IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.301
Volume 3, Issue 2, May 2023

Decentralized Blockchain Application using ReactJs

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Abstract: *It is a decentralised blockchain application created with the help of ReactJS. It is made up of SOLANA digital currency. Because we can update smart contracts in Solana far more readily than we can in Solidity, Solana is more trustworthy overall. Solana is one of the world's fastest blockchains, processing more than 65,000 transactions per second (TPS). Solana has maintained a spot in the top 10 cryptocurrencies by market cap for more than a year thanks to its speed, cheap transaction cost, and developer-friendly development strategy. This application is basically a clone of Instagram platform in this application we can create the post which is stored on cloud storage and when we add the post it will cost some SOL and it will be stored on the blockchain. Once the post is stored on the blockchain we cannot remove it. To do this process we need a cryptocurrency wallet so for this project we are using the Phantom cryptocurrency wallet. Phantom wallet is a non-custodial Web3.0 wallet, and it is the most popular cryptocurrency wallet for the Solana blockchain..*

Keywords: Solana; Blockchain

I. INTRODUCTION

Blockchain technology is gaining a lot of popularity these days because of its decentralized and secure nature. The use of blockchain in web applications can provide transparency, immutability, and security to the application. ReactJS is a widely used front-end technology that allows us to create fast and responsive web applications. Solana is a high-performance blockchain that offers fast transaction speeds and low transaction fees, making it an ideal choice for building decentralized applications.

To use Solana cryptocurrency in the application, a cryptocurrency wallet is required. Phantom wallet is a non-custodial Web3.0 wallet that allows users to securely store their Solana tokens and make transactions on the Solana blockchain. As a non-custodial wallet, users have full control over their funds, and their private keys are never shared with any third party.

Phantom wallet has become the most popular cryptocurrency wallet for the Solana blockchain due to its user-friendly interface and fast transaction processing. It provides users with a seamless experience to interact with decentralized applications built on the Solana blockchain. By using Phantom wallet, users can easily send and receive SOL tokens, view their transaction history, and manage their wallet settings.

II. LITERATURE SURVEY

Instagram is a widely popular social media platform that has revolutionized the way people share photos and videos. However, its centralized structure has also been criticized for data privacy concerns and censorship. A decentralized Instagram clone using ReactJS and blockchain technology can provide a solution to these issues. In this literature survey, we explore the existing literature related to blockchain- based social media platforms and decentralized applications. Blockchain-based Social Media Platforms: Steemit is one of the first blockchain-based social media platforms that introduced the concept of rewarding users with cryptocurrency for creating and curating content. Its blockchain-based architecture ensures transparency and censorship resistance. However, it has been criticized for its complex user interface and slow transaction times. Minds is another blockchain-based social media platform that offers users control over their data and content. It uses Ethereum blockchain and offers a token-based incentive system to reward users. It has gained popularity due to its focus on privacy and free speech.

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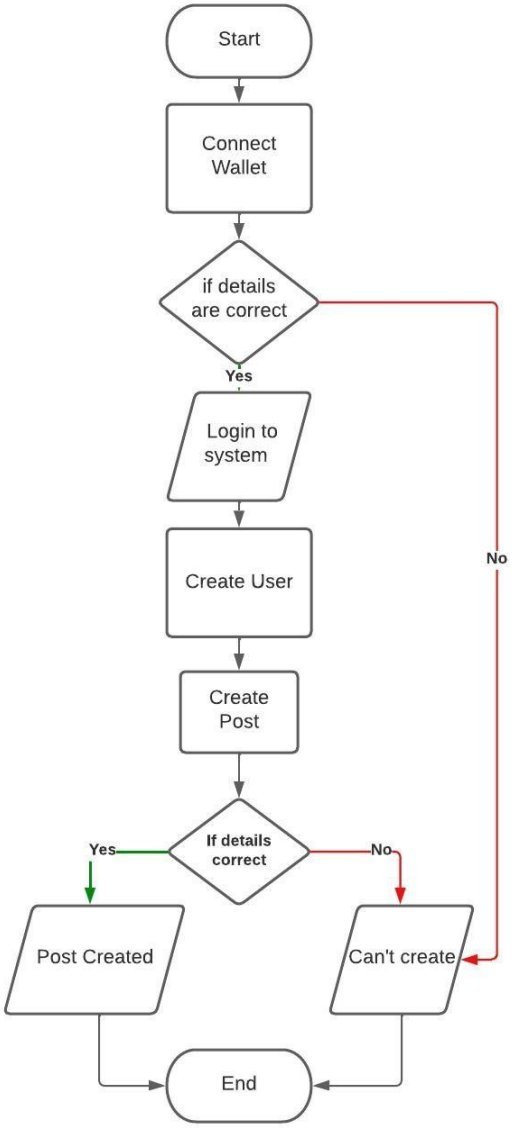
III. PROPOSED IMPLEMENTATION.

