Blockchain Council™

Certified Hyperledger Developer

Hyperledger Composer Capstone Project

Capstone Project

This course includes a Hyperledger Composer Capstone Project - This project can act as guideline for you to help build applications using Hyperledger Composer systems.

Assumptions:

- We are going to take a predefined front end for the project.
- This course do not include front end development.
- All the files for the same will be shared with you.

Problem

A customer loyalty program allows companies to reward customers who frequently make purchases. Program members are able to earn points on purchases, which can translate into some type of reward such as discount, freebie or special customer treatment. The members work toward a certain amount of points to redeem their reward. These programs can have multiple companies as partners on the program, to cater to a customer base. However, current loyalty program systems are restraint on relations between partners, and with visibility to members. These restraints can be removed by creating the customer loyalty program on a blockchain network.
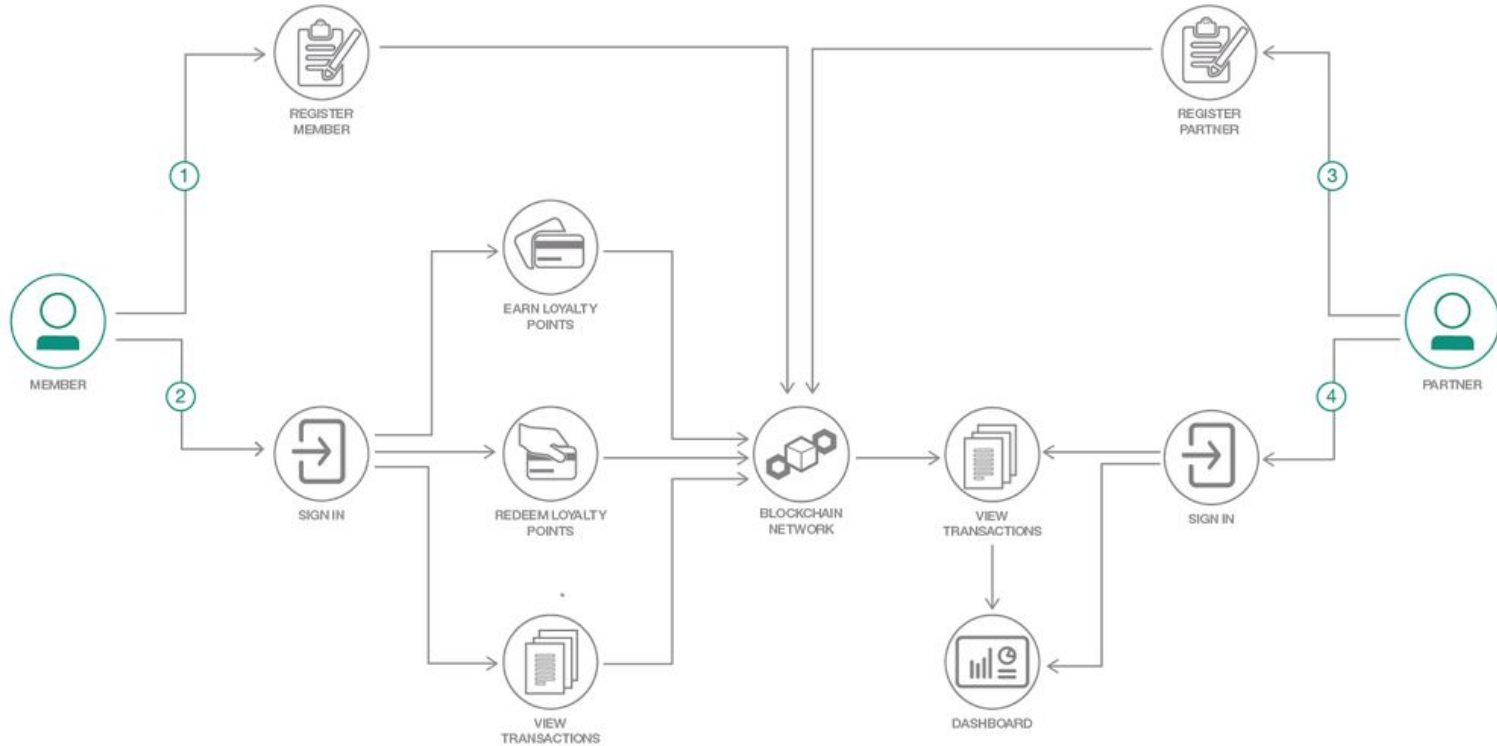
What we are going to do?

In this code pattern, we will create a customer loyalty program as a blockchain web application using Hyperledger Composer API and Node.js. The application will allow members to register on the network where they will create their account. They will be identified on the network with their account number and will create a access key which they will use to sign in. This access key is used as the card id for the member to make transactions and query records. The member once signed in, can make transactions to earn points and redeem points from the partners on the network. They can view their transactions as part of the blockchain ledger. This code pattern illustrates the use of permissions as part of the network where a member can only view their transactions.

What we are going to do?

- Create basic business network using Hyperledger Composer framework
- Deploy the network to an instance of Hyperledger Fabric locally or on IBM Blockchain Starter Plan
- Build a Node.js web application to interact with the blockchain network using Composer API

Customer Loyalty Program - Architecture

THANK YOU!

Any questions?
You can mail us at
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