PropertyBlock-Network

Contributors:

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This is a project for CFDev 03 at The Blockchain Hub, at York University Lassonde Professional Development, Lassonde School of Engineering.

Objective:

Digital Property Network is a platform for users to digital exchange the property ownership over a Hyperledger smart contract network. This Defines a business network where house sellers can list their properties for sale.

Tools Used for This Project:

- An ubuntu instance was created on Amazon AWS with Hyperledger Fabric deployed.
- The Hyperledger Composer was used as a tool to help in the development of the PropertyBlock-network.
- The sample DigitalProperty-network was used as a basis with edits being made to the library and model files in the chain code.

PropertyBlock-network is defined as:

Participant Person

Assets LandTitle SalesAgreement

Transaction RegisterPropertyForSale 'BlockedProperty' 'UnBlockedProperty'
A Person is responsible for a LandTitle. By creating a SalesAgreement between two Person participants you are then able to submit a RegisterPropertyForSaletransaction.

How the Network Functions:

The network has the following abilities and functions:

- Register a new property on the network
- Puts a new property for sale on the network
- Transfer the ownership of the property
- Add the information to the land title information of the asset
- Completes the review of a property registered on the network and refrain it from getting sold on the network identified by propertyId
- Completes the review of all the properties registered on the network and allows it to sale on the network identified by propertyId

Transactions that can be completed on the network:

- Registers new property on the network for sale
- Block a property on the network
- Unblock a property on the network

Sources:

- Hyperledger Fabric documentation
- Hyperledger Composer documentation
- The Linux Foundation resources