

Property Registration- Blockchain

Smart Contract Steps Document

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This document contains step by step guide to user who would like to understand different methods available implemented in the smart contracts and execute to understand the output.

Introduction

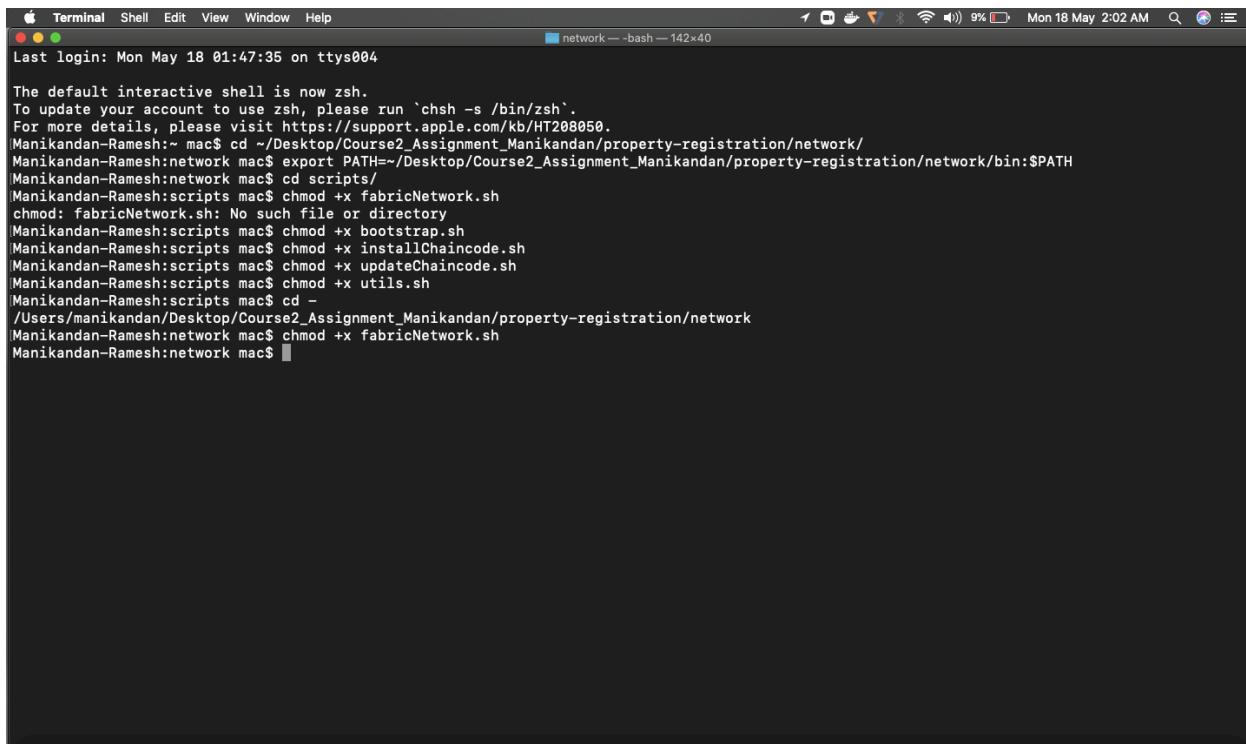
There are two smart contracts, 1) for User and 2) Registrar. NodeJS is used to write these smart contracts.

Pre-requisites

These smart contracts were developed using Property- Registration stub which contains necessary software for deploying and executing smart contracts.

Pre-requisites of Software

- Export bin path to PATH Variable using following command:
 - **export PATH=~/Desktop/Course2_Assignment_Manikandan/property-registration/network/bin:\$PATH**
- Enable Read and Write access for script files using following command
 - **Chmod +x fabricNetwork.sh**
 - **Chmod +x installChaincode.sh**
 - **Chmod +x updateChaincode.sh**
 - **Chmod +x utils.sh**
 - **Chmod +x bootstrap.sh**
- Kindly replace your “network/bin” files based on “Operating System” – Here Mac OS X – bin files attached



The screenshot shows a Mac OS X Terminal window with the following session:

```
Terminal Shell Edit View Window Help
Last login: Mon May 18 01:47:35 on ttys004
network -- bash - 142x40
The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT200050.
Manikandan-Ramesh:~ mac$ cd ~/Desktop/Course2_Assignment_Manikandan/property-registration/network/
Manikandan-Ramesh:network mac$ export PATH=~/Desktop/Course2_Assignment_Manikandan/property-registration/network/bin:$PATH
Manikandan-Ramesh:network mac$ cd scripts/
Manikandan-Ramesh:scripts mac$ chmod +x fabricNetwork.sh
chmod: fabricNetwork.sh: No such file or directory
Manikandan-Ramesh:scripts mac$ chmod +x bootstrap.sh
Manikandan-Ramesh:scripts mac$ chmod +x installChaincode.sh
Manikandan-Ramesh:scripts mac$ chmod +x updateChaincode.sh
Manikandan-Ramesh:scripts mac$ chmod +x utils.sh
Manikandan-Ramesh:scripts mac$ cd -
/Users/manikandan/Desktop/Course2_Assignment_Manikandan/property-registration/network
Manikandan-Ramesh:network mac$ chmod +x fabricNetwork.sh
Manikandan-Ramesh:network mac$
```

Users

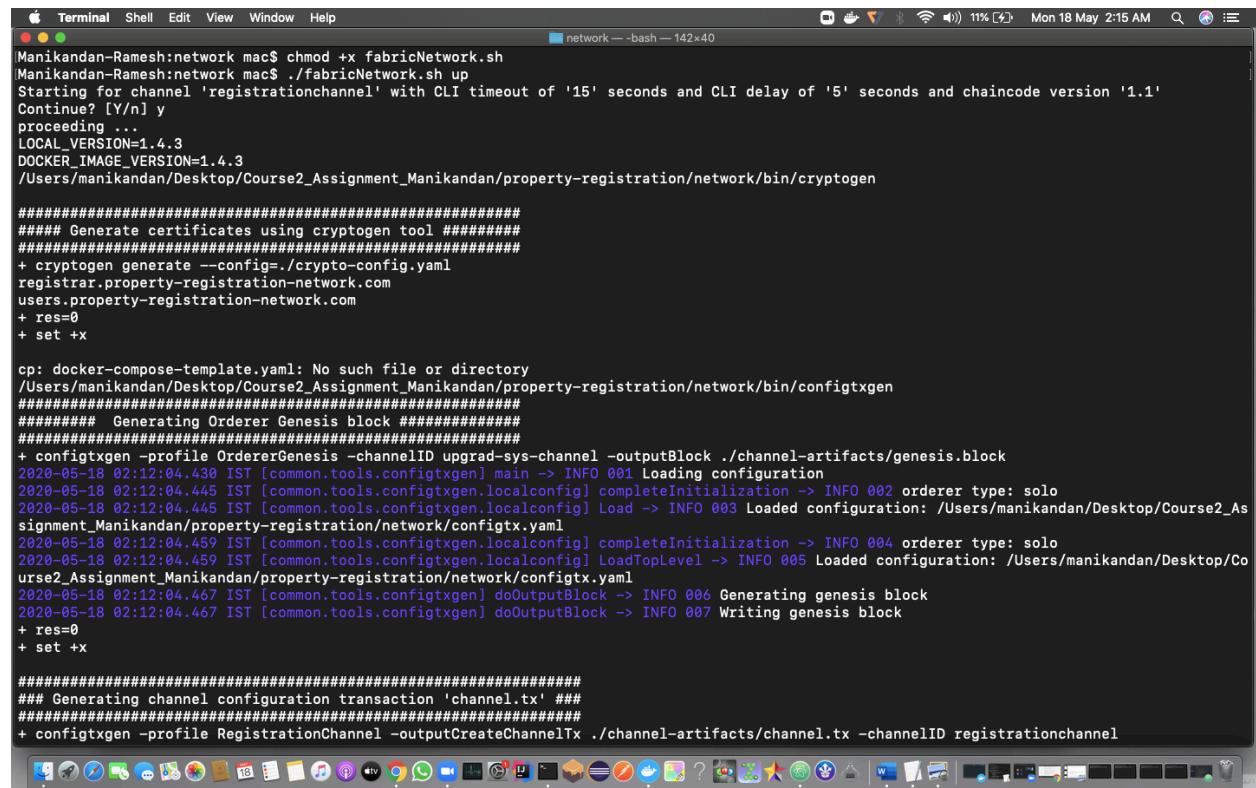
- Seller – Manikandan, manikandanramesh@mail.com, 1231231231231231
- Buyer – Rajalakshmi, rajimanikandan@mail.com, 4564564564564564

Step 1: Bootstrapping the network

Command

1. Go to the ‘network’ folder of the project
2. Execute the command “**./fabricNetwork.sh up**”, which will prompt for the confirmation to boot the network. Enter ‘Y’ in the terminal to bring up the network.

