THE BLOCKCHAIN SCHOOL

COURSE 1

MODULE 3

HISTORY OF LEDGER

First used for maintaining details of barter in Mesopotamia.
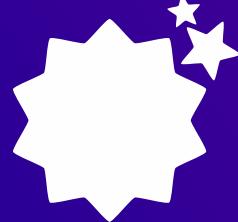
Initially called "Proto-cuneiform", later became a new language "Cuneiform".

Double entry system emerged in europe in 1340 AD One for credit and one for debit.

DISADVANTAGES OF OLD LEDGER SYSTEM

1. Time Constraint

2. Efficiency

3. Expensive

4. Vulnerable

NEW LEDGER SYSTEM

Every node is connected to a network and shares a common ledger

Node is a block, and nodes sharing same ledger is a blockchain

ADVANTAGES OF BLOCKCHAIN OVER TRADITIONAL LEDGER SYSTEM

1. Consensus Protocols

2. Data Provenance

3. Ability to Avoid Mutation

4. Final Nature of the Blockchain

WHAT IS NODE?

Nodes are the devices over the Blockchain that maintain the Blockchain and process the transactions if need be.

WHAT IS CONSENSUS?

Consensus is an act of coming to an agreement over a specific transaction depending upon some predefined protocols which depend upon the nature of asset under transaction.

CATEGORIES OF CONSENSUS MECHANISM

1. Consensus with mining

2. Consensus without mining

WHAT IS DATA PROVINCE?
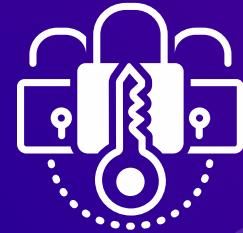
Data

Data is a raw form or segments of information which can be processed to achieve a meaningful interpretation and result in specific information

Province

Provenance is a record of ownership of an asset which is used as an index of quality or authenticity of that asset.

Data provenance is a record maintenance method where the records of transactions over the blockchain are stored as a trail of data.

WHAT IS IMMUTABILITY?

Immutability is a property by virtue of which no mutation to a block in the blockchain is possible. Once a data set is registered in a block and the block is attached to the chain of other blocks, it is fundamentally impossible to alter the contents of that block.

WHAT IS FINALITY?

Finality is a property by virtue of which a single entry point is facilitated to understand the ownership of an asset after that asset has undergone a transaction.