Vishwakarma Institute of Information Technology

Department of Information Technology

Final Year BTech Project - Abstract

(Academic Year: 2020-21)

Project Title: Supply Chain Traceability			
Project Group No.: A-17		Guide Name: Dr. Priya Shelke	
GROUP MEMBERS:			
Roll No./ Seat No.	Name of Student	Project Area	Project Platform
17u112	Ayush Bansal	Blockchain.	Ethereum Blockchain,
17u273	Lokesh Budhlani		Solidity, Ganache,
17u354	Aadesh Ingle		Truffle, Hyperledger
17u373	Siddesh Vyavahare		Fabric, Hyperledger
17u688	Ashish Gole		Sawtooth, Multichain

Abstract

Nowadays, the customers are unaware of the events happening to the items in the supply chain which creates a lack of trust in their minds. So, the solution to this problem can be implemented efficiently using blockchain.

This project is intended to explore transparency in the supply chain of organic products like Jaggery by the usage of Blockchain technology. It allows for decentralized data storage and provides immutability. The decentralized data storage makes it impossible for an unauthorized actor to tamper the data.

Various actors involved in the supply chain are Producers, Distributors, Retailers, Customers, and Quality Checkers. The customers can query the product information by entering the unique code and know the status and events on the product in the supply chain. Various tools are being studied such as Ethereum, Enterprise Ethereum, Multichain, Hyperledger Fabric, Hyperledger Sawtooth to find the efficient one for this supply chain use case.

This project is expected to replace the ongoing methods employed by the industry to trace products in the supply chain, thus leading to an immense decrease in cost and efforts for the producers and making the products cheaper for the customers. The blockchain could also be deployed on cloud services to increase availability, reliability.

This project can be used by any organic product manufacturing industry that wants to better track the products and explore transparency in the supply chain.

This project is sponsored by EmerTech Innovations.