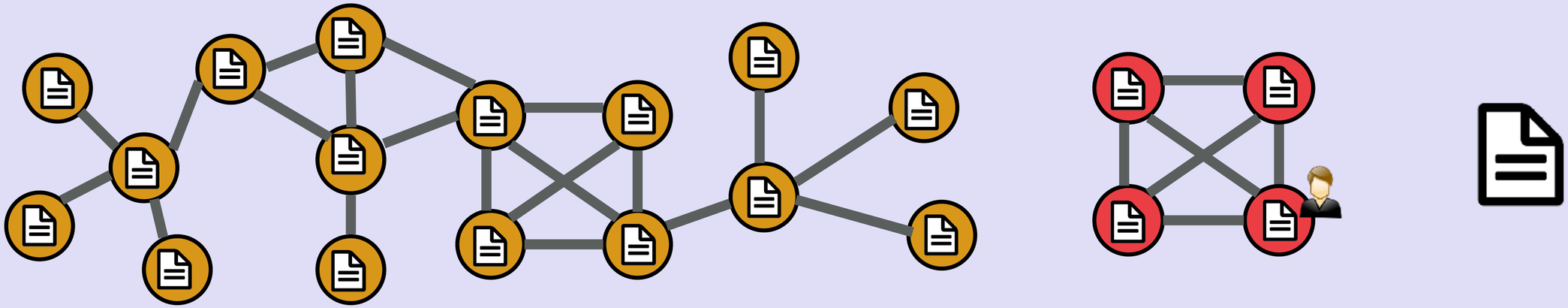
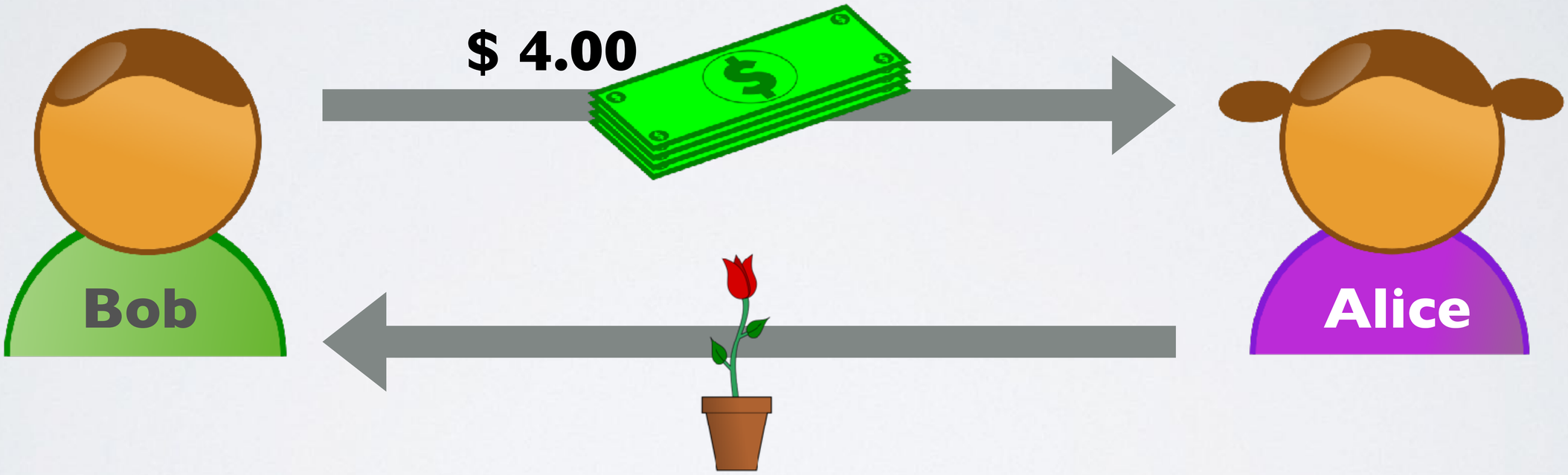
BLOCKCHAIN TUTORIAL 23