Terminal Screenshot:



```
Manikandan-Ramesh:network mac$ chmod +x fabricNetwork.sh
Manikandan-Ramesh:network mac$ ./fabricNetwork.sh up
Starting for channel 'registrationchannel' with CLI timeout of '15' seconds and CLI delay of '5' seconds and chaincode version '1.1'
Continue? [Y/n] y
proceeding ...
LOCAL_VERSION=1.4.3
DOCKER_IMAGE_VERSION=1.4.3
/Users/manikandan/Desktop/Course2_Assignment_Manikandan/property-registration/network/bin/cryptogen

#####
##### Generate certificates using cryptogen tool #####
#####
+ cryptogen generate --config=./crypto-config.yaml
registrar.property-registration-network.com
users.property-registration-network.com
+ res=0
+ set +x

cp: docker-compose-template.yaml: No such file or directory
/Users/manikandan/Desktop/Course2_Assignment_Manikandan/property-registration/network/bin/configtxgen
#####
##### Generating Orderer Genesis block #####
#####
+ configtxgen -profile OrdererGenesis -channelID upgrade-sys-channel -outputBlock ./channel-artifacts/genesis.block
2020-05-18 02:12:04.430 IST [common.tools.configtxgen] main -> INFO 001 Loading configuration
2020-05-18 02:12:04.445 IST [common.tools.configtxgen.localconfig] completeInitialization -> INFO 002 orderer type: solo
2020-05-18 02:12:04.459 IST [common.tools.configtxgen.localconfig] Load -> INFO 003 Loaded configuration: /Users/manikandan/Desktop/Course2_Assignment_Manikandan/property-registration/network/configtx.yaml
2020-05-18 02:12:04.459 IST [common.tools.configtxgen.localconfig] completeInitialization -> INFO 004 orderer type: solo
2020-05-18 02:12:04.459 IST [common.tools.configtxgen.localconfig] LoadToplevel -> INFO 005 Loaded configuration: /Users/manikandan/Desktop/Course2_Assignment_Manikandan/property-registration/network/configtx.yaml
2020-05-18 02:12:04.467 IST [common.tools.configtxgen] doOutputBlock -> INFO 006 Generating genesis block
2020-05-18 02:12:04.467 IST [common.tools.configtxgen] doOutputBlock -> INFO 007 Writing genesis block
+ res=0
+ set +x

#####
### Generating channel configuration transaction 'channel.tx' ###
+
+ configtxgen -profile RegistrationChannel -outputCreateChannelTx ./channel-artifacts/channel.tx -channelID registrationchannel
```

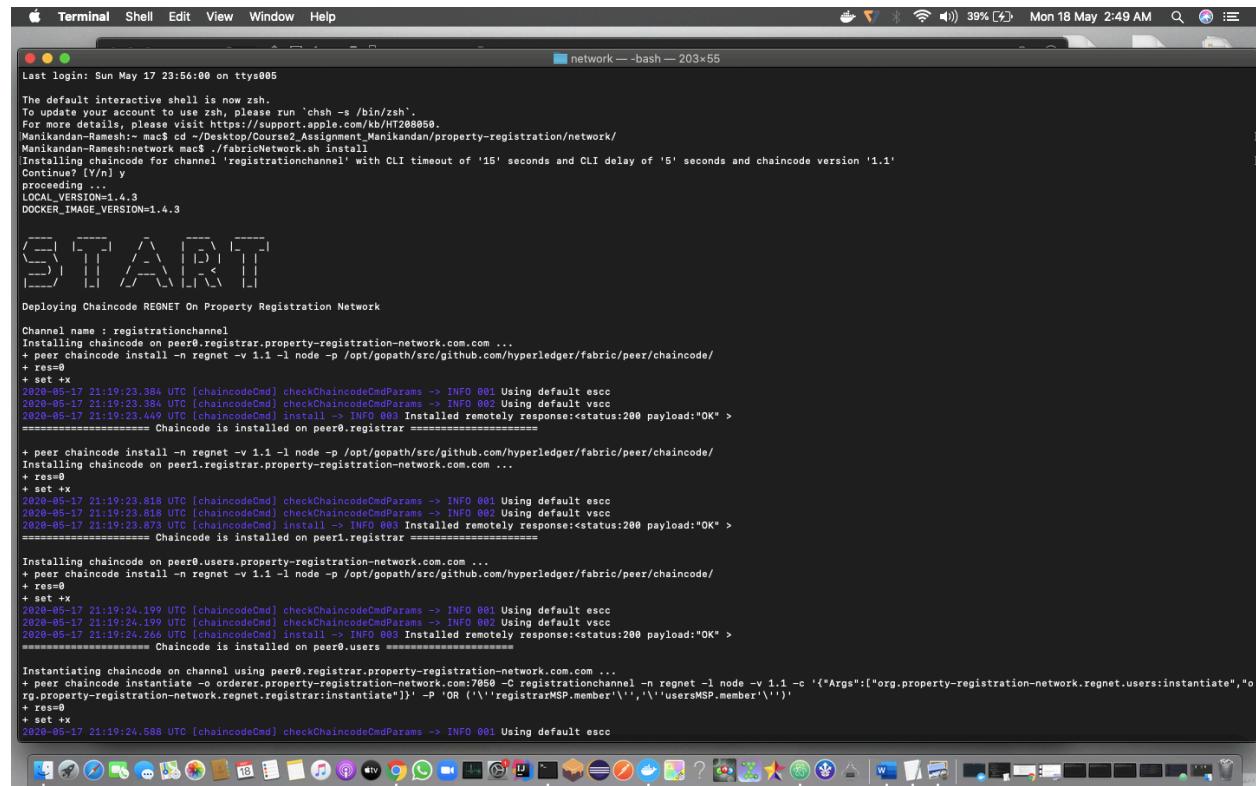
```
Terminal Shell Edit View Window Help
network — bash — 142x40
+ peer channel join -b registrationchannel.block
+ res=0
+ set +x
2020-05-17 20:45:02.798 UTC [channelCmd] InitCmdFactory -> INFO 001 Endorser and orderer connections initialized
2020-05-17 20:45:02.887 UTC [channelCmd] executeJoin -> INFO 002 Successfully submitted proposal to join channel
===== peer1.users.registration-network.com joined channel 'registrationchannel' =====
+ peer channel join -b registrationchannel.block
+ res=0
+ set +x
2020-05-17 20:45:08.177 UTC [channelCmd] InitCmdFactory -> INFO 001 Endorser and orderer connections initialized
2020-05-17 20:45:08.292 UTC [channelCmd] executeJoin -> INFO 002 Successfully submitted proposal to join channel
+ peer channel update -o orderer.property-registration-network.com:7050 -c registrationchannel -f ./channel-artifacts/registrarMSPanchors.tx
Updating anchor peers for REGISTRAR...
+ res=0
+ set +x
2020-05-17 20:45:08.614 UTC [channelCmd] InitCmdFactory -> INFO 001 Endorser and orderer connections initialized
2020-05-17 20:45:08.656 UTC [channelCmd] update -> INFO 002 Successfully submitted channel update
===== Anchor peers updated for org 'registrarMSP' on channel 'registrationchannel' =====
Updating anchor peers for USERS...
+ peer channel update -o orderer.property-registration-network.com:7050 -c registrationchannel -f ./channel-artifacts/usersMSPanchors.tx
+ res=0
+ set +x
2020-05-17 20:45:13.950 UTC [channelCmd] InitCmdFactory -> INFO 001 Endorser and orderer connections initialized
2020-05-17 20:45:14.058 UTC [channelCmd] update -> INFO 002 Successfully submitted channel update
===== Anchor peers updated for org 'usersMSP' on channel 'registrationchannel' =====
=====
All GOOD, Hyperledger Fabric Property Registration Network Is Now Up and Running! =====
[{"\u25a1": "\u25a1", "\u25a1": "\u25a1"}, {"\u25a1": "\u25a1", "\u25a1": "\u25a1"}]
Manikandan-Ramesh:network mac$
```

Step 2: Chaincode Installation and Instantiation

Command:

- Once Step1 is complete, execute below command which will install & instantiate the smart contracts in chaincode container and allow us to invoke different methods listed below.
- “./fabricNetwork.sh install”**

