

Blockchain Assignment - 1

Fill in the blanks:

- ① Decentralised
- ② Peer to peer
- ③ three (3)
- ④ DLT (Distributed Ledger Technology)
- ⑤ mining.

2m

- ① There are 3 types of blockchain.

② Public blockchain:

→ A public/permissionless block chain network is one where anyone can participate without restrictions.

③ Private blockchain

→ This blockchain allows org. to set controls on who can access block chain data. Only users who are granted permissions can access specific sets of data.

④ Federated blockchain:

→ A network where the consensus process is closely controlled by preselected set of nodes.

- ⑤ It can be trusted due to so many reasons.
It's compatibility with other business applications due to it's open source nature.

③ Database

1) Database uses centralized storage of data

2) Needs an admin or database administrator

Blockchain

Blockchain uses decentralized storage of data

No admin is required.

④ No, it is not possible to do so.

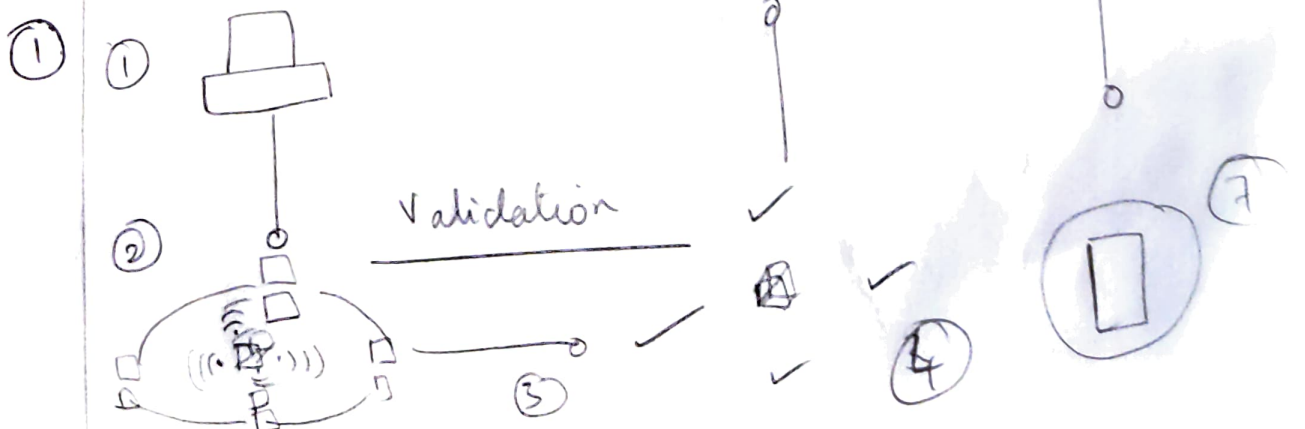
Proof of work

- ⑤
- ① The probability of mining a block is determined by how much computational work is done
 - ② A reward is given to first miner to solve cryptographic puzzle.

Proof of stake

- ⑥
- ① The validator do not receive a block reward instead they collect network fee as their reward.

SM



① Transaction Request.

→ Someone requests a transaction which is requested using a device known as wallet.

② Transaction broadcast:

→ Requested transaction is then ~~bro~~ broadcasted in a peer to peer network ~~consistency~~ consisting of computers.

③ Transaction validation:

→ All nodes in the network of nodes validates the transaction and the user's status.

④ Verification Process:

→ Uses digital signature established using key pairs to authentication transaction & senders.

⑤ Block formation:

→ The transaction is combined with other transaction.
→ To create a new block of data for the ledger.

⑥ Adding the block to blockchain:-

→ The new block is added in such a way that it is permanent and unalterable.

⑦ Transaction Complete:

Then, the transaction is finally complete.