

ABSTRACT

Current developments are very rapid, for example in currency, now currency has developed, not only using paper money to make a buying and selling transaction. digital currency or as we know it cryptocurrency, the currency is developing very fast, therefore many users now do not know or do not understand how the transaction process uses currency cryptocurrency the.

Implement by creating a website to transact a sacrificial animal using the erc-20 token as an initialization of a currency. erc-20 tokens are generated using smart contract as agreed by both parties. with this implementation, transactions made by users will be written in storage *blockchain* and to initialize its user using database *mongodb*.

Based on the implementation that has been done, an output is obtained in the form of website which works as expected. Result of transaction time by using the network private and the testnet tested with 2*device* different ones produce quite prominent differences in transaction times, which are influenced by the specifications of the laptop used and the internet network. The difference hits 750ms with laptop a on the first write inside *blockchain* with the testnet network, and on laptop b there is a time spike in the middle of a transaction touching 100ms/200ms caused by a less stable internet network. The results of these transactions can be seen by users by searching for txnhash on etherscan.

Keywords: smart contract, token ERC-20, website, cryptocurrency, *device*.