

BATCH NO: 4

PROJECT TITLE: ENHANCED SECURITY IN HEALTH INFORMATION SYSTEM USING LEVERAGING CLOUD ALGORITHM

ABSTRACT:

Blockchain has unique advantages in data privacy protection and data integrity. We can solve many security problems, such as the single point of failure and data sharing in the current centralized system through blockchain approach. The pressing challenges facing healthcare data management by harnessing the power of blockchain technology. In response to escalating demands for seamless medical assistance and improved data sharing, our system leverages the inherent strengths of blockchain, including distributed ledger, encryption, immutability, and traceability. By integrating these features, we establish a robust framework for secure and efficient healthcare data sharing across multiple organizations. Key components of our system include a distributed ledger infrastructure to eliminate single points of failure, encryption technology to safeguard sensitive data, immutable audit trails for transparent record-keeping, and traceable data provenance for enhanced accountability. Additionally, smart contracts are utilized to streamline insurance claim processes, while two distinct data sharing protocols cater to medical and personal health data, offering users a user-friendly approach to managing their information. The escalating demand for secure and seamless healthcare data sharing by proposing a sophisticated blockchain-based solution. With the rapid advancement of information technology, ensuring the privacy and integrity of medical data has become paramount. By harnessing blockchain's decentralized architecture, robust encryption methods, and immutable ledger, our system offers a formidable defense against common security vulnerabilities plaguing centralized systems. By bridging cutting-edge blockchain technology with the intricacies of the medical sector, our project presents a comprehensive solution poised to transform healthcare data management and elevate patient care to new heights. Two distinct data sharing protocols cater to the diverse needs of medical and personal health data management, empowering users with greater control over their information.

Keywords : Blockchain, Healthcare, Data sharing, Security, Encryption