**1.5 Components of a Blockchain**

1. Peer-to-peer Network
2. Message 🡺 Transactions
3. Consensus Rules
4. A state machine that process transaction according to consensus rules.
5. (**The execution of code is happened in Ethereum virtual machine and then the state of Ethereum is updated**.)
6. A chain of cryptographically secured blocks that acts as a journal of all the verified and accepted state transactions.
7. A consensus algorithm that decentralizes control over the blockchain, by forcing participants to cooperate in the enforcement of the consensus rules.
8. A game theory sound incentivization scheme (e.g. proof-of-work cost plus block reward) to economically secure the state machine in an open environment.
9. One or more open source software implementation of the above clients.

**Ethereum have multiple clients**.

Ethereum also published the yellow paper to describe the technical aspects how the algorithm will start, work and how the communication will be in the network.

With these specifications now everyone can write their clients.

Whereas client is a software which we downloaded and when start it blockchain is made on it ,and the blocks are synchronizing and when the new transaction come to network you will also receive this transaction.

Client is also known as Mining software ,Miner,node