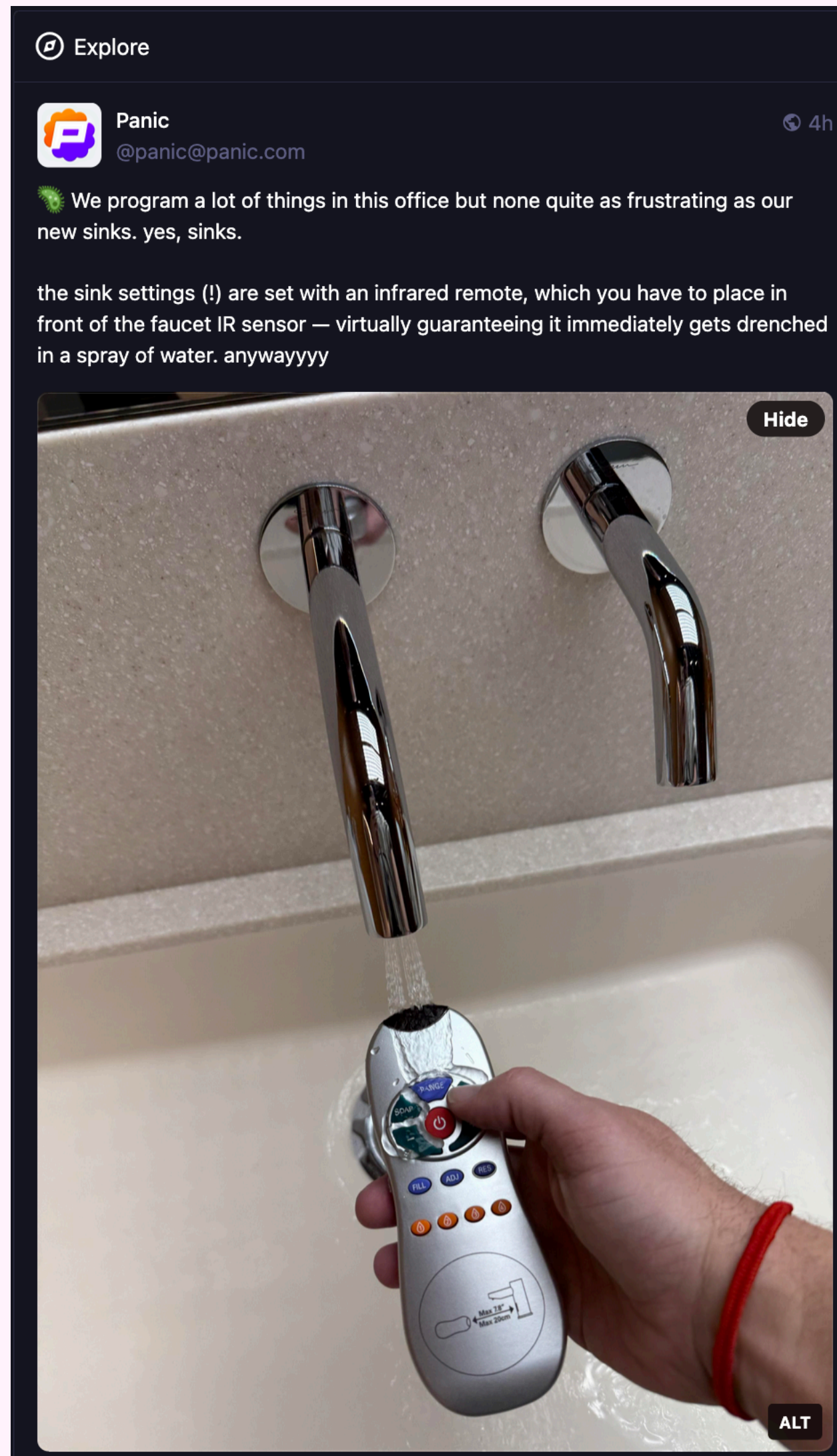
- increased testing surface
- importance of spec-following
- having to learn about other interpretations






THE FLATTENED WEB

EXAMINING THE TIMELINE




IS A "BOOKMARK" A "NOTE"?




 **Postmarks**
@updates@postmarks.glitch.me

Postmarks on Github
The current home for Postmarks' source code & development process

[Translate](#)

 **GitHub**
GitHub - ckolderup/postmarks: a single-use...
a single-user bookmarking website designed to live on the Fed...

Sep 12, 2023, 09:08 PM · 

TRAPPED IN THE TIMELINE



- does product design matter?
- why build a separate thing?

SOCIAL MEDIA HAS ONE SHAPE



- scrolling the flat web feels essential to being social right now

SOCIAL MEDIA HAS ONE SHAPE



- feeling resentful of context collapse
- still feel drawn to it despite that
- but it eats at me

WHAT TO DO



- walk away from interop as a principle?
- how to correct course reasonably instead?

WHAT TO DO



- I still think ActivityPub is the future
- but it deserves more products that feel like it

WHAT TO DO

- can't escape tradeoffs
- but I also can't ignore them
- so what's next?

