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| Decentralized Voting Platform | Guy S Garcia | 1/20/2021 |
| <p><i>Problem Background</i></p> <ul style="list-style-type: none"> • People have lost trust in current voting systems thanks to the lack of transparency and ease of manipulation. • Centralized voting systems allow organizations to potentially take advantage and manipulate/falsify votes to their advantage. • The very nature of current political voting requires so much time that smaller decision voting is usually avoided. • These types of problems demotivate a great deal of people thus creating a bigger percentage of people that refuse to vote. | <p><i>Countermeasures</i></p> <ul style="list-style-type: none"> • Study fail points of previous voting platforms (what made them fail and what allowed them to be manipulated?) • Properly implement a decentralized blockchain connected as a parachain to a bigger chain like Cosmos or Polkadot to provide a more robust network thus increasing security. • By transforming a vote into a coin, it automatically has value, users see the importance of their opinion if it is given a monetary weight. • By grouping votes in different organizations we can further separate votes to turn a single platform into what feels like multiple ecosystems all working together to keep the core ideal present, security. • As mentioned before, decentralization makes it close to impossible to completely control and manipulate the votes without following the rules. The cheater would have to own 51% of the chain or 33% of all the coins to actually have a say in the system. • The first organization could be an open platform where users buy coins to vote on future software upgrades or changes in the system architecture. Making it a platform that has a fate decided by its users. | |
| <p><i>Target</i></p> <ul style="list-style-type: none"> • To create a decentralized voting system that no one can control or manipulate, thus making it completely governed by the people. • Decentralized technology leads to transparency, which allows everyone to see live results thus deterring mass scale vote manipulation. • An easy to use and open platform where everyone can create votes and polls, allowing governments, companies and individuals to communicate with the masses in the form of a vote. • A flexible platform allows more creativity in the incorporation of votes and the value of an individual vote. Giving everyone's voice value. | <p><i>Check/Evaluate</i></p> <ul style="list-style-type: none"> • Test how hard or easy it is to completely overthrow a decentralized vote • See how to be completely transparent on votes while hiding the user's identity to provide anonymity • If created organizations/groups inside the platform can incorporate their own way of logging in or generating new wallets. | |
| <p><i>Causes</i></p> <ul style="list-style-type: none"> • Centralized systems for voting cause a very obvious lack of transparency and security since they can be controlled by one organization or institution. • Lack of incorporation of technology makes it very easy to cheat. | <p><i>Proposed solution</i></p> <p>A decentralized voting application based on the concept of wallets and crypto-coins. First you create an organization, where users get registered (can be via SSN for governments, or company accounts) and then they receive a unique wallet. Organizations can choose to pay X amount of coins (1 coin = 1 vote) and then create some voting forms. Users must then use these coins or they will expire when its linked form expires. Being decentralized means a public ledger contains a record of all created votes, awarded coins and coins spent, allowing for the people to determine the legitimacy of the current or past votes. It also means it can never be erased, all information is permanently saved in the blockchain.</p> | |