Digital asset marketplace using blockchain technology

Pranav S. P[*1], Spoorthi N. Shetty[2], Sujan S[3], Tejas N[4]

[*1,2,3,4] Under Graduate Student, Dept. Of Computer Science & Engineering, Jyothy Institute of Technology Visvesaraya Technological University, Belagavi Bengaluru, Karnataka, India

Mrs. Madhu G[5]

[*5]Assistant Professor, Dept. Of Computer Science & Engineering, Jyothy Institute of Technology Visvesaraya Technological University, Belagavi Bengaluru, Karnataka, India.

Corresponding Author: Pranav S. P
Email: pranavsp315@gmail.com

Abstract:

Blockchain technology, which offers a decentralised and safe platform for the creation, ownership, and exchange of distinctive digital assets, has emerged as a key component in the growth of Non-Fungible Token (NFT) markets. NFTs use the immutable ledger of blockchain technology to indicate ownership or authenticity of digital content and to prohibit unauthorised changes.

Smart contracts are used by the blockchain technology used in NFT marketplaces, which is frequently based on Ethereum or other compatible blockchains, to automate the generation and execution of NFT transactions. By defining the guidelines for the creation, transfer, and verification of NFTs, these smart contracts do away with the need for middlemen and increase participant trust.

The provenance of NFTs is determined in large part by the key aspects of blockchain technology, including decentralization, cryptographic security, and consensus procedures. This addresses issues with intellectual property and authenticity by guaranteeing that the history of any digital item, from its creation to its current owner, is traceable and verifiable.

Keywords:

decentralization, cryptographic security, intellectual property, digital item, blockchain technology