Blockchain based E-Voting Application – A Survey

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Abstract

Document Sections

» Introduction

» Blockchain Technology

» Electroinc Voting Systems In Blockchain

» Hyperledger Fabric

» Design and Implementation of Hyperledger Frabric In E-Voting System

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Figures

References

Citations

Keywords

Metrics

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Abstract:
Voting is a crucial component of daily living in the modern world. Everyone belongs to social groups, which might vary in size, and in the majority of them, voting has a significant impact on key decisions. Technology advancements have simplified the voting process. Present voting system has lot of issues concerning to transparency, privacy etc., To solve these issues, both the polling and counting of ballots can be done using blockchain technology. In-depth information is provided on the development of the BlockVote electronic voting system. Application of Ethereum technology in e-voting leads to scalability issues. POW (proof of work) mining concept leads to inefficient time management operation. This study has proposed a Hyperledger fabric framework for the implementation of e-voting application. The Hyperledger Fabric network is a middleware program and an interface that make up the system. Both of the smart contracts: EVotingContract and CodesContract are a part of the Hyperledger Fabric blockchain. The connection between the blockchain network and the user interface is made possible by a gateway application.

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