



Types of blockchain

1. Public Blockchains
2. Private Blockchains
3. Consortiums Blockchains
4. Hybrid Blockchains

Public Blockchains

- Public blockchains are open, decentralized networks of computers accessible to anyone wanting to request or validate a transaction (check for accuracy).
- Those (miners) who validate transactions receive rewards.
- Public blockchains use proof-of-work or proof-of-stake consensus.
- permission-less distributed ledger system.
- Anyone who has access to the internet can sign in on a blockchain platform to become an authorized node and be a part of the blockchain network.
- Example : Bitcoin and Ethereum (ETH) blockchains.

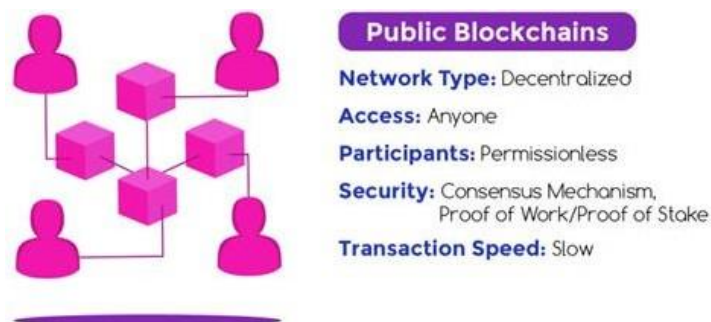


Figure 1.22 public blockchain

A public blockchain has some characteristic features:

- Write-only, immutable, transparent data storage.

- It brings trust among the whole community of users
- Decentralized, no need for intermediaries.
- Consistent state across all participants.
- Resistant against malicious participants.
- Anyone can join the public blockchain.

Disadvantages

- They suffer from a lack of transaction speed.

Private Blockchains

- A Private Blockchain is just like a relational database i.e. fully centralized and owned by a single organization.
- Private blockchains are not open, they have access restrictions.
- People who want to join require permission from the system administrator.
- They are typically governed by one entity, meaning they're centralized.
- For example, Hyperledger is a private, permissioned blockchain.



Private Blockchains

Network Type: Partially Decentralized

Access: Single Organization

Participants: Permissioned

Security: Pre-approved participants,
Voting/Multi-party Consensus

Transaction Speed: Lighter and Faster

Figure 1.23 private blockchain