updated readme.md
Philipp Hutter authored 1 day ago

Forked from Dsy_Challenge_Task / Frontend
28 commits ahead of the upstream repository.

Name	Last commit	Last update
Service	clean up code	3 days ago
res	updated readme.md	1 day ago
.gitignore	added express	8 months ago
Dockerfile	Attempt to implement fetch...	1 month ago
ReadMe.md	updated readme.md	1 day ago
package-lock.json	Try implement getQuoteEx...	1 week ago
package.json	Try implement getQuoteEx...	1 week ago

ReadMe.md

Blockchain Challenge Task

Requirements

All requirements below must be met in order to pass this lecture.

1. A working prototype with your stablecoin.
2. Use latest stable releases of chosen libraries and frameworks.
3. Interaction with a public blockchain (can be testnet).
4. Must be tradable on a decentralized exchange (DEX)
5. Stablecoin needs to rebalance on DEX to remain stable
6. Status and process need to be shown in the frontend.

- The solution may use existing libraries and code, but those must open software software.

Our project idea

We will make a Stablecoin that it tethered to the gold price. The Stablecoin will be on the Ethereum blockchain.

The frontend will be developed with Javascript, HTML and CSS. The smart contracts will be developed with Solidity. Because Remix IDE only support GitHub the Smart Contract will be developed there GitHub Project, whereas the rest of the project, will be developed on GitLab.

Infrastructure Documentation

For our JavaScript library we chose "WEB3.js" to be able to interact with the Ethereum Sepolia Testnet directly. The name of our coin "GETH" stands for "Gold Hedged Ethereum". This means, that one GETH Coin is always worth the same in Gold.
In our case 1 GETH = 0.01g Gold ≈ 0.84$.
The Pool can be accessed using this address:
`0x01d35ae96aB6c1b4A29dc568F817Eae1cBE9db4D`
The GETH Token can be accessed using this address:
`0x325c1902f027b8c6F63f944c5C755e3Bd45f2d40`

Project information

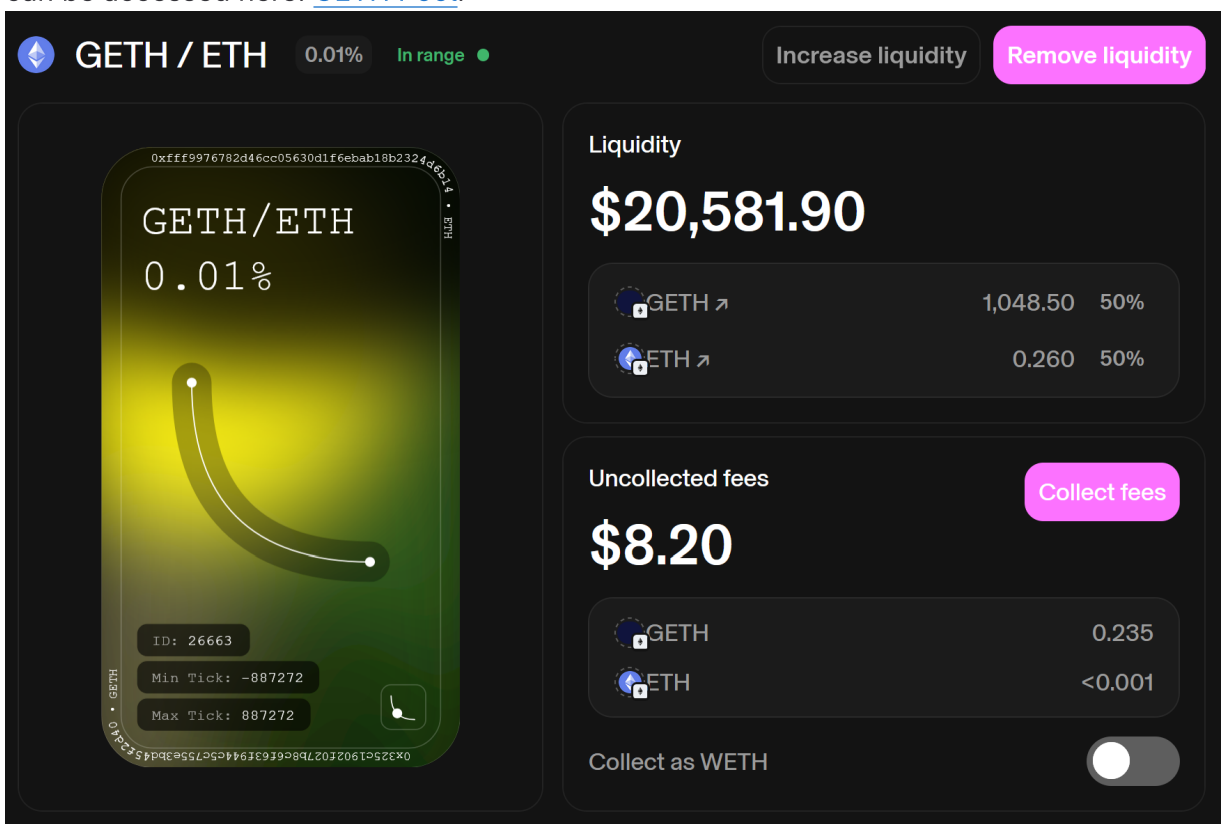
Created on
September 17, 2024

special considerations like Docker.

Due to our very limited Backend Logic we decided for the sake of simplicity to only use a Frontend component and to write the entire Logic in JavaScript on the Frontend.

Pool

Our pool is available on Uniswap. The pool is located on the Ethereum Sepolia Testnet and can be accessed here: GETH Pool.



Rebalancing

To achieve rebalancing we call the function "stabilizePool" every five seconds. This functions calculates the value of GETH using the current Gold price and the value of our Ethereum using the Ethereum rate.
If the value of our Tokens, GETH and ETH is within 1% of eachother we do nothing, otherwise we calculate how many coins we need to swap to be able to rebalance.