UDACITY Logout

PROJECT SPECIFICATION

Architect a Blockchain Supply Chain Solution - Part B

Write Up

CRITERIA	MEETS SPECIFICATIONS
Project write-up - UML	Project write-up include the following UML diagrams: • Activity • Sequence • State • Classes (Data Model)
Project write-up - Libraries	If libraries are used, the project write-up discusses why these libraries were adopted.

CRITERIA	MEETS SPECIFICATIONS
Project write-up - IPFS	If IPFS is used, the project write-up discusses how IPFS is used in this project.
General Write Up	A general write up exists to items like steps and contracts address.

Write smart contracts with functions

CRITERIA	MEETS SPECIFICATIONS

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SupplyChain.sol contains required tracking functions.	Smart contract implements functions to track. For example: Product ID Product UPC Origination Information Farm Misc organization info Longitude & Latitude of geo coordinates Product notes
Ownable.sol contains required functions that establish owner and the transfer of ownership.	Ownable.sol has required functions that establish owner and the transfer of ownership.

CRITERIA	MEETS SPECIFICATIONS
ConsumerRole.sol contains required functions that manage the consumer role.	ConsumerRole.sol has required functions that manage the consumer role.
RetailerRole.sol contains required functions that manage the consumer role.	RetailerRole.sol has required functions that manage the consumer role.
DistributorRole.sol contains required functions that manage the consumer role.	DistributorRole.sol has required functions that manage the consumer role.
Additional roles implemented are integrated correctly.	Student has implemented additional roles correctly.

Test smart contract code coverage

CRITERIA	MEETS SPECIFICATIONS
Test smart contract tests all required functions.	Project contains tests for the boiler plate functions and all tests are approved without error.

Deploy smart contract on a public test network (Rinkeby)

CRITERIA	MEETS SPECIFICATIONS
Deploy smart contract on a public test network.	Smart contract is deployed on on the Ethereum RINKEBY test network.

CRITERIA	MEETS SPECIFICATIONS
Project submission includes transaction ID and contract address	Project submission includes a document (.md, .txt) that includes: • Transaction ID • Contract address • ◦ Hint: You can view Transaction ID and Contract ID from a blockchain explorer (e.g. Etherscan). Example Contract ID: https://rinkeby.etherscan.io/address/0xfb0720c0715e68f80c0c0437c9c491abfed9e7ab#code

Modify client code to interact with a smart contract

CRITERIA	MEETS SPECIFICATIONS
Client code interacts with smart contract.	Front-end is configured to: • Submit a product for shipment (farmer to the distributor, distributor to retailer, etc). • Receive product from shipment. • Validate the authenticity of the product.

Suggestions to Make Your Project Stand Out!

Optional: Implement Infura to store product image

- Ex: Farmer harvests coffee and upload pics w/ UPC hash
- Potentially only 2 methods needed upload() and read()