Terminal



```
Last login: Sun May 17 23:56:00 on ttys005
network -- bash -- 203x55
The default interactive shell is now zsh.
To update your account to use zsh, please run 'chsh -s /bin/zsh'.
For more details, please visit https://support.apple.com/kb/HT208050.
Manikandan-Ramesh:~ mac5$ cd ~/Desktop/Course2_Assignment_Manikandan/property-registration/network/
Manikandan-Ramesh:~/Desktop/Course2_Assignment_Manikandan/property-registration/network$ ./FabricNetwork.sh install
Installing chaincode for channel 'registrationchannel' with CLI timeout of '15' seconds and CLI delay of '5' seconds and chaincode version '1.1'
Continue? [Y/N] y
proceeding ...
LOCAL_VERSION=1.4.3
DOCKER_IMAGE_VERSION=1.4.3

Deploying Chaincode REGNET On Property Registration Network

Channel name : registrationchannel
Installing chaincode on peer0.registrat.property-registration-network.com ...
+ peer chaincode install -n regnet -v 1.1 -l node -p /opt/gopath/src/github.com/hyperledger/fabric/peer/chaincode/
+ res=0
+ set +x
2020-05-17 21:19:23.384 UTC [chaincodeCmd] checkChaincodeCmdParams -> INFO 001 Using default escc
2020-05-17 21:19:23.384 UTC [chaincodeCmd] checkChaincodeCmdParams -> INFO 002 Using default vscv
2020-05-17 21:19:23.449 UTC [chaincodeCmd] shinstall -> INFO 003 Installed remotely response:<status:200 payload:"OK">
===== Chaincode is installed on peer0.registrat =====

+ peer chaincode install -n regnet -v 1.1 -l node -p /opt/gopath/src/github.com/hyperledger/fabric/peer/chaincode/
Installing chaincode on peer1.registrat.property-registration-network.com.com ...
+ res=0
+ set +x
2020-05-17 21:19:23.818 UTC [chaincodeCmd] checkChaincodeCmdParams -> INFO 001 Using default escc
2020-05-17 21:19:23.818 UTC [chaincodeCmd] checkChaincodeCmdParams -> INFO 002 Using default vscv
2020-05-17 21:19:23.873 UTC [chaincodeCmd] install -> INFO 003 Installed remotely response:<status:200 payload:"OK">
===== Chaincode is installed on peer1.registrat =====

Installing chaincode on peer0.users.property-registration-network.com.com ...
+ peer chaincode install -n regnet -v 1.1 -l node -p /opt/gopath/src/github.com/hyperledger/fabric/peer/chaincode/
+ res=0
+ set +x
2020-05-17 21:19:24.199 UTC [chaincodeCmd] checkChaincodeCmdParams -> INFO 001 Using default escc
2020-05-17 21:19:24.199 UTC [chaincodeCmd] checkChaincodeCmdParams -> INFO 002 Using default vscv
2020-05-17 21:19:24.266 UTC [chaincodeCmd] install -> INFO 003 Installed remotely response:<status:200 payload:"OK">
===== Chaincode is installed on peer0.users =====

Instantiating chaincode on channel using peer0.registrat.property-registration-network.com.com ...
+ peer chaincode instantiate -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -l node -v 1.1 -c '{"Args":["org.property-registration-network.regnet.users:instantiate","o
r.property-registration-network.regnet.registrat:instantiate"]}' -P "OR ('$registerMSF.member', '$usersMSP.member')"
+ res=0
+ set +x
2020-05-17 21:19:24.588 UTC [chaincodeCmd] checkChaincodeCmdParams -> INFO 001 Using default escc
```

```
Terminal Shell Edit View Window Help
network — bash — 203x55
Deploying Chaincode REGNET On Property Registration Network
Channel name : registrationchannel
Installing chaincode on peer0.regnet.property-registration-network.com ...
+ peer chaincode install -n regnet -v 1.1 -l node -p /opt/gopath/src/github.com/hyperledger/fabric/peer/chaincode/
+ res=$?
+ set +x
2020-05-17 21:19:23.384 UTC [chaincodeCmd] checkChaincodeCmdParams -> INFO 001 Using default escc
2020-05-17 21:19:23.384 UTC [chaincodeCmd] checkChaincodeCmdParams -> INFO 002 Using default vscv
2020-05-17 21:19:23.449 UTC [chaincodeCmd] install -> INFO 003 Installed remotely response:<status:200 payload:"OK">
===== Chaincode is installed on peer0.register =====

+ peer chaincode install -n regnet -v 1.1 -l node -p /opt/gopath/src/github.com/hyperledger/fabric/peer/chaincode/
Installing chaincode on peer1.regnet.property-registration-network.com ...
+ res=$?
+ set +x
2020-05-17 21:19:23.818 UTC [chaincodeCmd] checkChaincodeCmdParams -> INFO 001 Using default escc
2020-05-17 21:19:23.818 UTC [chaincodeCmd] checkChaincodeCmdParams -> INFO 002 Using default vscv
2020-05-17 21:19:23.873 UTC [chaincodeCmd] install -> INFO 003 Installed remotely response:<status:200 payload:"OK">
===== Chaincode is installed on peer1.register =====

Installing chaincode on peer0.users.property-registration-network.com ...
+ peer chaincode install -n regnet -v 1.1 -l node -p /opt/gopath/src/github.com/hyperledger/fabric/peer/chaincode/
+ res=$?
+ set +x
2020-05-17 21:19:24.199 UTC [chaincodeCmd] checkChaincodeCmdParams -> INFO 001 Using default escc
2020-05-17 21:19:24.199 UTC [chaincodeCmd] checkChaincodeCmdParams -> INFO 002 Using default vscv
2020-05-17 21:19:24.266 UTC [chaincodeCmd] install -> INFO 003 Installed remotely response:<status:200 payload:"OK">
===== Chaincode is installed on peer0.users =====

Instantiating chaincode on channel with peer0.register.property-registration-network.com ...
+ peer chaincode instantiate -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -l node -v 1.1 -c '{"Args":["org.property-registration-network.regnet.users:instantiate","o
rg.property-registration-network.regnet.register:instantiate"]}' -P 'OR(''registrarMSP.member'', ''usersMSP.member'')'
+ res=$?
+ set +x
2020-05-17 21:19:24.588 UTC [chaincodeCmd] checkChaincodeCmdParams -> INFO 001 Using default escc
2020-05-17 21:19:24.589 UTC [chaincodeCmd] checkChaincodeCmdParams -> INFO 002 Using default vscv
===== Chaincode is instantiated on peer0.register on channel 'registrationchannel' =====

===== All GOOD, Chaincode REGNET Is Now Installed & Instantiated On Registration Network =====

Manikandan-Ramesh:network mac$
```

Step 3: Start the chaincode node application

This is a must have step before proceeding to Step 4

Command:

1. Enter into docker container for chaincode using command “**docker exec -it chaincode /bin/bash**”
2. Install node modules using “**npm install**” command which will install all necessary Node modules inside chaincode container.
3. Start the node application: “**npm run start-dev**”

Terminal:

```
./src/x509.cc: In function 'v8::Local<v8::Value> try_parse(const string&)':
./src/x509.cc:409:38: warning: value computed is not used [-Wunused-value]
    BIO_set_close(ext_bio, BIO_CLOSE);
    ^
SOLINK_MODULE(target) Release/obj.target/x509.node
COPY Release/x509.node
make: Leaving directory '/opt/gopath/src/chaincode/node_modules/fabric-shim/node_modules/@ampretia/x509/build'

> grpc@1.23.3 install /opt/gopath/src/chaincode/node_modules/fabric-shim/node_modules/grpc
> node-pre-gyp install --fallback-to-build --library=static_library

node-pre-gyp WARN Using needle for node-pre-gyp https download
[grpc] Success: "/opt/gopath/src/chaincode/node_modules/fabric-shim/node_modules/grpc/src/node/extension_binary/node-v57-linux-x64-glibc/grpc_node.node" is installed via remote
npm notice created a lockfile as package-lock.json. You should commit this file.
npm WARN regnet@0.0.1 No repository field.
npm WARN regnet@0.0.1 No license field.

added 492 packages from 1060 contributors and audited 492 packages in 174.818s
found 7 vulnerabilities (6 low, 1 high)
  run `npm audit fix` to fix them, or `npm audit` for details
root@a5a1485b2dd3:/opt/gopath/src/chaincode# npm audit fix
npm WARN regnet@0.0.1 No repository field.
npm WARN regnet@0.0.1 No license field.

added 9 packages from 3 contributors, removed 9 packages and updated 2 packages in 20.139s
fixed 6 of 7 vulnerabilities in 492 scanned packages
  1 package update for 1 vulnerability involved breaking changes
  (use `npm audit fix --force` to install breaking changes; or refer to `npm audit` for steps to fix these manually)

New minor version of npm available! 6.11.2 → 6.14.5
Changelog: https://github.com/npm/cli/releases/tag/v6.14.5
Run npm install -g npm to update!
```

The terminal window shows the execution of several npm commands. It starts by running a C++ file (./src/x509.cc) which triggers a warning about unused code. Then it runs make to build a node module (Release/obj.target/x509.node). After that, it installs the grpc module (version 1.23.3) and its dependencies. A note is given about using node-pre-gyp for building native modules. The output shows various npm warnings, such as missing repository and license fields for some packages. Finally, it performs an audit fix, updates 9 packages, and fixes 6 out of 7 vulnerabilities. A message at the end informs the user about a newer npm version (6.14.5) being available.

```
Terminal Shell Edit View Window Help
network — root@a5a1485b2dd3:/opt/gopath/src/chaincode — docker exec -it chaincode /bin/bash — 142x40
npm WARN regnet@0.0.1 No repository field.
npm WARN regnet@0.0.1 No license field.

added 9 packages from 3 contributors, removed 9 packages and updated 2 packages in 20.139s
fixed 6 of 7 vulnerabilities in 492 scanned packages
  1 package update for 1 vulnerability involved breaking changes
  (use `npm audit fix --force` to install breaking changes; or refer to `npm audit` for steps to fix these manually)

New minor version of npm available! 6.11.2 => 6.14.5
Changelog: https://github.com/npm/cli/releases/tag/v6.14.5
Run npm install -g npm to update!

root@a5a1485b2dd3:/opt/gopath/src/chaincode# npm run start-dev

> regnet@0.0.1 start-dev /opt/gopath/src/chaincode
> fabric-chaincode-node start --peer.address peer0.users.property-registration-network.com:9053 --chaincode-id-name regnet:1.1

Configuring yargs through package.json is deprecated and will be removed in the next major release, please use the JS API instead.
Configuring yargs through package.json is deprecated and will be removed in the next major release, please use the JS API instead.
Configuring yargs through package.json is deprecated and will be removed in the next major release, please use the JS API instead.
2020-05-17T21:31:28.253Z info [shim:contracts-spi/bootstrap.js]           No metadata file supplied in contract, introspection will generate all the data
2020-05-17T21:31:28.258Z info [shim:contracts-spi/chaincodefromcontract.js]    Using serializers {"transaction":"jsonSerializer","serializers":{}}
Configuring yargs through package.json is deprecated and will be removed in the next major release, please use the JS API instead.
2020-05-17T21:31:28.399Z info [shim:lib/chaincode.js]                      Registering with peer peer0.users.property-registration-network.com:9053 as chaincode "regnet:1.1"

Command succeeded

2020-05-17T21:31:28.461Z info [shim:lib/handler.js]                          Successfully registered with peer node. State transferred to "established"
2020-05-17T21:31:28.469Z info [shim:lib/handler.js]                          Successfully established communication with peer node. State transferred to "ready"

[  ]
```

