Hyperledger Fabric Assignment for Intership

Problem Statement:

A financial institution needs to implement a blockchain-based system to manage and track assets. The system should support creating assets, updating asset values, querying the world state to read assets, and retrieving asset transaction history. The assets represent accounts with specific attributes, such as **DEALERID, MSISDN, MPIN, BALANCE, STATUS, TRANSAMOUNT, TRANSTYPE**, and **REMARKS**. The institution aims to ensure the security, transparency, and immutability of asset records, while also providing an efficient way to track and manage asset-related transactions and histories.

Level-1

Setup Hyperledger fabric test network using references give below.

References:-

- https://hyperledger-fabric.readthedocs.io/en/latest/whatis.html

- https://hyperledger-fabric.readthedocs.io/en/latest/getting_started.html

- https://hyperledger-fabric.readthedocs.io/en/latest/test_network.html

Level-2

Develop and test the smart contract for the above requirement.

References:-

- https://hyperledger-fabric.readthedocs.io/en/latest/smartcontract/smartcontract.html

- https://github.com/hyperledger/fabric-samples/tree/main/asset-transfer-basic/chaincode-go

- https://hyperledger-fabric.readthedocs.io/en/release-2.4/deploy_chaincode.html

- https://hyperledger-fabric.readthedocs.io/en/release-2.4/deploy_chaincode.html#invoking-the-chaincode

Level-3

Develop a rest api for invoking smart contract deployed into hyperledger fabric test network and create a docker image for the rest api

References:-

- https://hyperledger-fabric.readthedocs.io/en/latest/gateway.html

Technical Requirements:

Programming Language: Golang or JavaScript or TypeScript or Java

**golang is preferred

Note:-

- *Please do not use any AI tools for the code i.e chatGPT, google Bard etc.*

- *Please upload the assignment to github public repo and share the link*