1. Introduction

This is a 'Dapp' which use web3, Vue and smart contract technique to build a decentralized Album voting system

2. Functions

1) Mandate - The host can giving out voting opportunities to other accounts.

2) Vote - Accounts with voting right can vote for album(s)

3) Delegate - Accounts with voting right can delegate their rights to other accounts.

4) Board - Shows information of albums' voting result

5) Show accounts information

3. Implement (how to run this project)

First you need to build the environment follow the instruction of “command.txt”.

1) The host account deploy the contract(Vote.sol) and get the address of the contract, put the address here:

A screen shot of a computer program

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!! When you press deploy, you need to provide input of Candidates in a list form.

(like: [‘a’,’b’,’c’] )

A screenshot of a computer

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2) Get test net’s(Infura Sepolia) API and put it here:

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3) put file vote.json into contract directory.

4) Dependencies like this (installed tools we need):

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5) Run “npm run serve”, and we can get this:

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6) Copy local’s link and open it in the chrome browser.

We can get:

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7) Host giving out voting opportunities:

Step1: Input the addresses of voters in the form of a list to the left area:

Like : [‘ad1’,’ad2’,’ad3’]

Step2: Input the private key of the host account to the right area.

Step3: Press the button “Give out voting opportunities”.

By doing this, host can give other accounts opportunities to vote. And the host account born with 1 chance to vote.

8) Accounts’ information shown below

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9) If you want, one account can delegate its chance to another.(If the receiver already voted for an album, the vote will be automatically added to that album)

You can do this by:

Step1: Input private key and delegator account’s address, and press the button “Delegate”.

10) The board shows how many votes each album get.

A screenshot of a music album voting system

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11) Accounts with right can vote for album like this:

Step1: Input the account’s private key and press the button “Save Private Key”.

Step2: Click one of the buttons on the right (with number) to vote. Wait for several seconds, it is done.

4. Tips

1. Every time you switch account use ‘metamask’, it is better to refresh the page.
2. If you don’t follow the workflow or your account don’t have enough eth coins(when you do the transection), there will be **errors** coming out.

Just close the error page(by press the top right button), refresh, top up and try again.

A screenshot of a computer error

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Or you can change the gas limit and price here: (try different values)

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