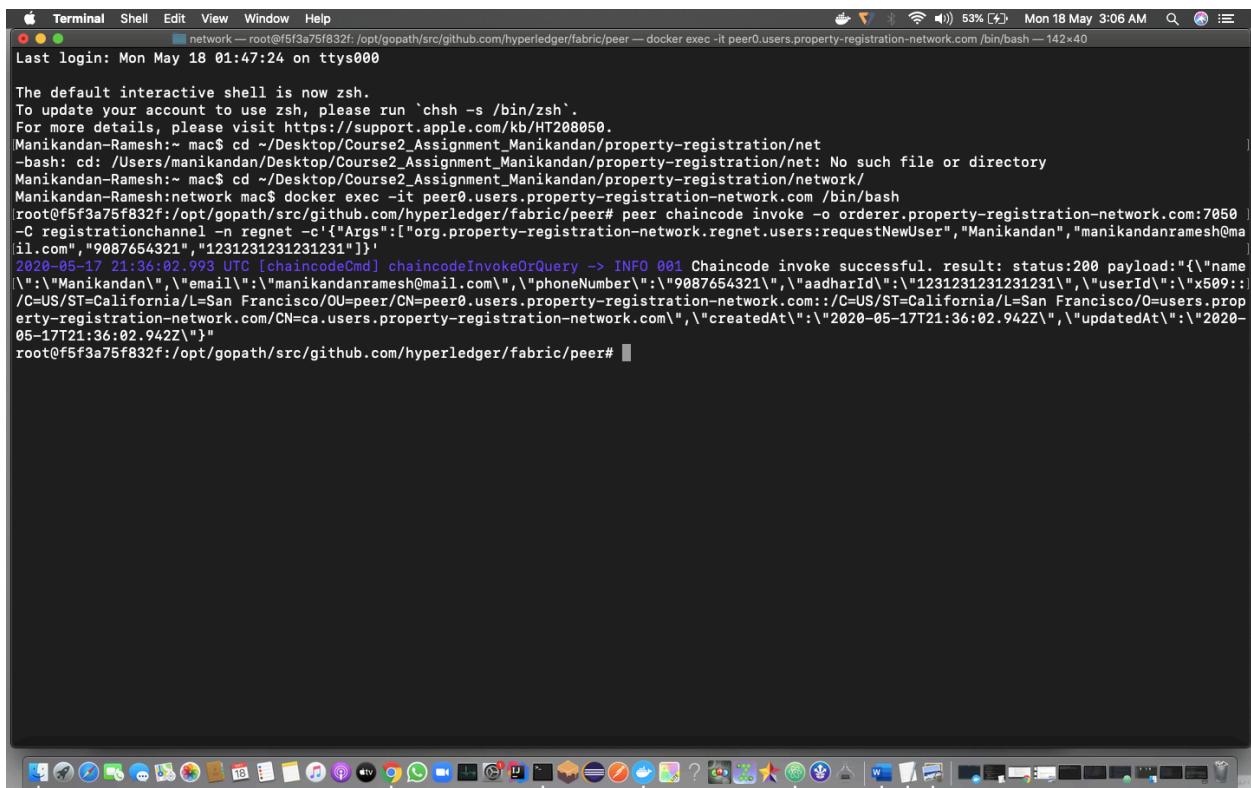
Step 4: Invoke Smart Contract Methods as per flow mentioned

Function 1: requestNewUser

Commands:

1. Enter into Peer0 of users org: “`docker exec -it peer0.users.property-registration-network.com /bin/bash`”
2. Execute command: “`peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.users:requestNewUser","Manikandan","manikandanramesh@mail.com","9087654321","1231231231231231"]}'`”

Terminal:



The screenshot shows a macOS terminal window with the title bar "network — root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer — docker exec -it peer0.users.property-registration-network.com /bin/bash — 142x40". The terminal content is as follows:

```
Last login: Mon May 18 01:47:24 on ttys000
The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
Manikandan-Ramesh:~ mac$ cd ~/Desktop/Course2_Assignment_Manikandan/property-registration/net
-bash: cd: /Users/manikandan/Desktop/Course2_Assignment_Manikandan/property-registration/net: No such file or directory
Manikandan-Ramesh:~ mac$ cd ~/Desktop/Course2_Assignment_Manikandan/property-registration/network/
Manikandan-Ramesh:network mac$ docker exec -it peer0.users.property-registration-network.com /bin/bash
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.users:requestNewUser","Manikandan","manikandanramesh@mail.com","9087654321","1231231231231231"]}'
2020-05-17 21:36:02.993 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{"name":"Manikandan","email":"manikandanramesh@mail.com","phoneNumber":"9087654321","aadharId":"1231231231231231","userId":"x509:/C=US/ST=California/L=San Francisco/O=peer/CN=peer0.users.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=users.property-registration-network.com/CN=ca.users.property-registration-network.com","createdAt":"2020-05-17T21:36:02.942Z","updatedAt":"2020-05-17T21:36:02.942Z"}"
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer#
```

Function 2: approveNewUser

Commands:

1. Enter into Peer0 of registrar org: “**docker exec -it peer0.registrar.property-registration-network.com /bin/bash**”
2. Execute command: “**peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.registrar:approveNewUser","Manikandan","1231231231231231"]}'**”

Terminal:

The screenshot shows a macOS Terminal window with the following content:

```
Terminal Shell Edit View Window Help
network — root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer — docker exec -it peer0.registrar.property-registration-network.com /bin/bash — 143x40
Last login: Mon May 18 01:47:32 on ttys003

The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
Manikandan-Ramesh:~ mac$ cd ~/Desktop/Course2_Assignment_Manikandan/property-registration/network/
Manikandan-Ramesh:network mac$ docker exec -it peer0.registrar.property-registration-network.com /bin/bash
root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.registrar:approveNewUser","Manikandan","1231231231231231"]}'
2020-05-17 21:38:53.055 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\"name\":\"Manikandan\",\"email\":\"manikandanramesh@mail.com\",\"phoneNumber\":\"9087654321\",\"aadharId\":\"1231231231231231\", \"userId\":\"x509:::C=US/ST=California/L=San Francisco/O=peer0.users.property-registration-network.com/CN=ca.users.property-registration-network.com\", \"createdAt\":\"2020-05-17T21:36:02.942Z\", \"updatedAt\":\"2020-05-17T21:38:53.034Z\", \"upgradCoins\":0, \"registrarId\":\"x509:::C=US/ST=California/L=San Francisco/O=peer0.registrar.property-registration-network.com:::C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\", \"status\":\"Approved\"}"
root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer#
```

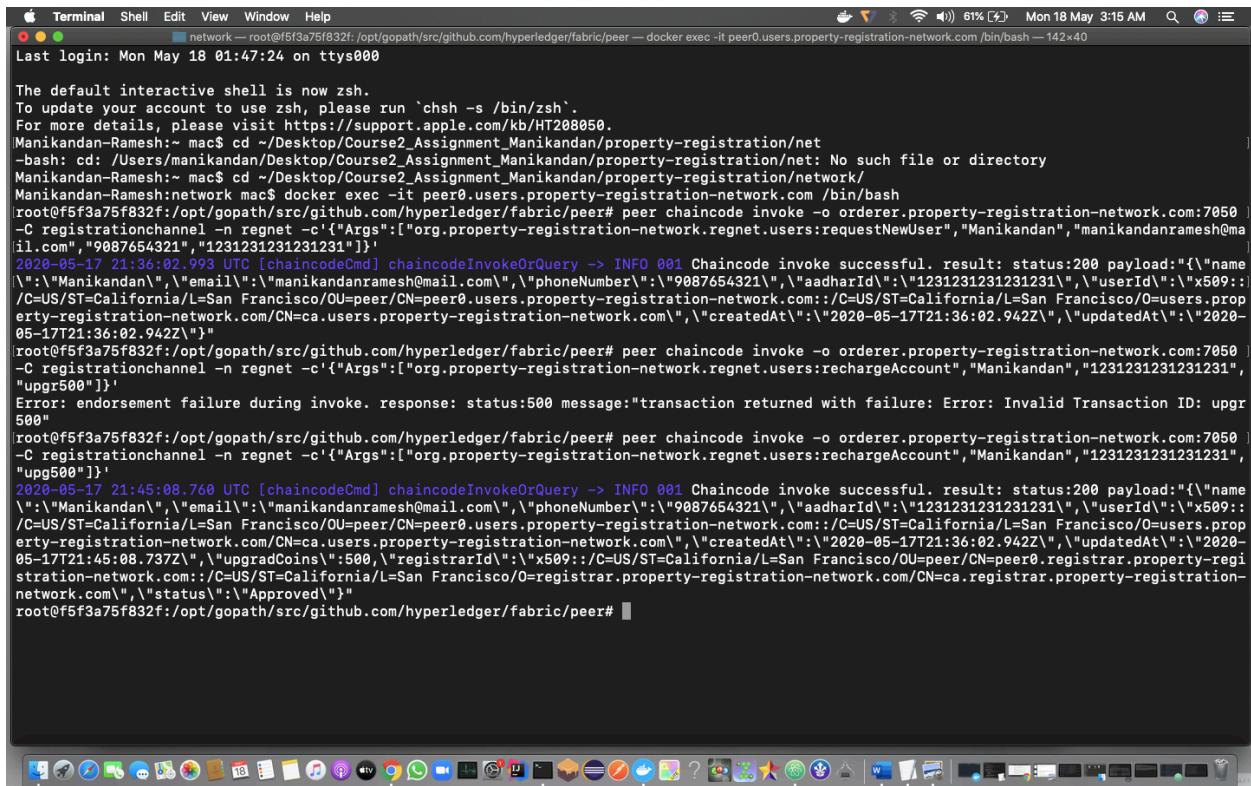
The terminal window has a dark background and a light-colored text area. The title bar shows the path: network — root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer — docker exec -it peer0.registrar.property-registration-network.com /bin/bash — 143x40. The status bar at the bottom shows the date and time: Mon May 18 01:47:32 on ttys003.

