Decentralized Property Registration and Management Platform

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Abstract

The existing property registry management does not have a well-defined protocol for verifying and validating transactions that occur within the domain. These transactions rely on handwritten signatures, an unreliable methodology for determining an asset's ownership. The legal system governs this process. However, several disputes have occurred due to improper validation and verification when registering properties, changing custody, and maintaining the chain of ownership. Trades have been made by including a lower value than the actual asset value, which will reduce the tax owed to the government and will lead to the failure of these departments. There are no appropriate mechanisms to resolve common disputes that arise within the domain. The courts must resolve these disputes using the same recurring traditional procedure, which will take years or decades to conclude. The main objective of this research is to develop a secure property registration mechanism by creating a digital protocol using a decentralized blockchain network. In addition, the research will focus on developing a minimum asset value calculator using machine learning and geographic information system, verifying the authenticity of the generated digital documents, and creating digital deeds for new and old paper-based records.

Keywords

Land Registration, Blockchain, Decentralization, Machine Learning ,