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Blockchain Based Electronic Voting System

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Abstract: The use of technology has grown increasingly significant in meeting human needs. Due to the increased use of technology, new obstacles have arisen in the democratic process. The majority of people today do not trust their leaders, holding elections is criticalin modern democracy. The biggest difficulties in the existing voting system are vote rigging, EVM (Electronic voting machine) hacking, election manipulation, and polling booth capturing. Smart contracts are meaningful pieces of codes, to be integrated in the blockchain and executed as scheduled in every step of blockchain updates. E-voting, is another trending, yet critical, topic related to the online services. The blockchain, togetherwith smart contracts is a promising contender for developing safer, cheaper, more secure, transparent, and easier-to-use electronic voting systems. Ethereum and its network are one of the most ideal because to its consistency, widespread use, and provision of smart contract logic. An e-voting system must be secure, as it should not allow duplicated votesand be fully transparent, while protecting the privacy of the attendees. In this project abstract we have addressed the application of an e-voting application as a smart contract for the Ethereum network using the Ethereum and the Solidity language along with JavaScript UI.

Keywords: Blockchain, Cryptocurrency, Ethereum

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