Function 3: rechargeAccount

Commands:

1. Enter into Peer0 of users org: “**docker exec -it peer0.users.property-registration-network.com /bin/bash**”
2. Execute command:
 - a. Success: “**peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.users:rechargeAccount","Manikandan","1231231231231231","upgr500"]}'**”
 - b. Failure: “**peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.users:rechargeAccount","Manikandan","1231231231231231","**upgr500**"]}'**”

Terminal for Failure & Success:



```
Terminal Shell Edit View Window Help
network — root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer — docker exec -it peer0.users.property-registration-network.com /bin/bash — 142x40
Last login: Mon May 18 01:47:24 on ttys000
The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
Manikandan-Ramesh:~ mac$ cd ~/Desktop/Course2_Assignment_Manikandan/property-registration/net
-bash: cd: /Users/manikandan/Desktop/Course2_Assignment_Manikandan/property-registration/net: No such file or directory
Manikandan-Ramesh:~ mac$ cd ~/Desktop/Course2_Assignment_Manikandan/property-registration/network/
Manikandan-Ramesh:network mac$ docker exec -it peer0.users.property-registration-network.com /bin/bash
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.users:requestNewUser","Manikandan","manikandanramesh@mail.com","9087654321","1231231231231231"]}'
2020-05-17 21:36:02.998 UTC [chaincodeCmd] chaincodeInvokeOrQuery -> INFO 001 Chaincode invoke successful. result: status:200 payload:"{\"name\":\"Manikandan\",\"email\":\"manikandanramesh@mail.com\",\"phoneNumber\":\"9087654321\",\"aadharId\":\"1231231231231231\",\"userId\":\"x509::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.users.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=users.property-registration-network.com/CN=ca.users.property-registration-network.com\",\"createdAt\":\"2020-05-17T21:36:02.942Z\",\"updatedAt\":\"2020-05-17T21:36:02.942Z\"}"
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.users:rechargeAccount","Manikandan","1231231231231231","upgr500"]}'
Error: endorsement failure during invoke. response: status:500 message:"transaction returned with failure: Error: Invalid Transaction ID: upgr500"
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.users:rechargeAccount","Manikandan","1231231231231231","upgr500"]}'
2020-05-17 21:45:08.760 UTC [chaincodeCmd] chaincodeInvokeOrQuery -> INFO 001 Chaincode invoke successful. result: status:200 payload:"{\"name\":\"Manikandan\",\"email\":\"manikandanramesh@mail.com\",\"phoneNumber\":\"9087654321\",\"aadharId\":\"1231231231231231\",\"userId\":\"x509::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.users.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=users.property-registration-network.com/CN=ca.users.property-registration-network.com\",\"createdAt\":\"2020-05-17T21:45:08.737Z\",\"upgradCoins\":500,\"registrarId\":\"x509::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\",\"status\":\"Approved\"}"
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer#
```

Function 4: viewUser

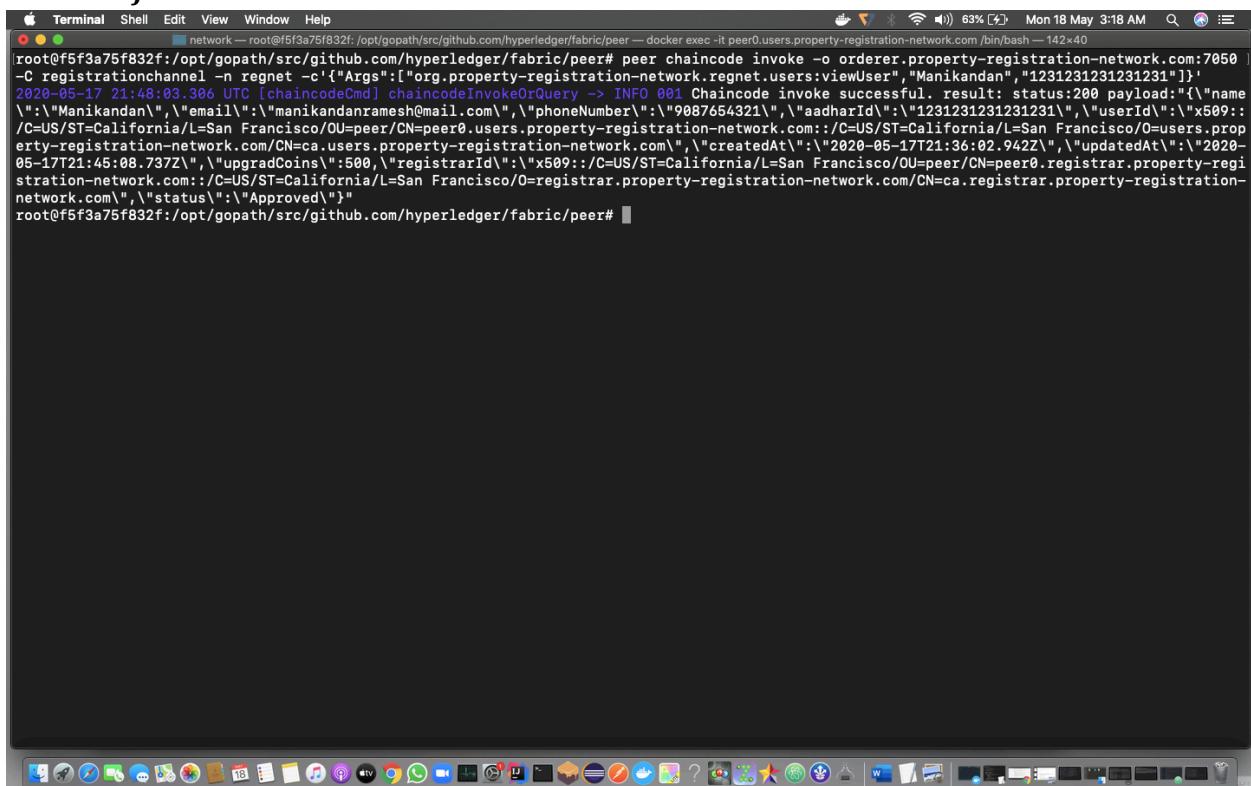
Commands for Users Org:

1. Enter into Peer0 of users org: “**docker exec -it peer0.users.property-registration-network.com /bin/bash**”
2. Execute command: “**peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.users:viewUser","Manikandan","1231231231231231"]}'**”

Commands for Registrar Org:

1. Enter into Peer0 of registrar org: “**docker exec -it peer0.registrar.property-registration-network.com /bin/bash**”
2. Execute command: “**peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.registrar:viewUser","Manikandan","1231231231231231"]}'**”

Terminal for User:



A screenshot of a macOS Terminal window titled "network". The window shows a command being run: "root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.users:viewUser","Manikandan","1231231231231231"]}'". The output indicates a successful invoke operation with status 200, displaying a JSON payload containing user information like name, email, phone number, Aadhar ID, user ID, and registration details.

```
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.users:viewUser","Manikandan","1231231231231231"]}'  
2020-05-17 21:48:03.383 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:{"name ":"Manikandan","email ":"manikandanramesh@mail.com","phoneNumber ":"9887654321","aadharId ":"1231231231231231","userId ":"x509::/C=US/ST=California/L=San Francisco/OU=peer0.users.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=users.property-registration-network.com/CN=ca.users.property-registration-network.com","createdAt ":"2020-05-17T21:36:02.942Z","updatedAt ":"2020-05-17T21:45:08.737Z","upgradCoins":500,"registrarId ":"x509::/C=US/ST=California/L=San Francisco/OU=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com","status ":"Approved"}"  
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer#
```

Terminal for Registrar:

The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit <https://support.apple.com/kb/HT208050>.

```
Manikandan-Ramesh:~ mac$ cd ~/Desktop/Course2_Assignment_Manikandan/property-registration/network/
Manikandan-Ramesh:network mac$ docker exec -it peer0.registrar.property-registration-network.com /bin/bash
root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.registrar:approveNewUser","Manikandan","1231231231231231"]}'
2020-05-17 21:38:53.053 UTC [chaincodeCmd] chaincodeInvokeOrQuery -> INFO 001 Chaincode invoke successful. result: status:200 payload:{"name":"Manikandan","email":"manikandanramesh@mail.com","phoneNumber":"9087654321","aadharId":"1231231231231231","userId":"x509:::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.users.property-registration-network.com::C=US/ST=California/L=San Francisco/O=users.property-registration-network.com/CN=ca.users.property-registration-network.com","createdAt":"2020-05-17T21:36:02.942Z","updatedAt":"2020-05-17T21:38:53.034Z","upgradCoins":0,"registrarId":"x509:::C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com","status":"Approved"}"
root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.registrar:viewUser","Manikandan","1231231231231231"]}'
2020-05-17 21:49:50.342 UTC [chaincodeCmd] chaincodeInvokeOrQuery -> INFO 001 Chaincode invoke successful. result: status:200 payload:{"name":"Manikandan","email":"manikandanramesh@mail.com","phoneNumber":"9087654321","aadharId":"1231231231231231","userId":"x509:::C=US/ST=California/L=San Francisco/O=users.property-registration-network.com/CN=ca.users.property-registration-network.com","createdAt":"2020-05-17T21:36:02.942Z","updatedAt":"2020-05-17T21:45:08.737Z","upgradCoins":500,"registrarId":"x509:::C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com","status":"Approved"}"
```