Ledger

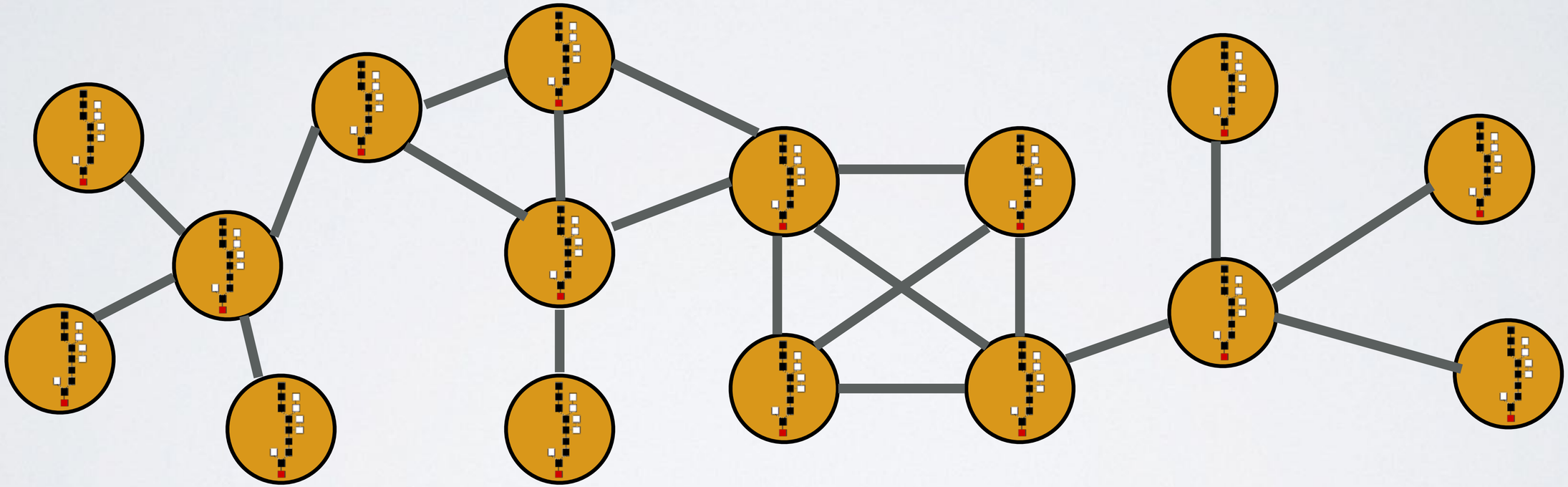


CASH PAYMENT (DO NOT USE)

- Bob is paying Alice $ 4.00 for her plant. This transaction is not recorded and no third party is involved.

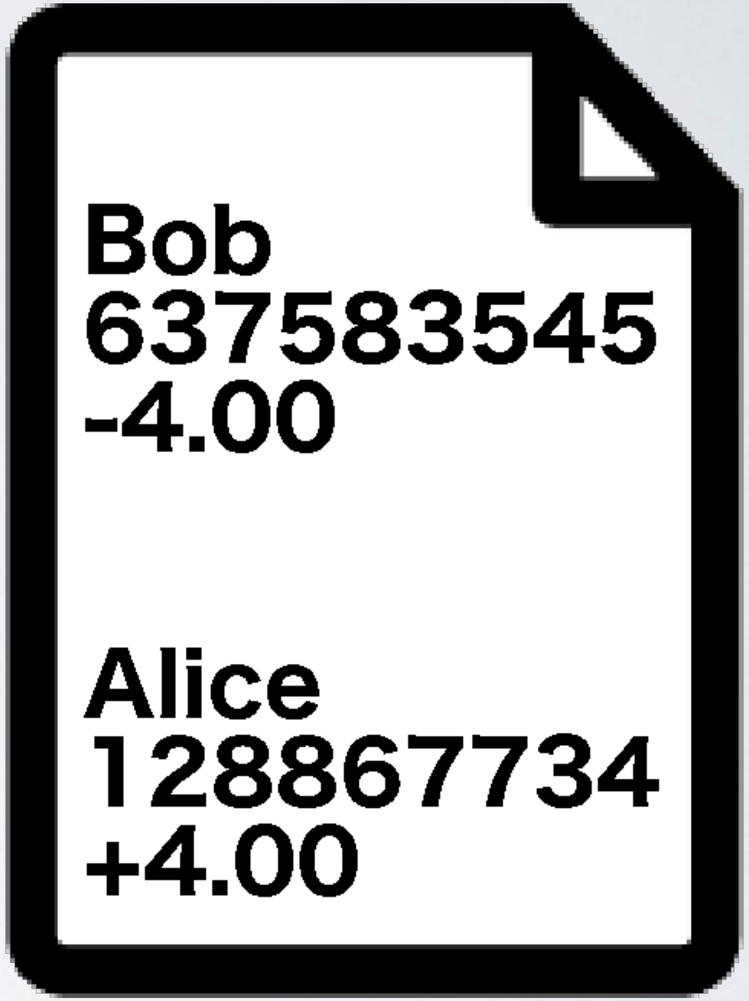


DO NOT USE



CENTRALISED DATABASE (DO NOT USE)

- In the previous Bank example the recorded information were financial transactions.
- In the Bank example a centralised database or ledger is used and only the Bank has access to this database.

