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TYPES OF BLOCKCHAIN

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Abstract

Blockchain technology most useful Technology. Blockchain has recently gained a lot of popularity, which has led to a high demand for the adaptation of this technology. A Blockchain is a decentralized database that is shared among computer network nodes. Transactional data from numerous sources may be readily collected, integrated, and shared using blockchain cloud services. Data is divided into common blocks linked together using cryptographic hashes as unique IDs. It makes transactions much easier. Most important it removes the role of a third Person making transactions directly between the sender and receiver. It has four different types of blockchain Public Blockchain, Private Blockchain, consortium blockchain, and hybrid blockchain. It is easier than banking transactions. It Establishes trust among parties doing business together by offering reliable, shared data. It enables seamless tracking and tracing of goods and services across the supply chain. Blockchain technology solves the drawbacks of centralization, but in itself, it brings a lot of other problems to solve when it comes to applying blockchain technology to different scenarios.

Keywords:-Blockchain technology, Digital Ledger, Transaction, DAPP, Business Area.

Objective:

Introduction

The David chaum was first proposed a blockchain-like protocol in his 1982 dissertation “Computer Systems Established, Maintained, and Trusted by Mutually Suspicious Groups”. Further work on a cryptographically secured chain of blocks was described in 1991 by Stuart Haber and W. Scott Stornetta Blockchain is decentralized network. Is defined as a ledger of decentralized store data securely and shared. Blockchain technology enables a collective group of select participants to share data. With blockchain cloud services, transactional data from multiple sources can be easily collected, integrated, and shared. Data is broken up into shared blocks that are chained together with unique identifiers in the form of cryptographic hashes. Blockchain provides data integrity with a single source of truth, eliminating data duplication and increasing security.Blochchain having four types Public, Private, consortium and Hybrid. In blockchain for transaction use different currencies like bitcoin, litecoin, Ether. The bitcoin is most of the use for transaction. These are largest currency in blockchain worlds. The bitcoin is use in public blockchain. The blockchain is use in business area there will be produce digital organization

The currency used in blockchain for transaction but in Ehereum have the ether currency there will also produces different smart contract using solidity language also we can produce the Application. Blockchain is secure

2000: In the year 2000, Stefan Konst published his theory of cryptographic secured chains, plus ideas for implementation.

Introduction

Types of Blockchain

1. Public Blockchain

In public blockchain technology, every node can join that blockchain but its mining is necessary mining is done by a miner. One of the first public blockchains that were released to the public was the bitcoin public blockchain. It enabled anyone connected to the internet to do transactions in a decentralized manner. This type of blockchain serves the main advantage of its uncontrollability, which denotes that nobody will be able to completely control the network. As a consequence, it safeguards the data's security and supports the information's immutability. A completely distributed public blockchain will arise from the equal power of all nodes connecting to it.

2. Private Blockchain

In the Private Blockchain, only limited blocks are involved here that are not accessible to everyone. Which is having limited access.it is limited to only one organization out of the organization block that cannot be involved in that blockchain. These blockchains may be governed and supervised by an individual who can guarantee that the administrators are guiding participants since they are more centralized. Depending on the blockchain owner's choices, these chains may or may not include a token. Participant and validator access is restricted. To distinguish between open blockchains and other peer-to-peer decentralized database applications that are not open ad-hoc compute clusters, the terminology Distributed Ledger (DLT) is normally used for private blockchains.

3. Consortium Blockchain

The Consortium Blockchain More than one organization is combined making it one blockchain that blockchain involves block only those who are combined. Only that combined organization can make transactions between them. Consortium blockchains are commonly used in industries where multiple organizations need to collaborate on a common goal, such as supply chain management or financial services. The advantage of consortium blockchains is that they can be more efficient and scalable than public blockchains, as the number of nodes required to validate transactions is typically smaller.

4. Hybrid blockchain

As per the name suggested here more than one blockchain is combined. A hybrid blockchain has a combination of centralized and decentralized features the hybrid blockchain is a combination of public and private blockchain. Which has features of public and private blockchains. A blockchain network where the consensus process (mining process) is closely controlled by a preselected set of nodes or by a preselected number of stakeholders. A transaction in a private network of a hybrid blockchain is usually verified within that network.

References

1) https://www.simplilearn.com/tutorials/blockchain-tutorial/types-of-blockchain

2) https://101blockchains.com/types-of-blockchain

3) https://intellipaat.com/blog/types-of-blockchain/

4) https://en.wikipedia.org/wiki/Blockchain

5)https://www.oracle.com/middleeast/blockchain/what-is-blockchain/