THE CHINESE UNIVERSITY OF HONG KONG, SHENZHEN

MDS 6117

BLOCKCHAIN TECHNOLOGY AND DEVELOPMENT

Assignment 3

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1   Task

(a) **Install the chaincode**
    The success screenshot:

```
whale@mds6117:~$ docker exec cliMagnetoCorp peer chaincode list --installed
Get installed chaincodes on peer:
Name: papercontract, Version: 0, Path: /opt/gopath/src/github.com/contract, Id: 96b95b32a93259036224ca0fb61c9eada8368350
8f26d207329753b738b6404f
```

Figure 1: Install the chaincode

(b) **Instantiate the chaincode**
    The success screenshot (mychannel6)

```
whale@mds6117:~/go/src/github.com/hyperledger/fabric-samples/commercial-paper/organization/magnetocorp/contract$ docker
exec cliMagnetoCorp peer chaincode instantiate -n papercontract -v 0 -l node -c '{"Args":["org.papernet.commercialpaper:
instantiate"]}' -C mychannel6 -P "AND ('Org1MSP.member')"
2022-04-30 03:48:53.830 UTC [chaincodeCmd] InitCmdFactory -> INFO 001 Retrieved channel (mychannel6) orderer endpoint: o
rderer.example.com:7050
2022-04-30 03:48:53.833 UTC [chaincodeCmd] checkChaincodeCmdParams -> INFO 002 Using default escc
2022-04-30 03:48:53.833 UTC [chaincodeCmd] checkChaincodeCmdParams -> INFO 003 Using default vscc
whale@mds6117:~/go/src/github.com/hyperledger/fabric-samples/commercial-paper/organization/magnetocorp/contract$ docker
exec cliMagnetoCorp peer chaincode list --instantiated -C mychannel6
Get instantiated chaincodes on channel mychannel6:
Name: papercontract, Version: 0, Path: /opt/gopath/src/github.com/contract, Escc: escc, Vscc: vscc
```

Figure 2: Instantiate the chaincode

(c) **Modify application programs**
    The screenshot of these modified parameters in issue.js:

```
        const issueResponse = await contract.submitTransaction('issue', 'MagnetoCorp', '118010141', '2021-03-21', '2022-
03-20', '88888888');
```

Figure 3: Modify application program issue.js

The screenshot of these modified parameters in buy.js:

```
        const buyResponse = await contract.submitTransaction('buy', 'MagnetoCorp', '118010141', 'MagnetoCorp', 'DigiBank', '88888888'
, '2021-03-21');
```

Figure 4: Modify application program buy.js

The nano screenshot of modified parameters in redeem.js:

```
const redeemResponse = await contract.submitTransaction('redeem', 'MagnetoCorp', '118010141', 'DigiBank', '2022-03-20');
```

Figure 5: Modify application program redeem.js

(d) **Run application programs**
Issue:

Figure 6: issue.js

Buy:

Figure 7: buy.js

Redeem:

Figure 8: redeem.js