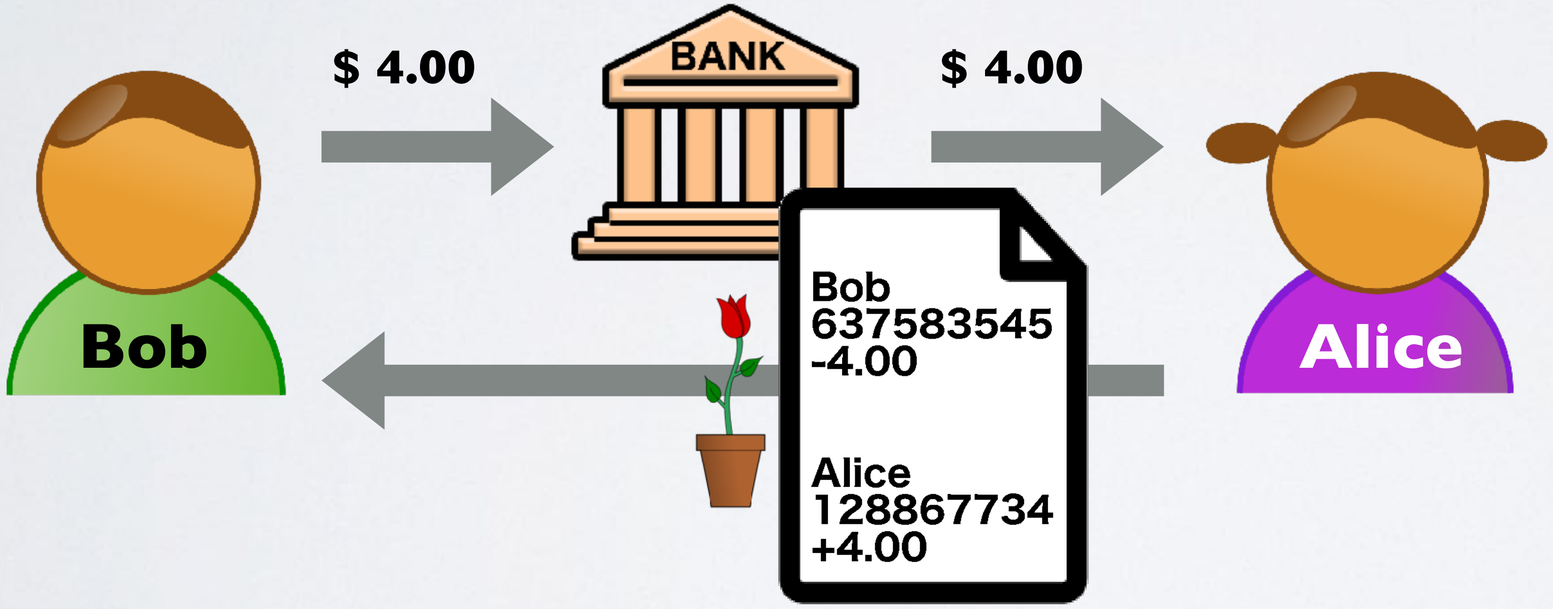


A ledger is a kind of database where confirmed transactions are recorded

CENTRALISED DATABASE

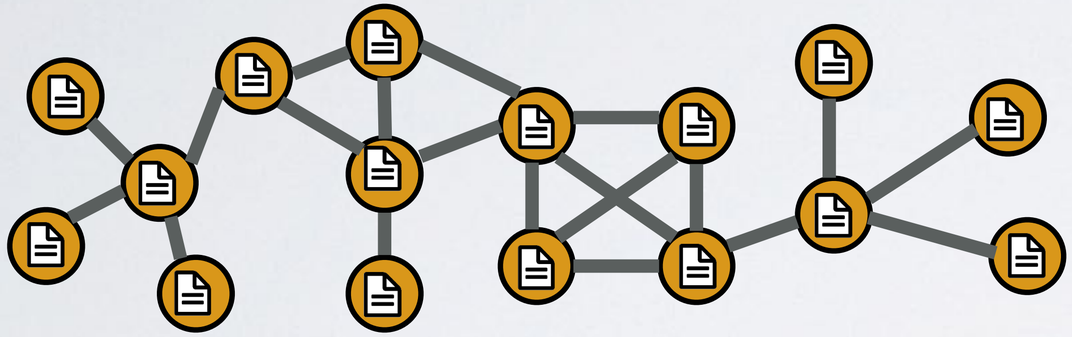
- Bob is purchasing a product from Alice's shop. He is making an online transaction. The Bank subtract $4.00 from Bob's bank account and add $4.00 to Alice's account. The Bank records these transactions in a centralised database also known as a ledger.

- Only the Bank (trusted third party) has access to this ledger.



