Geth-Hired

FOSSEE Fellowship 2019

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Classroom, Aero Annex Building

The Team

Guide:

Prof. Vinay Ribeiro

Mentor:

Mr. Parag Tiwari

Team:

1. Divyajyoti Ukirde
2. Abhishek Kedia
3. Vindeep Chaudhari
4. Siddharth Chaki
5. Akshat Jain

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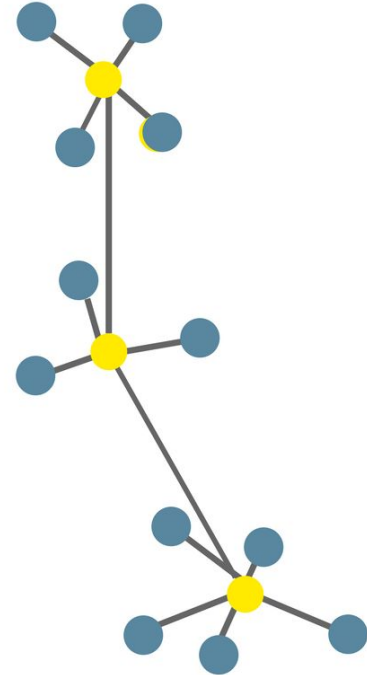- Demonstration
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Blockchain Overview

What is Blockchain?

- An open, distributed, decentralised system.

- The information is not stored in a single place, a copy is maintained all over the network.

- Identities are kept completely private, using cryptography but all transactions are transparent and data immutable.

- A growing list of records, called **blocks** are linked using cryptography.

- Consensus is required to add a record on Blockchain.

What is Blockchain?

- In Blockchain applications, same data is distributed across all the computers within the network which makes the application **decentralized**.

- This means no one person or entity has control over the blockchain.

Decentralized

Why Blockchain?

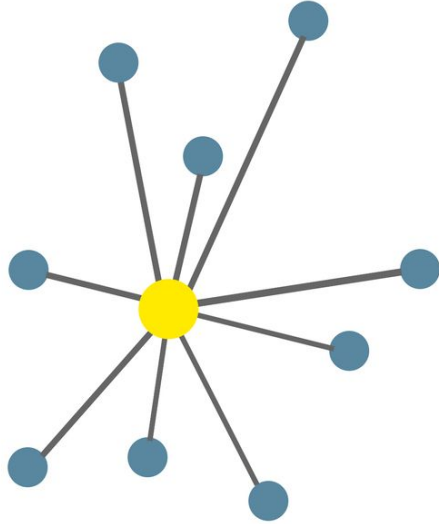- Decentralize
- Immutable
- Transparent
- Secure

Smart Contract

- A smart contract is a computer protocol intended to digitally facilitate, verify, or enforce the negotiation or performance of a contract.

- Smart contracts help you exchange money, property, shares, or anything of value in a transparent, conflict-free way while avoiding the services of a middleman.
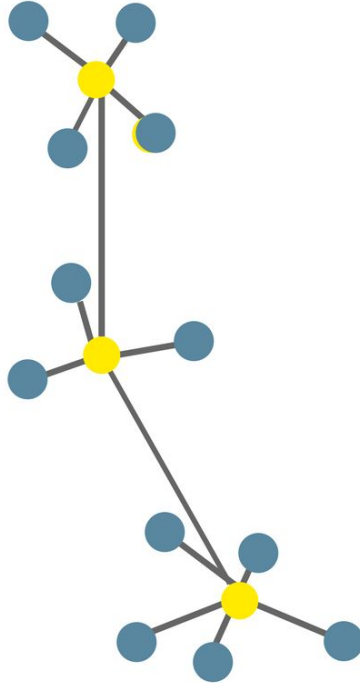
Tokens

- Tokens are a representation of a particular asset or utility.
- They can represent any assets that are fungible and tradeable, from commodities to loyalty points to even other cryptocurrencies.
- In easier words, tokens are similar to tickets which allows us to use a particular application.
- For example, Ether is a cryptocurrency and GH is token which we are using in our application.
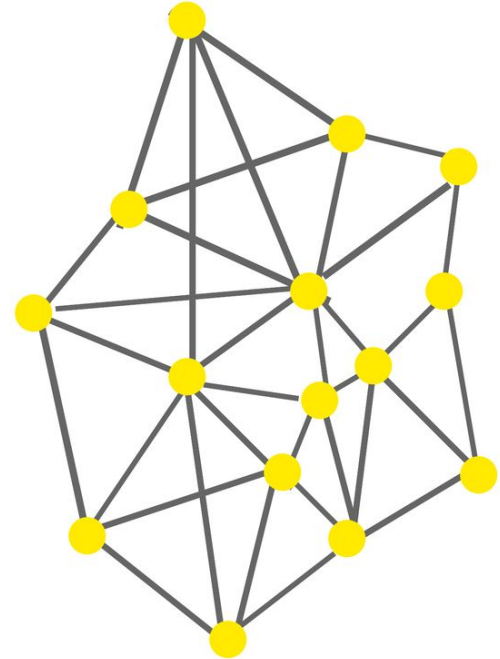
Application Overview

Centralized   Decentralized   Distributed

Geth-Hired - DApp Overview

Geth-hired a decentralised platform providing validated professional journeys. A reliable and cost-effective platform for finding and posting job opportunities with provisions to reward and incentivize users.

