Security of Medical health care data Using Block chain

Abstract:

The confidentiality and integrity are the important factors in data security. Patients' medical record is containing on sensitive information which relative to patient. Such as name, address, age, diseases, assurance and so on. To secure and protect this data, there is a need for developing method for this purpose. This project focused on confidentiality and integrity of electronic healthcare records (EHRs). As these two factors in EHR is a critical issue for patients and providers. The patients' data store in centralised database, which generate weakness and attract hackers' attention. When attack happened, then the sensitive data will expose.

This project focuses on provide confidentiality and integrity for EHR by using blockchain algorithms. Using blockchain in this study will provide decentralised data for patients' data to prevent the issues which result from centralised data storage. The model adapted blockchain techniques based on The Advanced Encryption Standard (AES) and Secure Hash Function (SHA). This model was built to contribute to the healthcare management systems to allow only the authorised individuals to reachsensitive data.