

# True Vote

Area/Domain of Project : - Blockchain

## Abstract :

Recently, there has been a growing interest in using blockchain technology for decentralised website , especially with regard to voting systems. Traditional voting procedures frequently have issues with accessibility, security, and openness. With its intrinsic qualities of decentralisation, immutability, and openness, blockchain presents a viable way to deal with these problems .The goal of this project is to create a decentralised voting system with React.js, a well-liked JavaScript user interface toolkit, and Solidity, an Ethereum smart contract language. By utilising blockchain technology, the system seeks to improve voting procedures' accessibility and integrity . Solidity will be used to create smart contracts that will control the voting procedure. These contracts will specify how elections are held, votes are cast, and results are tallied. They will be implemented on the Ethereum network, guaranteeing immutability and transparency. Ethereum's own decentralised identifiers (DIDs) and other standards, such as DIDs based on decentralised identifiers for Web (DID Web), will be integrated into the system. React.js will be used in the development of the application's front end to create a user-friendly interface that voters can use to engage with the decentralised voting mechanism. Viewing ongoing elections, safely casting ballots, and confirming the accuracy of the results will all be possible for users. Votes will be safely recorded and impenetrable thanks to blockchain's cryptographic principles. Every vote will have a distinct cryptographic signature linked to it, protecting against fraud and double voting while preserving anonymity. The system hopes to be more accessible to a larger group of users, such as those who live in rural areas or have restricted access to conventional voting infrastructure, by utilising blockchain technology. Additionally, because it is decentralised, it can be scaled to accommodate a huge number of participants without sacrificing performance. Election results may be instantly verified by both participants and auditors because to blockchain's transparency. This lowers the possibility of disagreements and increases confidence in the voting process. The React and Solidity-powered decentralised voting system JS is a step in the direction of safer, more open, and inclusive democratic processes. It solves major issues with traditional voting systems by utilising blockchain technology, opening the door for further developments in decentralised government.