The Network Times

Ian Turner June 19, 2024

1 Full Stack Rust Rewrite Loading

i love leptos so this app will be my way to become cracked at rust. it's in different git repo btw (too lazy to update readme in other repo)

2 Bounty Submission for Balajis on Farcaster

Balaji put out a cast on Wednesday the 6th challenging anyone to create an AI NYT. He provided a nice example of something working 18 months ago with inferior LLM models. I've been looking for a reason to stay up all night coding, so I figured I'd give it a shot.

Why LATEX Ian?

Great question anon! I write these notes everyday at work and on other projects since pmarca gave me the idea with his ANTI-TODO list concept. Blog is no longer on the internet or else I would link it here. This may be completely useless to people, but I don't really but much detail in my git commits (I should start) so maybe this will help if you end up contributing.

3 Week 1 - Ship Website ASAP

Friday, 3/8/2024

- Recruit 10x designer, Michael Raisch.
- Set ship or die goal to Sunday (Didn't know the deadline at the time).
- Install hubble and run node.
- Get basic views built.
- Rust server which makes API calls to various LLM models.

Saturday, 3/9/2024

- Connect rust server api calls to client components.
- Struggle with hosting server.

Sunday, 3/10/2024

• Launch at 6AM rofl.

4 Week 2 - Feature Maxing

Monday, 3/11/2024

• Settle on OVH server to host and migrate away from AWS.

Tuesday, 3/12/2024

• Get Claude 3 Opus API working for article gen on photo click.

Wednesday, 3/13/2024

• Redesign by another 10X designer, Elvia Franco.

Thursday, 3/14/2024

- Skim through [1] for the 4th time.
- Initialize this very document (meta).
- Start to implement redesign.
- redesign nearly complete, need to style tweets still.

Friday, 3/15/2024

- Adjust system prompt, use haiku to save money rofl.
- Add LATEX pdf for change log button.

Saturday, 3/16/2024

• See Figure 1.



Figure 1: ahhh

Sunday, 3/16/2024

• See Figure 1.

5 Week 3 - AHHHHH

Monday, 3/11/2024

 \bullet See Figure 2.



Figure 2: AHHHH

Tuesday, 3/12/2024

• See Figure 3.



Wednesday, 3/13/2024

• Store articles in local storage to prevent multiple API calls per channel per session. Still very clunky behavior with NavBar versus logos on ArticleList.

6 Week 4 SEE WEEK 5

7 Week 5

I can't be asked

- I am too lazy to summarize my shitty git commits from the 13 til now (the 31st).
- Enjoy Mr. Incredible Uncanny 4 instead:



- Right, now I've added a few things:
 - custom link style and formatting in casts
 - render images in casts
 - sign in with farcaster (doesn't do much else yet)
 - link to view cast on warpcast
- $\bullet\,$ I suppose I should add reaction data and stuff now.
- I'm avoiding the actual hard tech of having the LLM not hallicinate. I'm thinking of having a writers room where my proprietary spagetti code strips out the things that don't make logical sense from the summary from the LLM.

I really can't be asked

- I suck at updating this, but I'm focused on a native farcon app at the moment. you can check it out here.
- I'm trying to get messaging working by handcrafting endpoints in rust (this will be my downfall, I should just use Neynar) so I'll use them in both apps anyways.
- Figure 5 is a drawing (from farcaster YT tutorial) which shows how to create a message with a custom client application.

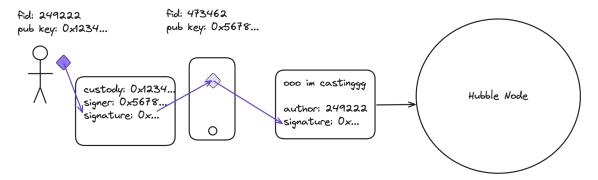


Figure 5: Farcaster Signer Concept

• pinata, farcasterindex, things to thing about using recommended by a friend.

8 Week 7?

Saturday, 04/20/2024

- Q is helping me with ai nyt server.
- I am hard stuck on messages so perhaps we will crack it together.

Sunday, 04/21/2024

- Got diesel initialized in the project for storing articles, have not yet tested the ORM yet, I'll do this soon.
- I was distracted by the reactions feature for the network times. This was really easy to add, and I styled it indigo-300 or something like this. I've never seen a social site have this color like, so it's interesting at least.
- You can't yet press the like, this will work once I finally figure out how to make the app a valid signer for users.
- I added a profile page as shown in Figure 6.



Figure 6: Profile Page

• I added hover effects (you can't see it here but matt's pfp background has a slight black circle with 10% opacity applied here (Figure 7).



Figure 7: Pfp Hover Effect

9 Week 8?

Sunday, 06/10/2024

- we might be back (leptos rewrite). notes from testing existing hubble node routes with leptos components.
- this is not live yet since it has very limited funtionality.
- fetch_username checks if lead_usernames already has the fid. if not, it fetches the username and updates the state.
- added ongoing_requests to track fetches and avoid multiple requests for the same fid.
- Used create_effect to manage side effects, ensuring usernames are fetched only once.
- Used spawn_local for async tasks to keep the main thread non-blocking.
- Signal and set_signal handle reactive state in the Channels component, making sure the UI updates when data changes.
- HashSet tracks ongoing_requests, preventing duplicate fetches and redundant state updates.
- The component dynamically displays usernames from the updated state.
- asdfasdf

Monday, 06/11/2024

- removed the lead_username variable and its assignment using unwrap_or_else from the view!
- added closure inside the view! macrothat matches on lead_usernames.get().get(<ref>fid).
- if the lead username is available show it, else show "chill" in div where username would be
- closure is defined using move || to capture the lead_usernames and fid variables.

Tuesday, 06/12/2024

- begin rewrite of cast and cast list pages, need to think about using create_effect in the complicated way that i did above.
- using this create_effect in the way that i am to sync the reactive system is officially (Figure 8) discouraged since you might shoot off your foot with an infinite loop if you don't create something to keep track of the ongoing_requests. i like the chill message though and how it could show up at different times for different channels in some cases (probably won't be used, but we will see).
- i'll do the cast stuff without create_effect to see if it's less complicated and achieves virtually the same thing.

Figure 8: create effect bad

10 Week 9?

Monday, 07/17/2024

- man i can not count, but we are back. leptos rewrite going well, realized i need to use something like deadpool-diesel since i already have some diesel endpoints i want to repurpose and apparently this deadpool crate integrates well with tokio (at least better than plain r2d2 from diesel)
- i will play around with this for article storage and more
- looks like deadpool is the move, will explore latest changes to crate and try to implement this over r2d2
- channels still sus as hell the way i use create_effect, but we will send it for now (i don't know how to use loom crate or similar yet to test async / concurrent stuff)

Tuesday, 07/18/2024

- i am getting skill issued when trying to convert to deadpool from vanilla postgres r2d2 setup haha. might just stick with what i had before and if the stream fails halfway by user refresh or anything else, that's just tough buddy¹
- ...

¹this will destroy me inside

References

[1] C. Huyen, $\underline{\text{Designing Machine Learning Systems}}.$ USA: O'Reilly, 2022.