

ABSTRACT

The development of technology is increasingly developing and requires people to follow the technology. Innovations that developed from various kinds of digitalization needs in the modern era. Various transactions and jobs that require paper to record decreases and turn to digital records.

Bitcoin is a digital currency in the form of cryptogafi and is recorded using the Blockchain system. Blockchain is a protocol that functions as a system that houses a variety of transactions and digital record data that is stored in a decentralized and distributed *Network*. Ethereum is a digital currency that uses Blockchain for bookkeeping and transactions, but in blockcahin etherum it can be used by various software developers who need Blockchain protocol as bookkeeping, transactions and computer *Networks* on the internet.

Electronic Medical Record (EMR) is a collection of medical records in digital form that is connected and integrated with information systems in hospital *Networks*. Patient data and information is very sensitive because it involves patient medical health information. In B-EMR (Blockchain Electronic Medical Record) the patient's medical record will be stored in a *Blockchain Network* using one of the smart contract features in the Ethereum Blockchain. Then various data attached to the medical record can be stored in the InterPlanetary File System (IPFS). IPFS is a peer-to-peer *Network* system that connects all devices on the same file system.

key word : Blockchain, Bitcoin, Ethereum, smart contract, IPFS, medical record, EMR, B – EMR