BLOCKCHAIN AND SECURITY ISSUES

Shaili Trivedi Master's in Computer Science Shaili Trivedi@student.uml.edu

Abstract: One of the biggest problems in today's environment is data security. I'd like to introduce blockchain technology, highlighting the security issue, along with design and the way it operates in a web system. Blockchain is a technology that aids in encoding data in a way that makes it difficult or incredibly difficult to change data, hack the system, or trick it. Bitcoin is the primary example of a blockchain being used in the real world which is being used as cryptocurrency. The survey's primary goal is to offer a brief study of the use of blockchain in several applications and how it solves issues of security using decentralized(Distributed Networks) structure. The digital block is distributed among the nodes of a peer-to-peer network, which is a series(or chain) of blocks on which the whole digital transaction works on the network. Basically, the series of blocks are distributed over the network, and the transaction is completed when, all the distributed transaction over different the networks are verified, authorized and completed successfully. The original data over the network is sent in hash value, and if someone tries to change/cheat the value while the transaction is over the network, the digital chain breaks and the entire transaction fails.

Motivation: As cryptocurrency is one of the current hot topics through out the world. The functionality of how the cryptocurrency works in web, made me actively participate in the survey of how the blockchain increases the security and what other factors in blockchain can be improved to make it more secure network. The future enhancement of blockchain technology is use in digital advertisement, Supply Chain Management, real estate through tokenization and many more.