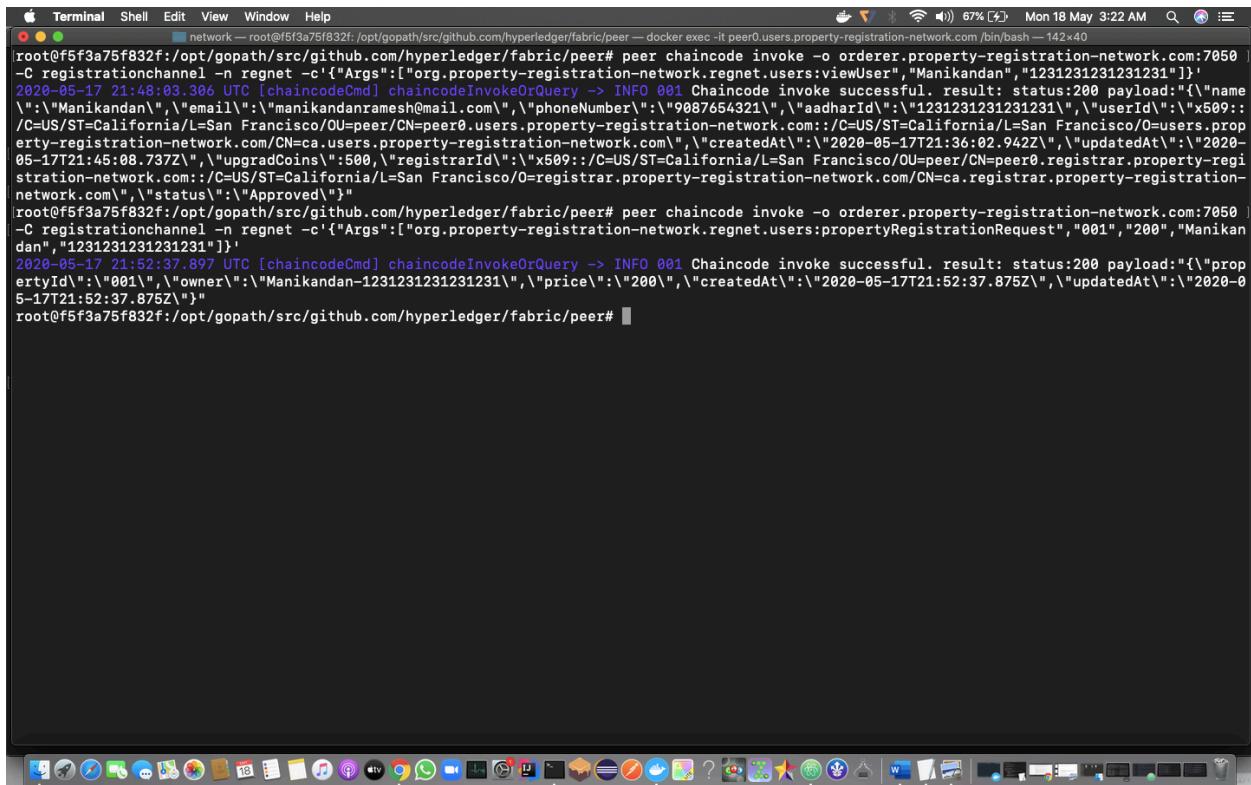
The terminal window shows the execution of Hyperledger Fabric chaincode commands to register a user ('regnet') and view a user ('viewUser'). The commands are issued from a Docker container running on a Mac OS X host. The logs indicate successful invocations with status codes 200 and 500, and provide detailed JSON payloads for each operation.

Function 5: propertyRegistrationRequest

Commands:

1. Enter into Peer0 of users org: “**docker exec -it peer0.users.property-registration-network.com /bin/bash**”
2. Execute command: “**peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.users:propertyRegistrationRequest","001","200","Manikandan","1231231231231231"]}'**”

Terminal:



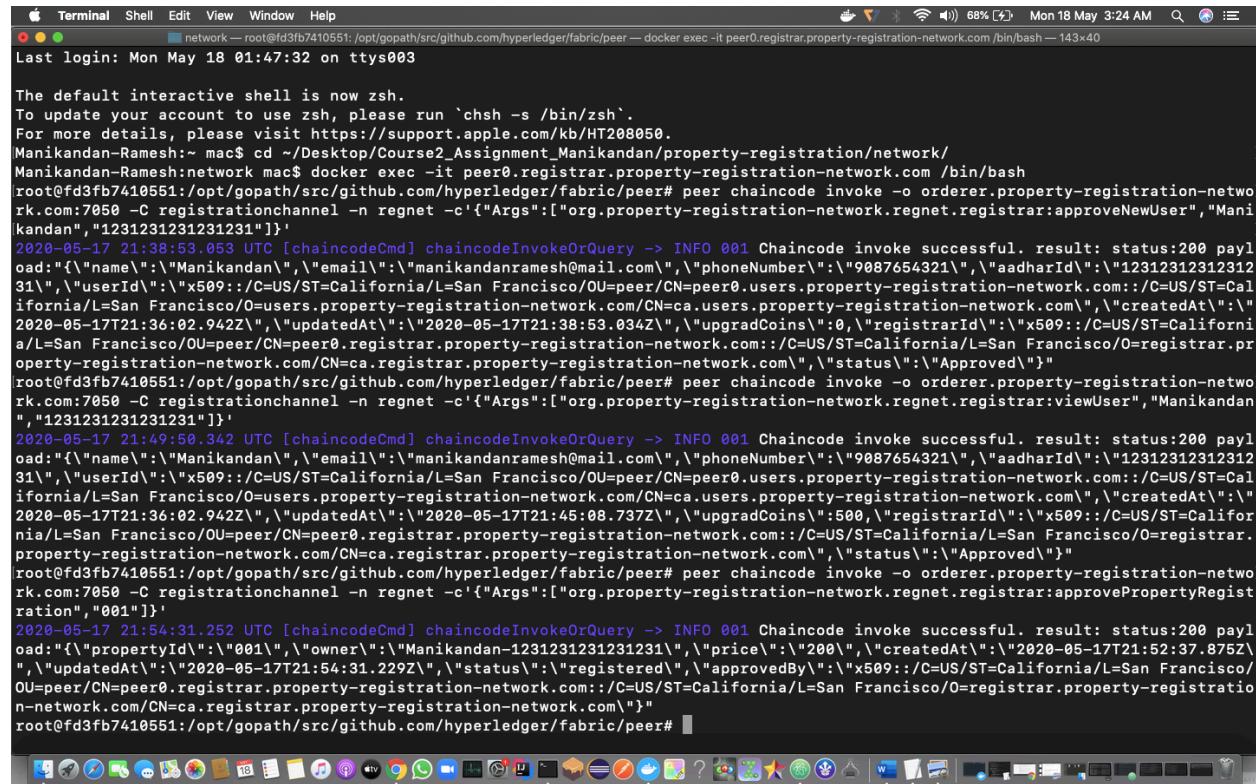
```
Terminal Shell Edit View Window Help
network — root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer — docker exec -it peer0.users.property-registration-network.com /bin/bash — 142x40
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.users:viewUser","Manikandan","1231231231231231"]}' 
2020-05-17 21:48:03.386 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\"name\":\"Manikandan\",\"email\":\"manikandanramesh@mail.com\",\"phoneNumber\":\"9887654321\",\"aadharId\":\"1231231231231231\",\"userId\":\"x509::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.users.property-registration-network.com::/C=US/ST=California/L=San Francisco/OU=users.propert...erty-registration-network.com/CN=ca.users.property-registration-network.com\",\"createdAt\":\"2020-05-17T21:36:02.942Z\",\"updatedAt\":\"2020-05-17T21:45:08.737Z\",\"upgradCoins\":500,\"registrarId\":\"x509::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.registrar.property-registrat...network.com::/C=US/ST=California/L=San Francisco/OU=registrar.property-registration-network.com/CN=ca.registrar.property-registrat...network.com\",\"status\":\"Approved\"}"
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.users:propertyRegistrationRequest","001","200","Manikandan","1231231231231231"]}' 
2020-05-17 21:52:37.897 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\"propertyId\":\"001\",\"owner\":\"Manikandan-1231231231231231\",\"price\":\"200\",\"createdAt\":\"2020-05-17T21:52:37.875Z\",\"updatedAt\":\"2020-05-17T21:52:37.875Z\"}"
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer#
```

Function 6: approvePropertyRegistration

Commands:

1. Enter into Peer0 of registrar org: “**docker exec -it peer0.registrar.property-registration-network.com /bin/bash**”
2. Execute command: “**peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.registrar:approvePropertyRegistration","001"]}'**”

