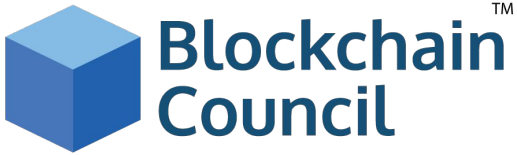

What is Blockchain?

What is Blockchain?

Blockchain is a transaction record database that is distributed, validated and maintained around the world by a network of computers. Instead of a single central authority such as a bank, a large community oversees the records in Blockchain, and no individual person has control over these records.

Blockchain is based on decentralized technologies. This functions as a peer-to-peer (P2P) network.

Blockchain can be defined as **“A peer-to-peer, decentralized, distributed ledger that records transactions efficiently, and in a verifiable and robust fashion.”**

Some real-life examples:

- Records of sale and purchase of raw material
- Bank account statements
- Excel sheets tracking hospital equipment
- A simple record-keeping book

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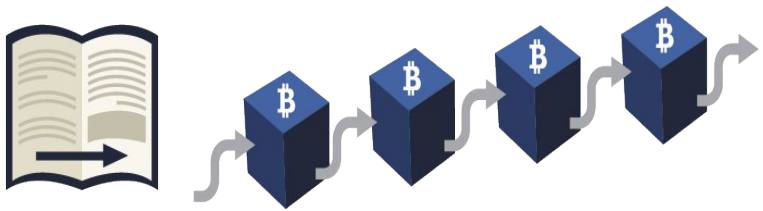
Understanding the Book Analogy

Consider Blockchain as a traditional book based ledger, where:

- Each page refers to a block connected to the previous page through a page number.
- It is easy to detect if a page/block has been removed or deleted.
- It is easy to arrange the pages/blocks and identify suspicious activity, because of the page number.
- It is impossible to tamper a previous entry in the ledger without someone noticing it, as the pages/blocks are built tightly on top of each other.

“Book = Blockchain, Page = Block, An entry in page = Blockchain Transaction”



Book	Blockchain
Pages	Blocks
Entries in page	Blockchain Transactions

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History of Blockchain

W. Scott Stornetta and Stuart Haber in 1991, proposed the concept of a secured chain of blocks (set of records).

Later in 2008, the blockchain system was conceptualized and introduced by an individual or a community known by the name 'Satoshi Nakamoto.'

They implemented the idea of using hashing in the blockchain framework to make it so safe that once saved in the blockchain, no one can make modifications or erase the data. This blockchain architecture is used by the Bitcoin cryptocurrency system as its basic or foundation infrastructure.

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How does Blockchain works?

User requests for a Transaction

Block representing the transaction is created

Block is created

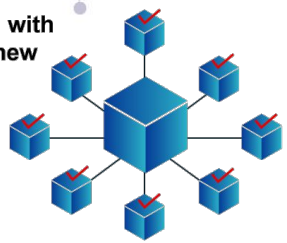
Requested transaction is broadcasted to a P2P network.

Network of nodes validates the Transaction.

Transaction is Complete

The new block is added to the existing blockchain.

Verified transaction is combined with other transactions to create a new block of data for the ledger.



Transaction is validated by other nodes in the network.

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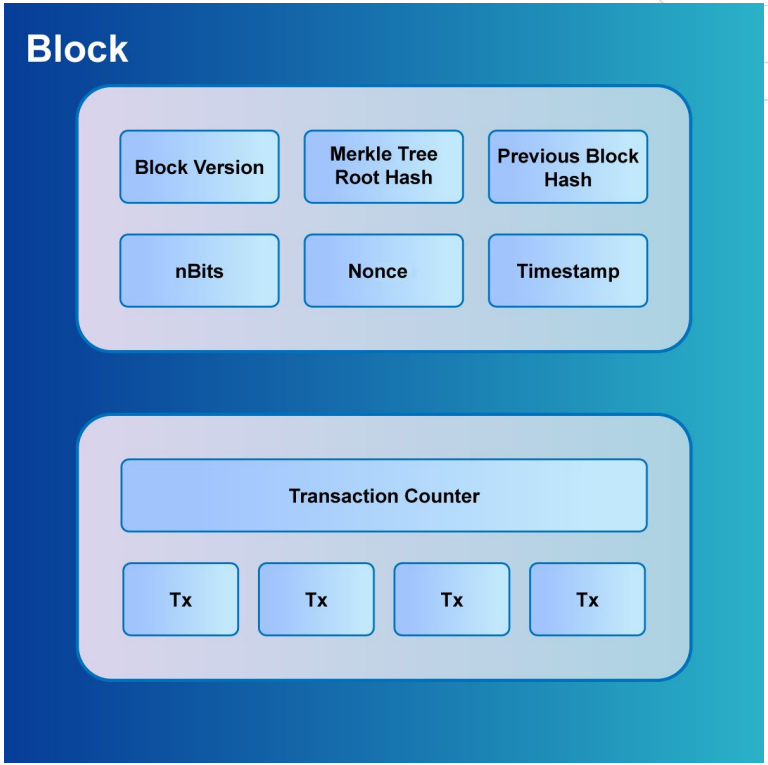
Block Overview



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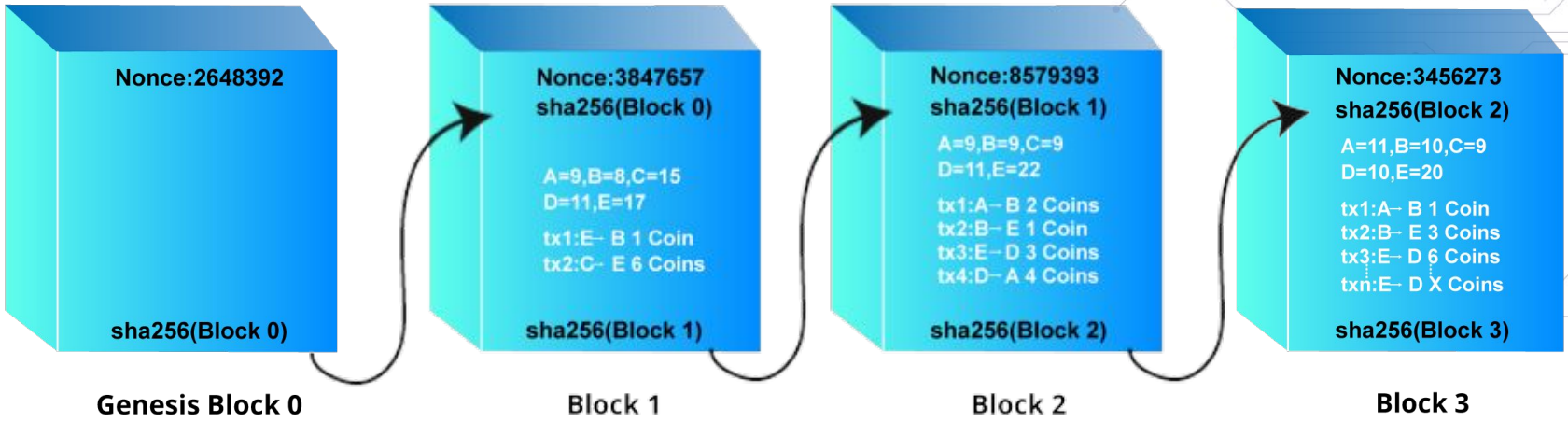
How Blockchain looks like?



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What makes Blockchain different?

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THANK YOU!

Any questions?

Visit

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You can also mail us at

hello@blockchain-council.org

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