A proposed system that is a clone of Instagram using blockchain technology could have several benefits over traditional social media platforms. Firstly, blockchain technology is known for its security and transparency. By using a decentralized system, users' data is stored on multiple nodes on the network, making it difficult for hackers to compromise the system. Additionally, the use of smart contracts can ensure that users' data is only accessed by authorized parties and is not misused. Secondly, a blockchain- based Instagram clone could give users more control over their data. With traditional social media platforms, users often have to agree to terms and conditions that give the platform ownership over their data. However, with a blockchain-based system, users could retain ownership of their data and have more say in how it is used. Thirdly, a blockchain-based Instagram clone could provide greater monetization opportunities for content creators. With the use of cryptocurrency, users could receive payment directly for their content without having to rely on the platform to monetize their content. Additionally, the use of smart contracts could ensure that payment is fair and transparent

IV. FLOWCHART



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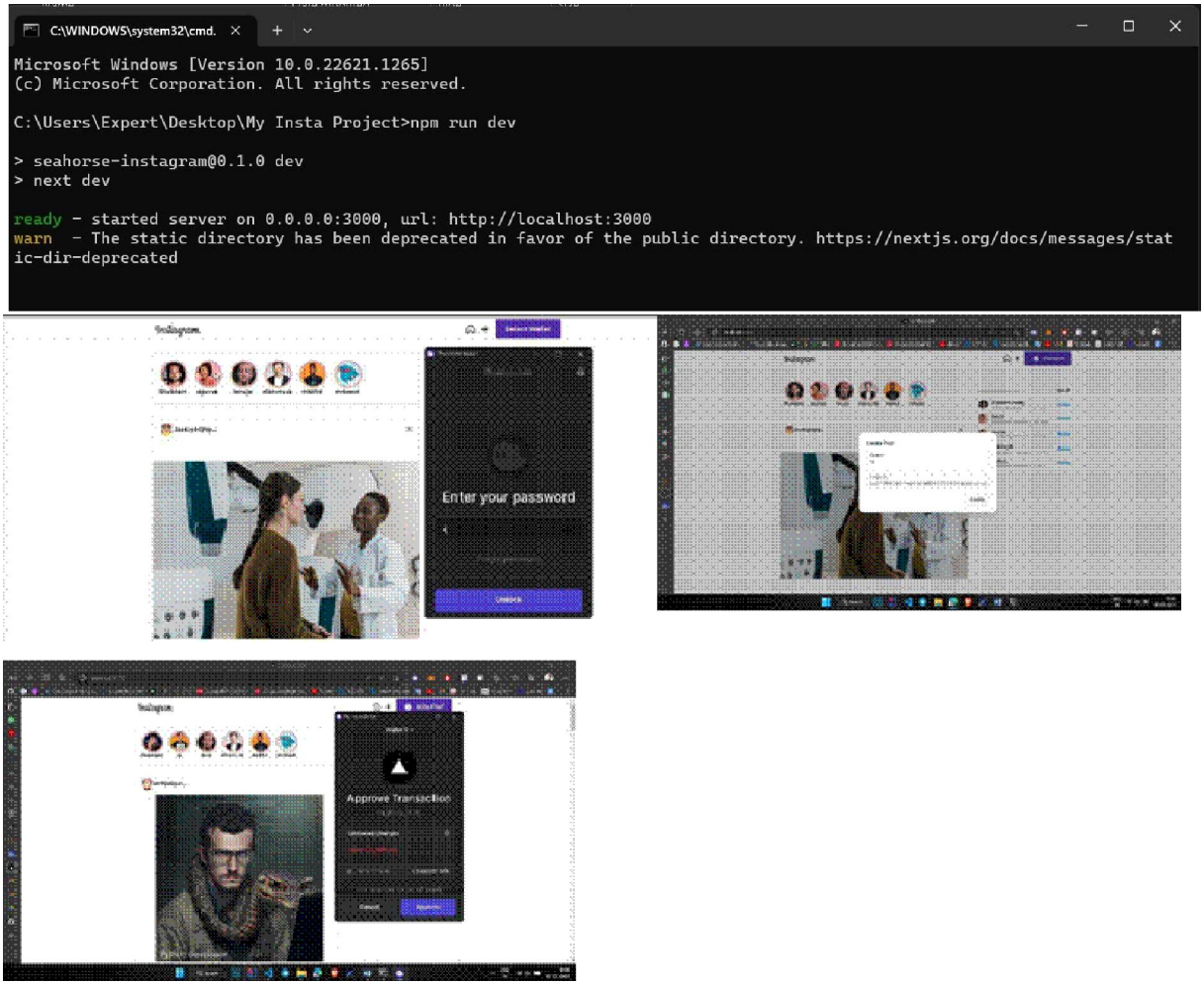
V. OUTPUT



V. CONCLUSION

In conclusion, incorporating blockchain technology into an Instagram clone project can offer several benefits, such as decentralization, enhanced security, digital ownership of content, cryptocurrency payments, transparent reward systems, and privacy features. By using blockchain, the platform can become more reliable, secure, and democratic, providing users with greater control over their data and interactions.

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