DJM_dApps



HTTPS://SHawry6.GITHUB.IO/DJM_DAPPS

Motivation & Summary

DJM_dApps

- Smart Contracts transacting on the Ethereum Blockchain
- This is a governance process which enables any group of people to agree on anything imaginable. This is achieved through the following steps:
 - 1. Proposal of Ideas submitted on the blockchain
 - 2. **Voting** for Proposals by the group members
 - 3. **Bidding** on a Winning Proposal by Suppliers
 - 4. **Contracting** the Winning Bidder to fulfill the Winning Proposal by the Chairperson/s of the group.



Technologies

- Written in the Solidity programming language
- HTML and Javascript for UIs
- hvPlot for statistics



Installation Guide

To transact with DJM_dApps you'll need:

- A digital wallet with Ethereum to transact. We recommend Metamask.
- Compatible browser. We recommend Google Chrome.
- Pinata to view blockchain submissions

For the geeks:

 To compile and deploy DJM_dApps we used and tested with Remix, Ganache and Metamask







Joe's presentation of the Proposal dApp



Submit a Proposal on Blockchain

Proposal on the Blockchain

Name of Proposer...

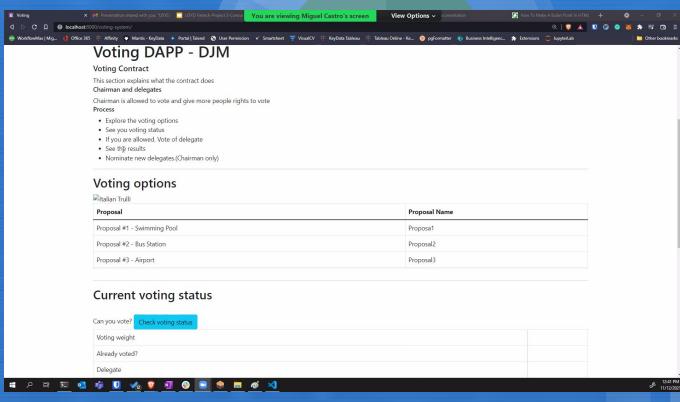
Type in your Proposal or load file..

Choose file No file chosen

SUBMIT PROPOSAL TO BLOCKCHAIN

Miguel's presentation of the Voting dApp





Dave's presentation of the Voting dApp



Bid for Tender

Select the Tender you would like to Bid on

BID

Registry of Tenders by Chairperson Only

Bus Stop

Attach Tender: Choose file 1_bustop.jpg

REGISTER TENDER

Joe's presentation of the Contract dApp



Submit a Contract on Blockchain



Contract on Blockchain

Contract Name...

Type in your Contract or load file...

Choose file No file chosen

Encrypt / Decrypt

SUBMIT CONTRACT TO BLOCKCHAIL

Issues / Improvements

- The User GUI involves a whole new world of coding which we had to quickly adapt to. There are many aspects that can be improved here with better knowledge of UI/UXs.
- The efficiency of transactions needs to be improved. The process of coding within solidity, testing and transacting with Ganache and Metamask with UIs in Javascript and html then pushing submissions to the IPFS via Pinata.



Useful Resources

- Ethers.js
 - https://docs.ethers.io/v5/
- Plotly
 - https://plotly.com/javascript/getting-started/#start-plotting
- YouTube
 - <u>www.youtube.com</u>
- Remix
 - www.remix.ethereum.org
- OpenZepplin
 - https://openzeppelin.com/

Questions