Terminal:



```
Apple Terminal Shell Edit View Window Help
network — root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer — docker exec -it peer0.registrar.property-registration-network.com /bin/bash — 143x40
Last login: Mon May 18 01:47:32 on ttys003

The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
Manikandan-Ramesh:~ mac$ cd ~/Desktop/Course2_Assignment_Manikandan/property-registration/network/
Manikandan-Ramesh:network mac$ docker exec -it peer0.registrar.property-registration-network.com /bin/bash
root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.registrar:approveNewUser","Manikandan","1231231231231231"]}'
2020-05-17 21:38:53.055 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\"name\":\"Manikandan\",\"email\":\"manikandanramesh@mail.com\",\"phoneNumber\":\"9087654321\",\"aadharId\":\"1231231231231231\",\"userId\":\"x509:::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.users.property-registration-network.com:/O=ST=California/L=San Francisco/O=users.property-registration-network.com/CN=ca.users.property-registration-network.com\",\"createdAt\":\"2020-05-17T21:36:02.942Z\",\"updatedAt\":\"2020-05-17T21:38:53.034Z\",\"upgradCoins\":0,\"registrarId\":\"x509:::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\"},\"status\":\"Approved\"}"
root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.registrar:viewUser","Manikandan","1231231231231231"]}'
2020-05-17 21:49:50.342 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\"name\":\"Manikandan\",\"email\":\"manikandanramesh@mail.com\",\"phoneNumber\":\"9087654321\",\"aadharId\":\"1231231231231231\",\"userId\":\"x509:::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.users.property-registration-network.com:/O=ST=California/L=San Francisco/O=users.property-registration-network.com/CN=ca.users.property-registration-network.com\",\"createdAt\":\"2020-05-17T21:36:02.942Z\",\"updatedAt\":\"2020-05-17T21:45:08.737Z\",\"upgradCoins\":500,\"registrarId\":\"x509:::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\"},\"status\":\"Approved\"}"
root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.registrar:approvePropertyRegistration","001"]}'
2020-05-17 21:54:31.252 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\"propertyId\":\"001\",\"owner\":\"Manikandan-1231231231231231\",\"price\":\"200\",\"createdAt\":\"2020-05-17T21:52:37.875Z\",\"updatedAt\":\"2020-05-17T21:54:31.229Z\"},\"status\":\"registered\",\"approvedBy\":\"x509:::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\"}"
root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer#
```

Method 7: viewProperty

Commands for Users Org:

1. Enter into Peer0 of users org: “**docker exec -it peer0.users.property-registration-network.com /bin/bash**”
2. Execute command: “**peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.users:viewProperty","001"]}'**”

Commands for Registrar Org:

1. Enter into Peer0 of registrar org: “**docker exec -it peer0.registrar.property-registration-network.com /bin/bash**”
2. Execute command: “**peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.registrar:viewProperty","001"]}'**”

Terminal for Users:

```
Terminal Shell Edit View Window Help
network — root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer — docker exec -it peer0.users.property-registration-network.com/bin/bash — 142x40
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.users:viewUser","Manikandan","1231231231231231"]}' 2020-05-17 21:48:03.303 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\\"name\":\"Manikandan\",\\\"email\":\"manikandanramesh@mail.com\",\\\"phoneNumber\":\"9087654321\",\\\"aadharId\":\"1231231231231231\",\\\"userId\":\"x509::/C=US/ST=California/L=San Francisco/OU=peer0.users.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=users.property-registration-network.com/CN=ca.users.property-registration-network.com\",\\\"createdAt\":\"2020-05-17T21:36:02.942Z\",\\\"updatedAt\":\"2020-05-17T21:45:08.737Z\",\\\"upgradCoins\":500,\"registrarId\":\"x509::/C=US/ST=California/L=San Francisco/OU=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\\\",\\\"status\":\"Approved\"}"
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.users:propertyRegistrationRequest","001","200","Manikandan","1231231231231231"]}' 2020-05-17 21:52:37.897 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\\"propertyId\":\"001\",\\\"owner\":\"Manikandan-1231231231231231\",\\\"price\":\"200\",\\\"createdAt\":\"2020-05-17T21:52:37.875Z\",\\\"updatedAt\":\"2020-05-17T21:52:37.875Z\"}"
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.users:viewProperty","001"]}' 2020-05-17 21:52:37.897 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\\"propertyId\":\"001\",\\\"owner\":\"Manikandan-1231231231231231\",\\\"price\":\"200\",\\\"createdAt\":\"2020-05-17T21:52:37.875Z\",\\\"updatedAt\":\"2020-05-17T21:54:31.229Z\",\\\"status\":\"registered\",\\\"approvedBy\":\"x509::/C=US/ST=California/L=San Francisco/OU=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com\\\"}"
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer#
```

Terminal for Registrar:

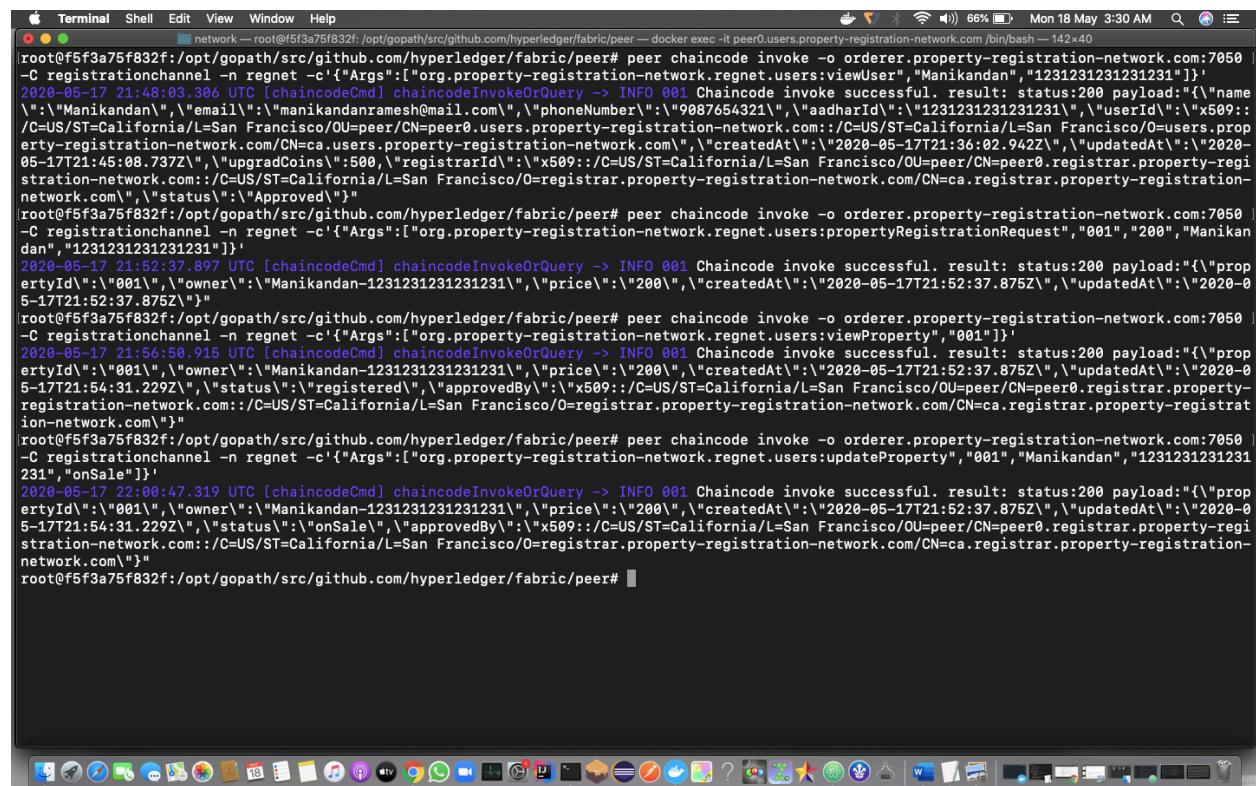
```
Terminal Shell Edit View Window Help
network — root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer — docker exec -it peer0.registrar.property-registration-network.com/bin/bash — 130x35
root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.registrar:viewUser","Manikandan","1231231231231231"]}' 2020-05-17 21:48:53.053 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\\"name\":\"Manikandan\",\\\"email\":\"manikandanramesh@mail.com\",\\\"phoneNumber\":\"9087654321\",\\\"aadharId\":\"1231231231231231\",\\\"userId\":\"x509::/C=US/ST=California/L=San Francisco/OU=peer0.users.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=users.property-registration-network.com/CN=ca.users.property-registration-network.com\",\\\"createdAt\":\"2020-05-17T21:36:02.942Z\",\\\"updatedAt\":\"2020-05-17T21:38:53.034Z\",\\\"upgradCoins\":0,\"registrarId\":\"x509::/C=US/ST=California/L=San Francisco/OU=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\\\",\\\"status\":\"Approved\"}"
root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.registrar:viewUser","Manikandan","1231231231231231"]}' 2020-05-17 21:49:50.342 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\\"name\":\"Manikandan\",\\\"email\":\"manikandanramesh@mail.com\",\\\"phoneNumber\":\"9087654321\",\\\"aadharId\":\"1231231231231231\",\\\"userId\":\"x509::/C=US/ST=California/L=San Francisco/OU=peer0.users.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=users.property-registration-network.com/CN=ca.users.property-registration-network.com\",\\\"createdAt\":\"2020-05-17T21:36:02.942Z\",\\\"updatedAt\":\"2020-05-17T21:45:08.737Z\",\\\"upgradCoins\":500,\"registrarId\":\"x509::/C=US/ST=California/L=San Francisco/OU=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\\\",\\\"status\":\"Approved\"}"
root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.registrar:approvePropertyRegistration","001"]}' 2020-05-17 21:54:31.252 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\\"propertyId\":\"001\",\\\"owner\":\"Manikandan-1231231231231231\",\\\"price\":\"200\",\\\"createdAt\":\"2020-05-17T21:52:37.875Z\",\\\"updatedAt\":\"2020-05-17T21:54:31.229Z\",\\\"status\":\"registered\",\\\"approvedBy\":\"x509::/C=US/ST=California/L=San Francisco/OU=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\\\"}"
root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.registrar:viewProperty","001"]}' 2020-05-17 21:58:24.237 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\\"propertyId\":\"001\",\\\"owner\":\"Manikandan-1231231231231231\",\\\"price\":\"200\",\\\"createdAt\":\"2020-05-17T21:52:37.875Z\",\\\"updatedAt\":\"2020-05-17T21:54:31.229Z\",\\\"status\":\"registered\",\\\"approvedBy\":\"x509::/C=US/ST=California/L=San Francisco/OU=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\\\"}"
root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer#
```