DISTRIBUTED LEDGER

- Blockchain platforms don't use a centralised database instead each node has a copy of the ledger.

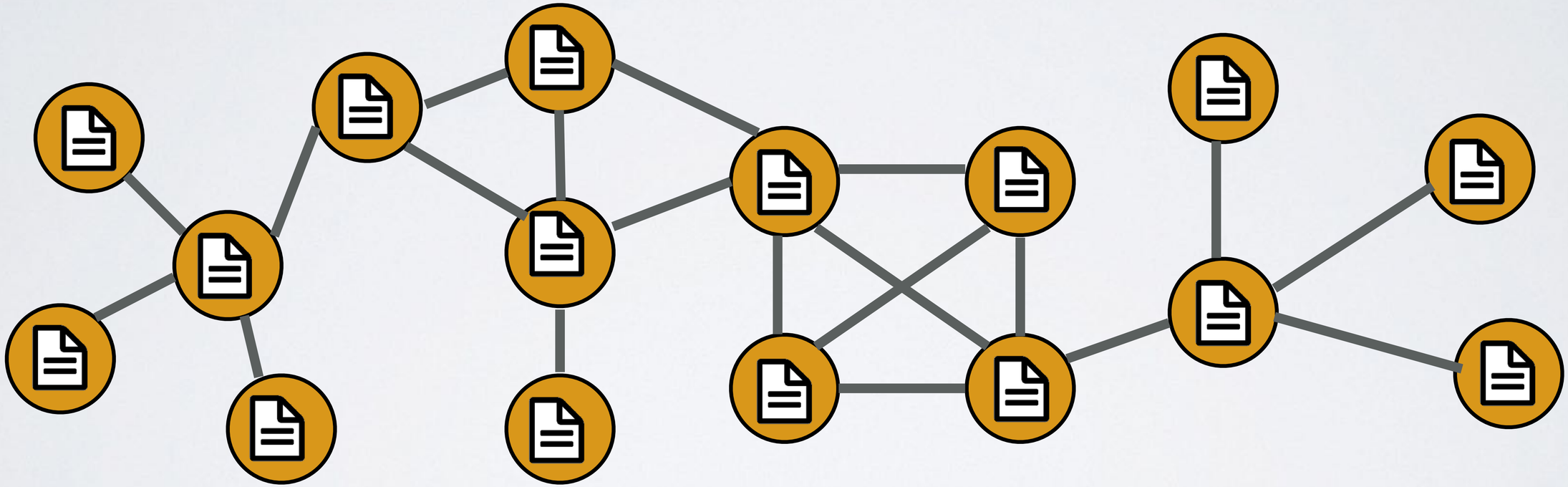


- Cryptocurrencies such as Bitcoin only stores balance information in the distributed ledger.

- Blockchain platforms such as Ethereum can store any kind of information, such as identity information, patient information, real estate information, etc., in the distributed ledger.

