Technical solution

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23/07/20

Platform we chose and reasons

- Which platform? Ethereum

- Why?

    - Ethereum => Bitcoin technology + Smart contracts + DApp

    - Smart contract : self-executing contract digitally between parties without third-party

    - DApp(Decentralized Application) : an application which runs on a blockchain

Critical Evaluation

- It extends Bitcoin technology

  - using Proof of Work for mining

  - problem of energy consumption

- Smart contracts implemented by Solidity language

  - developer must to learn Solidity

  - human errors can be occurred

What data is stored and how?

- Smart contract between buyer and seller

  - who buy/sell order

  - whose buy/sell signed

  - how much stock traded

  - shareholder lists

- Functions implemented on the smart contract is executed,

  then data about transactions should be stored in the blockchain

Outlook

- Based on Ethereum blockchain, we designed stock exchange platform

- Everyone can trade stocks with having same information

- In the future,

  - if DApp utilized increasingly,

  - people could become familiar with blockchain technology,

  - such as immutable, security, distribution, sharing, transparency, etc.