Geth-Hired - Users

- Job seeker
- Recruiter/Validator

Geth-Hired - Features

- No-one controls the system.
- Deprecating need of third party for Background Checks.
- Information on Verified Profile can be trusted to be genuine.
- Use of Tokens in application facilitate all tasks.
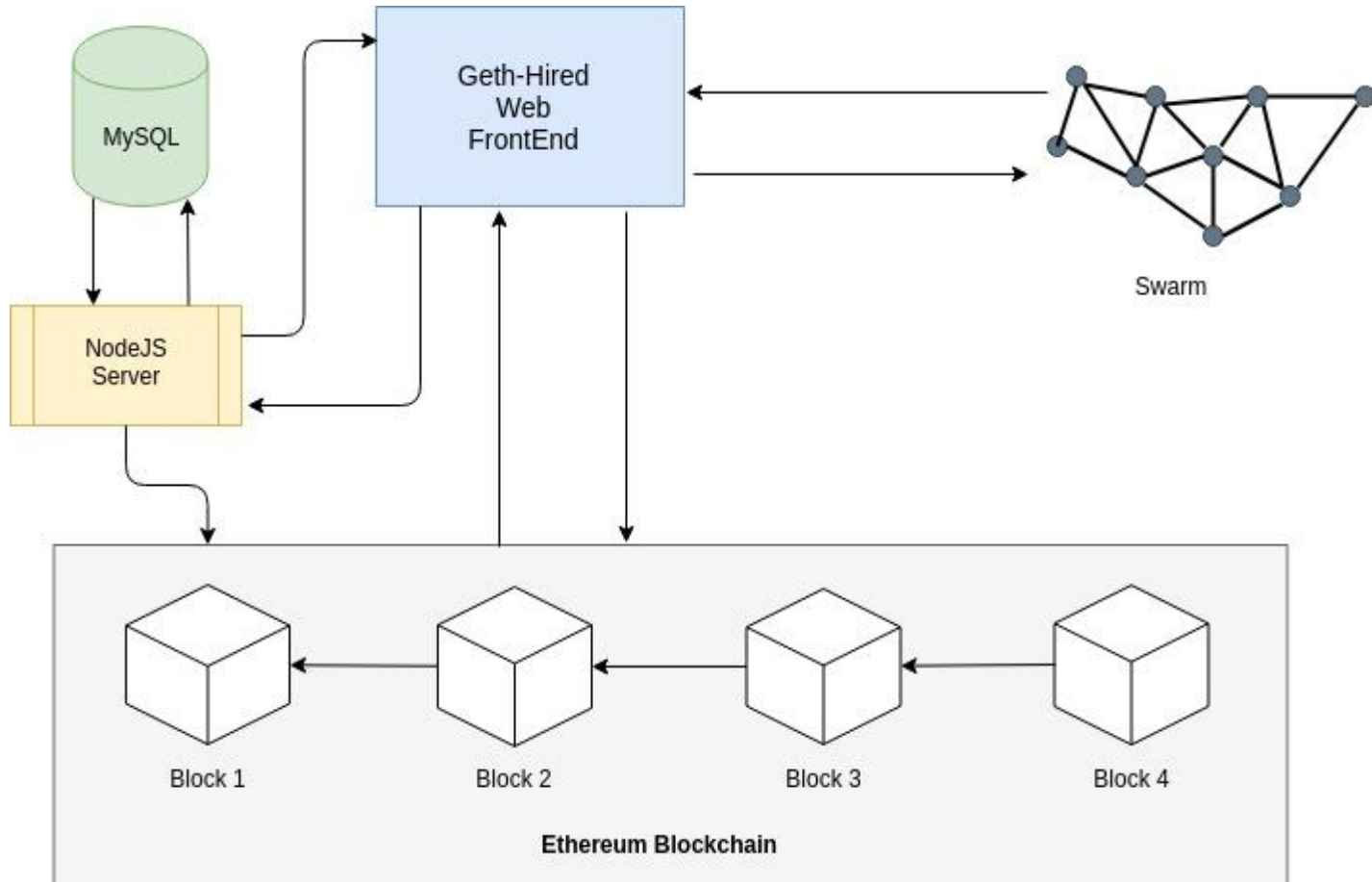- Escrow Accounts are handled by Smart Contracts.

Tech Stack

- Solidity 0.5.x | Smart contracts
- Truffle | IDE
- Ropsten | Blockchain test network
- Infura | deployment
- Swarm | distributed storage
- MySQL
- Portis | Handling ethereum accounts
- Web3 (commonly called web3.js)
- Node.js
- React (react.js)

Tech Stack contd...

- Github | Version control and distributed development.
- Confluence and JIRA | Information sharing, progress tracking and project management using Kanban Boards.

Geth-Hired Architecture

Use-cases for Job Seeker, Recruiter

- User Registration
- Adding Experience along with Certificate and initiates validation
- Admin directs that request to appropriate validator
- Validator receives request and act upon it.
- Generated Signature is transacted on blockchain.
- Verification can be done using blockchain transaction.

Demonstration

Scope

Scope

- Concept of Incentivized Endorsements based on reputation model will help to understand person's skill proficiency.
- Online Learning Platforms can use our platform for issuing certificates which will keep validity of certificates on Blockchain.
- Search: Candidates can be searched on the basic skills recommendation and candidates can search job posts based on their skills.

Thank You

What is Blockchain

- Growing list of records, called *blocks*, which are linked using cryptography.
- Information recorded on a blockchain can take on any form
- To store record on blockchain, requires a confirmation from several of devices, such as computers, on the network, Once consensus, is reached between these devices to store something on a blockchain

Decentralized Application

- A computer application that runs on a distributed computing system.
- Distributed computing systems can be Blockchains like Ethereum, EOS.
- Common Features -
  - Open Source
  - Decentralized
  - Incentivized
  - Protocol
- Role of Ethereum in Dapps