Unit 4

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Smart Contract

Smart Contract

A smart contract is a piece of software that stores rules for negotiating the terms of an agreement, automatically verifies fulfillment, and then executes the agreed terms.

Advantages of a smart contract

Technical Use-Cases	Legal Use-Cases	Economic Use-Cases
•Self-verifying •Self-executing •Tamper resistance	 It can map legal obligations into an automated process. If implemented correctly, they can provide a greater degree of contractual security 	 Higher transparency Fewer intermediaries Lower transaction costs

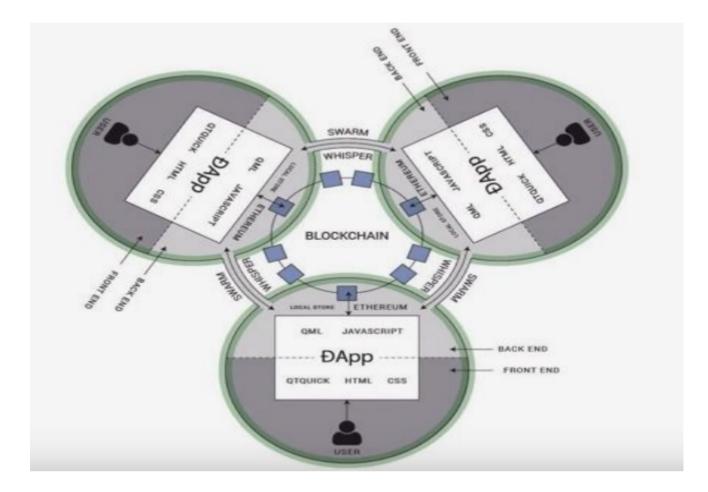
Deploying the contract is technically a transaction. So anyone can do it given they pay.

Contracts can use other contracts and even deploy other contracts.

Contracts cannot perform https requests. Outside information could be dangerous to the contract's functionality.

Decentralised Applications

A decentralized application (dApp) is a type of distributed open source software application that runs on a peer-to-peer (P2P) blockchain network rather than on a single computer.



Advantages of dApp

• Faster & payment processing without needing to integrate payment gateway to accept funds. • High levels of data security due to smart contracts governed by private keys. • Greater anonymity without needing the users to follow the lengthy signup process. • Reliable data records as users can access the public blockchain to verify transaction information