Disperse DAPP With Ink! And React

POLKADOT NA Hackathon

DAPP Overview

Disperse DAPP is a batching protocol for both native currency and ERC20/PSP20 tokens that can help create more efficient transfers by batching them in a single block. This dapp is live on multiple Dotsama ecosystem chains.

Project Repository and a simple GUI

Project Directory is located at https://github.com/polkadotrafat/disperse

GUI is at https://famous-llama-2bd8e8.netlify.app/

Contract Address (Shibuya Testnet): XAPTQfpsddWDJ9kkkVBQjkchzHjpD9Bz4noneJmfBvTySC7

Disperse Contract

Disperse Native Currency

```
pub fn disperse currency(&mut self, addresses: Vec<AccountId>, values: Vec<Balance>)->
Result<(), Error>
```

Disperse ERC20/PSP22 Tokens

```
pub fn disperse token(&mut self,token address: AccountId, addresses: Vec<AccountId>,
values: Vec<Balance>) -> Result<(),Error>
```

Contract Interactor GUI Requirements

- 1. Polkadot.js Wallet
- 2. Connect Polkadot.js to the blockchain by allowing website access
- 3. Get some tokens for transactions if you don't already have them.

Backend Tooling

Rust Toolchain

Substrate-contracts-node

Openbrush PSP22 Contract library

Polkadot.js account

Frontend Tooling

Create-React-App

yarn

React Bootstrap UI

Install: yarn install

Local Server: yarn start

DEMO 1: Batch Transfer Native Token

- Enter each address in a new line followed by a separator (comma,colon or blank space) and then the amount.
- In this Demo we will disperse different amounts of native currency to two different addresses.
 Both addresses are two different accounts from the same wallet.
- Address1 gets 0.2 and address two gets 0.3.

DEMO 2: Batch Transfer ERC20 Tokens

- Enter the ERC20/PSP22 Address. We will use testtoken (address) for this demo.
- Enter each address in a new line followed by a separator (comma,colon or blank space) and then the amount.
- In this Demo we will disperse different amounts of test tokens to two different addresses. Both addresses are two different accounts from the same wallet.
- Address1 gets 5000 tokens and address two gets 8000 tokens.