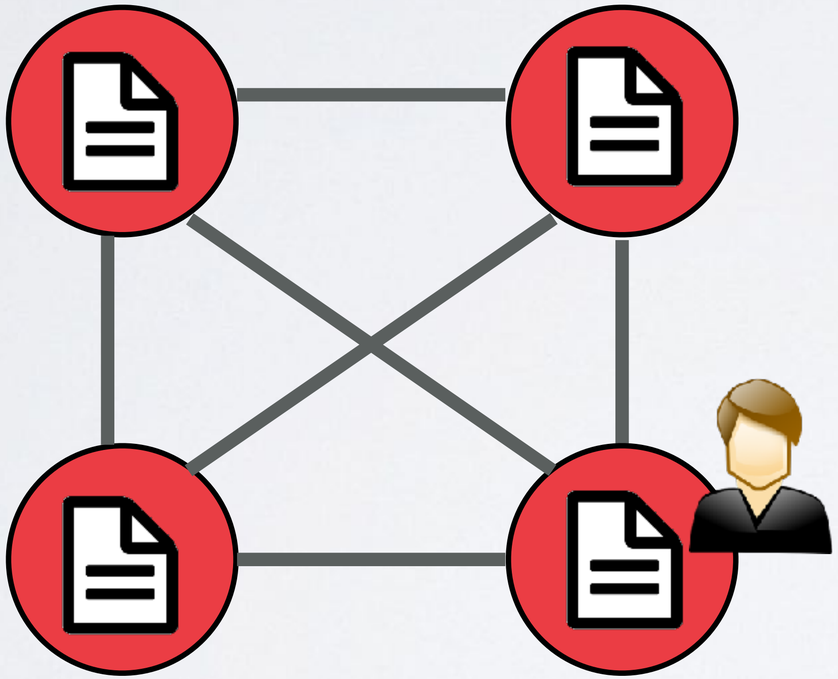
PUBLIC LEDGER / PERMISSIONLESS LEDGER

- When there is no central authority managing access to the ledger, this ledger is called a public ledger or a permissionless ledger.



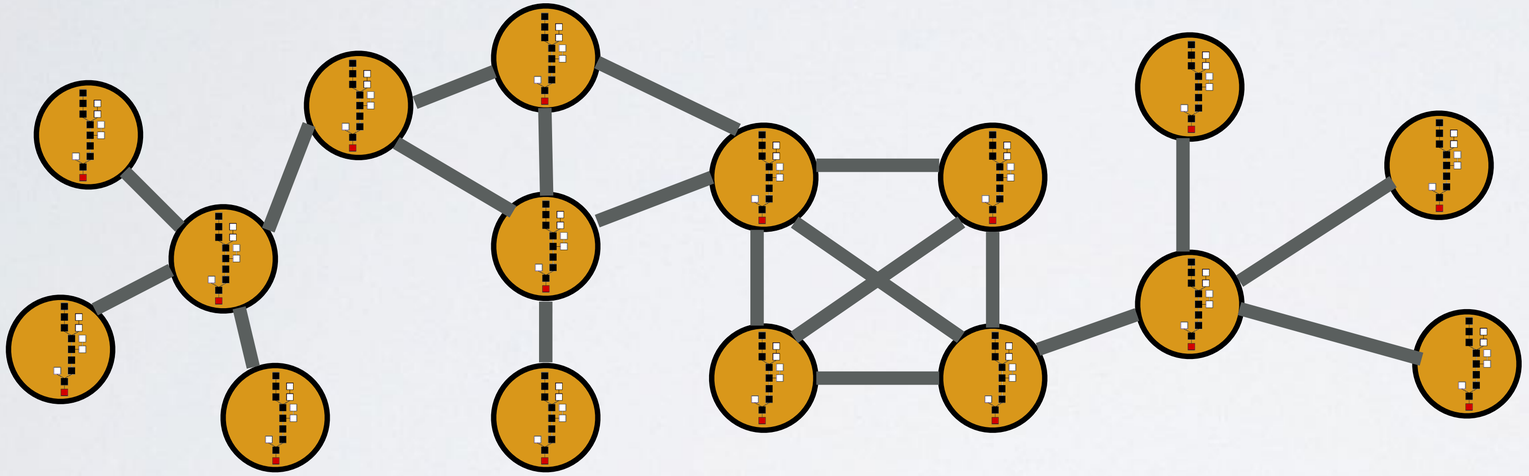
PRIVATE LEDGER / PERMISSIONED LEDGER

- When there is a central authority managing access to the ledger, this ledger is called a private ledger or a permissioned ledger.

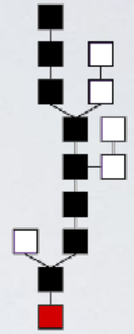


ADDTIONAL INFORMATION

- Bitcoin and Ethereum nodes have copies of the ledger, but the ledger should be correctly depicted this way:



- In the next video i will explain why this ledger should look like this.



Ledger correctly depicted

Ledger not correctly depicted