

Gnosis Fund Proposal For Creating Decentralized Pooling Application

Team name:

PoolX

Team members:

Gustavo Guimaraes, Timo Hedke, Markus Wass, Hendrik Bilges, and Matthew McIlhenny

What project are you building:

A pooling application that interfaces with the DutchX exchange. It will allow the collected funds to be used for both the buy and sell side of token pairs auctions.

Why did you decide to build it

The team's first interest happened at the EthBerlin hackathon. We were intrigued by the idea of a decentralized exchange via a reverse dutch auction. We looked into the DutchX product and its documentation during the hackathon and realized that the first auction of a new token pair in the exchange required a minimum amount of crypto asset. It became clear to us then that not every individual would have the means to start a token pair auction for her favorite token pair. It would most likely come from a group effort. By the end of EthBerlin hackathon, we conceived an application that allow individuals to chip in funds together in order to start the first token pair auction on DutchX. This resulted in the team winning the Gnosis bounty prize and we have since then been invigorated to make the project evolve and become a tool for others to use with DutchX.

How long will it take:

We plan to finish the project in 4 months.

How much funding are you requesting?

15 thousand euros

How did you hear about the GEF

At EthBerlin after winning the Gnosis bounty prize.

Proposal

The goal of this project is to create an application that collects funds into a pool in order to add buy part as well as the sell side of a first token pair auction within DutchX. This is a continuation of the work initiated at EthBerlin where the team won the Gnosis bounty prize. We are motivated to have this application as a go-to tool for the crypto community worldwide to use in regards to listing token pairs on the DutchX platform.

The future outlook of the project is promising. The team believes that pooling crypto assets have other use cases such as pooling to donate for a cause, collect funds to build a new playground in a park, and the like. The code has potential to be abstracted to become its own decentralized organization. The initial financial backing from the Gnosis fund will allow the team to create a tool which in turn may benefit use cases other than DutchX.

Features

The application will have three core features: 1. creation of a pool, 2. contribution to a pool, and 3. exchanged tokens withdrawal.

- 1. Creation of a pool uses a user interface in a mobile compatible web application.*
- 2. Contribution to a pool happens via a Telegram bot*
- 3. Exchanged tokens withdrawal occurs via the Telegram bot and a user interface on a mobile compatible app.*

For smart contracts, we'll use the Truffle Framework and Solidity to create the smart contracts. Smart contract tests are written in JavaScript.

The application will be created with React.js

Pool Creation page mockup:

Create Pool
for listing a token pair on DutchX Exchange

Pool Description

Token Listing

First Token Pair
Second Token Pair

1 Description and Token Pair

2 Step 2

3 Step 3

4 Step 4

5 Review

For the telegram bot we will use Node.js.

Team description

Gustavo Guimaraes - Blockchain and Software engineer with 6+ years of experience in information technology. He has worked on blockchain projects such as Odem.io (<https://odem.io/the-team.php>), Pillar project (<https://pillarproject.io/>), Starbase (<https://starbase.co/>), Zulu Republic (<https://www.zulurepublic.io/>) and Samsara Protocol (<http://samsaraprotocol.io/>).

Gustavo has also put forward educational material on blockchain development for new engineers coming into the space (<https://blog.zeppelin.solutions/how-to-create-token-and-initial-coin-offering-contracts-using-truffle-openzeppelin-1b7a5dae99b6>) and runs a periodically meetup in Berlin called Solidity Berlin (<https://www.meetup.com/Solidity-Berlin/>)

Timo Hedke: Blockchain Engineer at Zulu Republic (<https://www.zulurepublic.io/>)

Markus Wass: Blockchain Engineer at Starbase (<https://starbase.co/>)

Hendrik Bilges: Freelance Software Engineer with 10 years of experience in the industry.

Matthew McIlhenny: Founder at Chitra Group, Stima LLC (stima.us)

Timeline, Milestones and Deliverables

Detailed description of your timeline milestones and the corresponding payouts

Phase I

Completion of smart contracts

Deliverables

1. *Revisit smart contract created at EthBerlin and upgrade it with more features*
2. *Fully test current smart contract with unit and integration tests*
3. *Extend pool functionality, e.g. add pooling for buy/sell side orders*
4. *Test extended smart contract version with unit tests.*

Notes: The smart contract are going to be gas optimized. They will also have the following:

- *All smart contracts have 100% test coverage with solidity-coverage*
- *All public methods have netspecs*
- *Linters are applied (Solium or Solhint)*
- *Readme with setup instructions and explanations for implementation details*
- *All code (Variables, function names, comments) is in English*
- *The smart contracts are open source*

Time and Price Estimate

Delivery: Dec 15th. Cost requested 5000 € (five thousand euros)

Phase II

Creation of a pool uses a user interface in a mobile compatible web app.

Deliverables

1. *Set up all development infrastructure, application architecture, continuous integration, initial deployment*
2. *Allow the user to create a new pool, manage application state, provide a REST API for the bot and add unit tests to codebase*

Time and Price Estimate

Delivery: Jan 15th 2019. Cost requested 5000 € (five thousand euros)

Phase III

Contribution to a pool happens via a Telegram bot and exchanged tokens withdrawal occurs via the Telegram bot and a user interface on the application.

Deliverables

1. *Telegram Bot for allowing users to contribute to a pool*
 - a. *Show details of a particular pool*
 - b. *Allow the user to contribute to a pool*
 - c. *Show user's contributions for a particular pool*
2. *Allow the user to create a new pool and store it in the database, manage state, provide a REST API and create unit tests*
3. *Allow the user to withdraw contributed money*
 - a. *Allow the user to claim their exchanged tokens or retrieve their funds when the auction fails*
4. *Deploy application*

Time and Price Estimate

Delivery: March 15th 2019. Cost requested 5000 € (five thousand euros)

Others

Anything else you want to share with us

The team is dedicated to create a secure and user friendly tool built on top of DutchX. We are looking forward to continue contributing to a more decentralized future.

Note on Adoption and Promotion

The team aims to release the first application to be built on DutchX. We would like to use this in our favor and for promotional efforts in social media.

We are also part of a network of companies that created their own ERC20 tokens within the past two years. This is due to the team's extensive experience in Blockchain and Software development. We aim to reach out to these clients and promote this project among them. We will emphasize the benefits for their token to be listed on DutchX and how the pooling tool that we are creating will facilitate this.