

13 October 2022

Defi

↳ Dec. decentralized exchange.  
Collateral safety.

---

Problem definition.

- Goal
  - keep nodes in sync.
  - Some sequence of state transitions
  - Agree on the current state
- Two types of actors:
  - Nodes: responsible for consensus protocol
  - Users: submit transactions to one or more nodes.
- Nodes - ordered list of transactions that only grows over time -
- Order matters?
  - Two routes on the same resource (double spend attack).

## Solution

### Assumptions

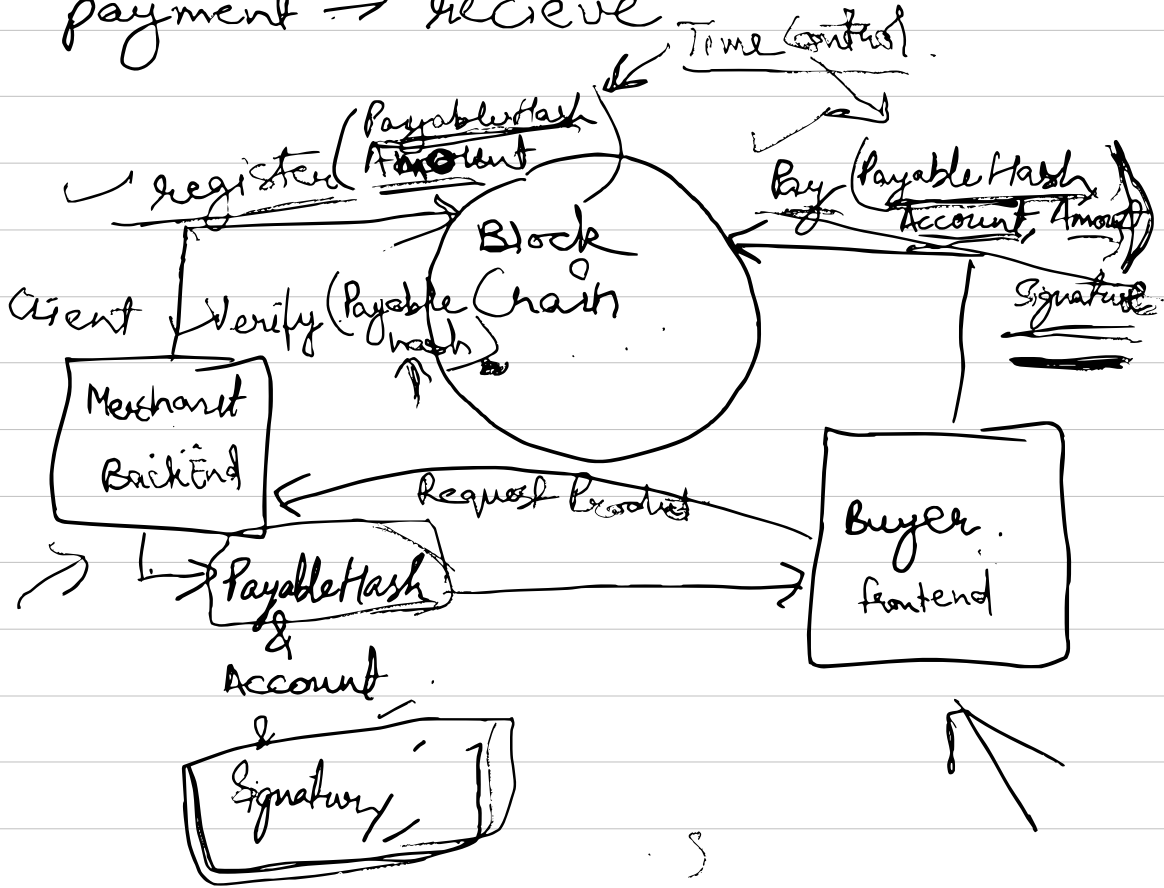
- Permissions setting
  - PKI (Public key & (PPK))
  - Synchronous Model.
    - Global Clock
    - Round 1, 2, 3, 4.
    - Msg sent at round  $t$ , will be received at  $t+1$
  - All honest Nodes.
    - way too strong.
- 

Does Sync takes gas (who pays for it)

Kademlia will stop clusters forming in the network. Which helps in fault tolerance.

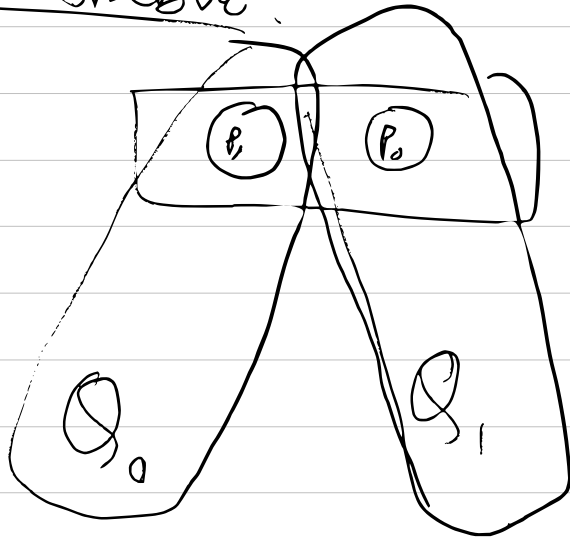
generate hash and register :  
→ 20 min

payment → receive



Project Idea

10 November



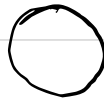
$P$



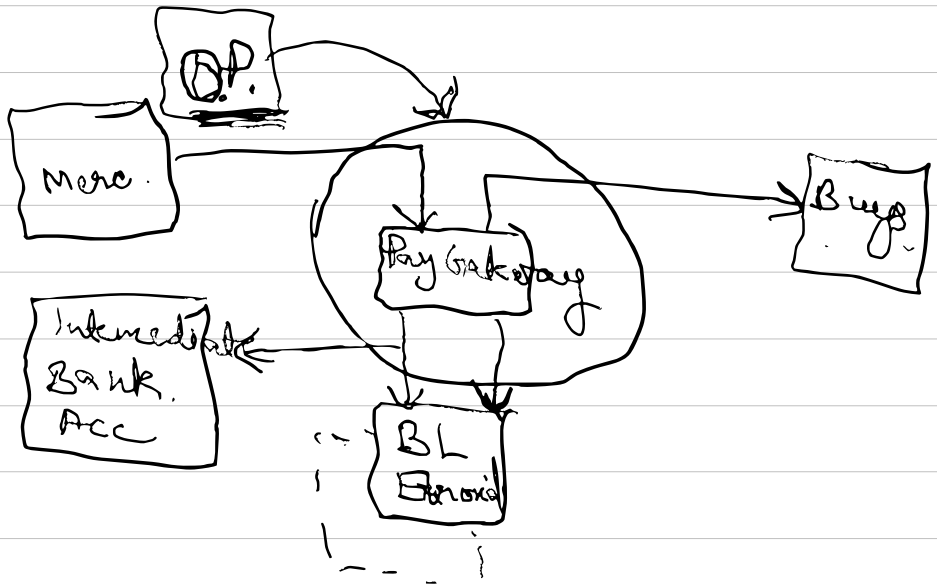
$Q_1$



$Q_3$



$Q_2$



---

Spring boot →

Smart Contract →

Java Script →