DAYANANDA SAGAR COLLEGE OF ENGINEERING

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

DECENTRALIZED FINANCE (DeFi) BANKING APPLICATION USING BLOCKCHAIN TECHNOLOGY

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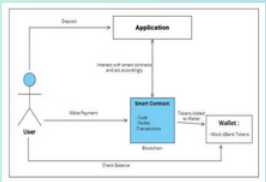
ABSTRACT

- Traditional banking systems rely on human interventions and can be prone to tampering or modification of transaction history and bank balances.
- The proposed solution is a DeFi (Decentralized Finance) banking application built on the Ethereum Blockchain technology.
- The DeFi application is fully automated and eliminates the need for human interference.
- Smart contracts will be developed to govern the system procedures.
- Users will have the ability to deposit, withdraw, and earn rewards in cryptocurrencies.
- The proposed system ensures that financial transactions cannot be altered.
- Transactions can be performed instantly from any location, whether it be home or work.

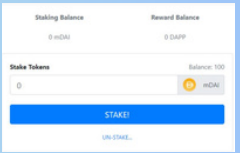
BLOCK DIAGRAM



METHEDOLOGY

- Smart Contract Development: Use Solidity to create contracts for staking, rewards distribution, and farming rules.
- User Interface Design: Develop a user-friendly interface displaying farming pools, staked balances, and earned rewards.
- Token Integration: Integrate specific tokens using Ethereum's ERC-20 standard, including transfers, staking, and balance tracking.
- Liquidity Provision: Set up liquidity pools through partnerships or incentivize users for liquidity mining.
- Testing and Security Audits: Thoroughly test smart contracts for functionality and security vulnerabilities. Perform audits to ensure robustness and protection against attacks.
- Deployment: Compile and deploy smart contracts on the Ethereum blockchain, making the token farming platform operational.

GUI



ADVANTAGES

- Decentralization: No intermediaries, full control over assets and transactions.
- Automation and Efficiency: Smart contracts automate processes, improving efficiency and accuracy.
- Yield Generation: Users earn rewards by providing liquidity or staking tokens.
- Accessibility: Available to anyone with an internet connection and compatible wallets.
- Security: Utilizes blockchain's security and immutability, reducing fraud and unauthorized access.