Method 8: updateProperty

Commands:

1. Enter into Peer0 of users org: “**docker exec -it peer0.users.property-registration-network.com /bin/bash**”
2. Execute command: “**peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args": ["org.property-registration-network.regnet.users:updateProperty", "001", "Manikandan", "1231231231231231", "onSale"]}'**”

Terminal:



```
network -- root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer -- docker exec -it peer0.users.property-registration-network.com /bin/bash - 142x40
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args": ["org.property-registration-network.regnet.users:viewUser", "Manikandan", "1231231231231231"]}' 2020-05-17 21:48:03.306 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\\"name\":\"Manikandan\",\"email\":\"manikandanramesh@mail.com\",\"phoneNumber\":\"9887654321\",\"aadharId\":\"1231231231231231\",\"userId\":\"x509::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.users.property-registration-network.com::/C=US/ST=California/L=San Francisco/0=users.property-registration-network.com/CN=ca.users.property-registration-network.com\",\\\"createdAt\":\"2020-05-17T21:36:02.942Z\",\\\"updatedAt\":\"2020-05-17T21:45:08.787Z\",\\\"upgradCoins\":500,\"registrarId\":\"x509::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/0=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\",\\\"status\":\"Approved\"}"
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args": ["org.property-registration-network.regnet.users:propertyRegistrationRequest", "001", "200", "Manikandan", "1231231231231231"]}' 2020-05-17 21:52:37.897 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\\"propertyId\":\"001\",\"owner\":\"Manikandan-1231231231231231\",\"price\":\"200\",\"createdAt\":\"2020-05-17T21:52:37.875Z\",\\\"updatedAt\":\"2020-05-17T21:52:37.875Z\"}"
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args": ["org.property-registration-network.regnet.users:viewProperty", "001"]}' 2020-05-17 21:56:50.915 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\\"propertyId\":\"001\",\"owner\":\"Manikandan-1231231231231231\",\"price\":\"200\",\"createdAt\":\"2020-05-17T21:52:37.875Z\",\\\"updatedAt\":\"2020-05-17T21:54:31.229Z\",\\\"status\":\"registered\",\\\"approvedBy\":\"x509::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/0=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\"}"
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args": ["org.property-registration-network.regnet.users:updateProperty", "001", "Manikandan", "1231231231231231", "onSale"]}' 2020-05-17 22:00:47.319 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\\"propertyId\":\"001\",\"owner\":\"Manikandan-1231231231231231\",\"price\":\"200\",\"createdAt\":\"2020-05-17T21:52:37.875Z\",\\\"updatedAt\":\"2020-05-17T21:54:31.229Z\",\\\"status\":\"onSale\",\\\"approvedBy\":\"x509::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/0=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\"}"
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer#
```

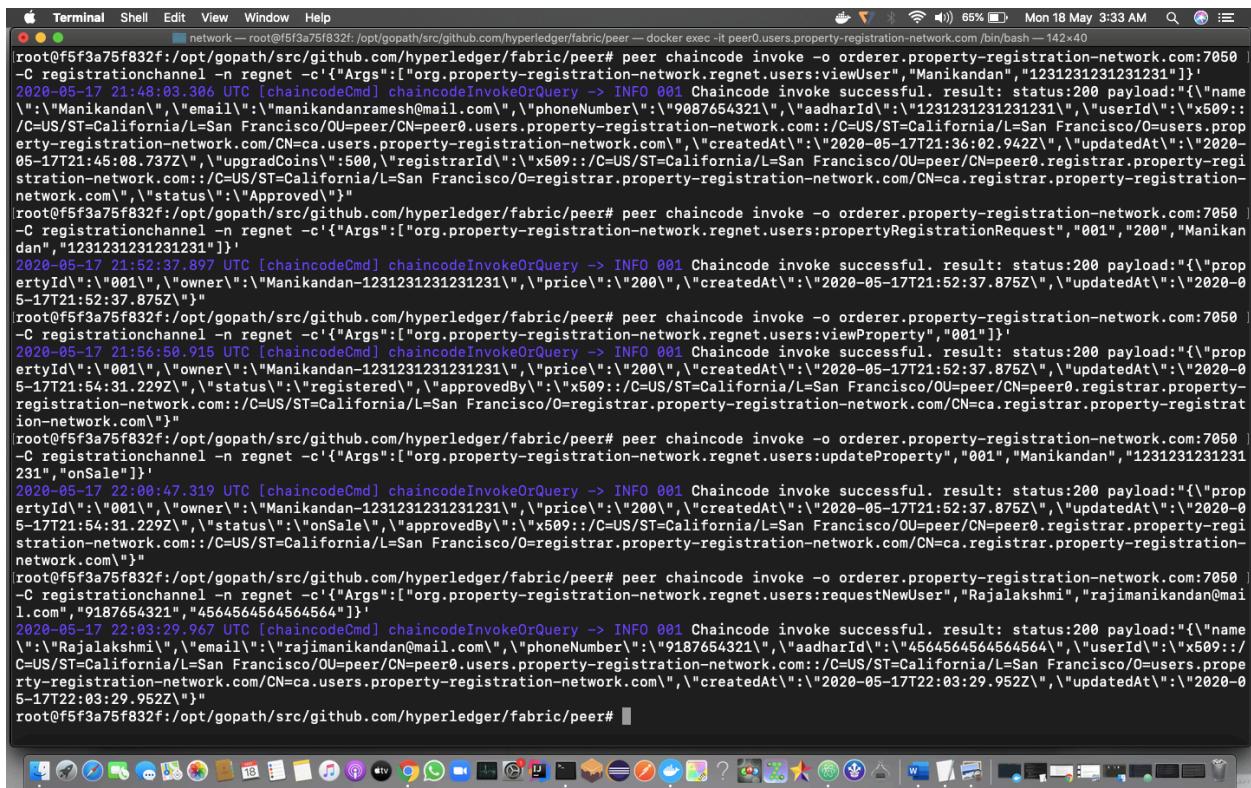
Method 9: purchaseProperty

Pre-requisite:

In order to purchase property, we need to register new user as mentioned below before proceeding with purchase of the property.

Steps to register new user (Rajalakshmi) in the network and request property purchase

1. **requestNewUser:** "peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.users:requestNewUser","Rajalakshmi","rajimanikandan@mail.com","9187654321","4564564564564564"]}'



```
Apple Terminal Shell Edit View Window Help
network — root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer — docker exec -it peer0.users.property-registration-network.com/bin/bash - 142x40
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.users:viewUser","Manikandan","1231231231231231"]}'
2020-05-17 21:48:03.306 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:>{"name ":"Manikandan","email ":"manikandanramesh@mail.com","phoneNumber ":"90887654321","aadharId ":"1231231231231231","userId ":"x509::C=US/ST=California/L=San Francisco/O=peer0.users.property-registration-network.com","createdAt ":"2020-05-17T21:45:08.737Z","upgradedCoins ":500,"registrarId ":"x509::O=US/ST=California/L=San Francisco/O=peer0.registrar.property-registration-network.com","status ":"Approved"}'
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.users:propertyRegistrationRequest","001","200","Manikan dan","1231231231231231"]}'
2020-05-17 21:52:37.897 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:>{"propertyId ":"001","owner ":"Manikandan-1231231231231231","price ":"200","createdAt ":"2020-05-17T21:52:37.875Z","updatedAt ":"2020-05-17T21:52:37.875Z"}'
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.users:viewProperty","001"]}'
2020-05-17 21:54:58.915 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:>{"propertyId ":"001","owner ":"Manikandan-1231231231231231","price ":"200","createdAt ":"2020-05-17T21:52:37.875Z","updatedAt ":"2020-05-17T21:54:31.229Z","status ":"registered","approvedBy ":"x509::O=US/ST=California/L=San Francisco/O=peer0.registrar.property-registration-network.com","caRegistrantName ":""}'
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.users:updateProperty","001","Manikandan","1231231231231231","onSale"]}'
2020-05-17 22:00:47.319 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:>{"propertyId ":"001","owner ":"Manikandan-1231231231231231","price ":"200","createdAt ":"2020-05-17T21:52:37.875Z","updatedAt ":"2020-05-17T21:54:31.229Z","status ":"onSale","approvedBy ":"x509::O=US/ST=California/L=San Francisco/O=peer0.registrar.property-registration-network.com","caRegistrantName ":""}'
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.users:requestNewUser","Rajalakshmi","rajimanikandan@mail.com","9187654321","4564564564564564"]}''
2020-05-17 22:03:29.967 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:>{"name ":"Rajalakshmi","email ":"rajimanikandan@mail.com","phoneNumber ":"9187654321","aadharId ":"4564564564564564","userId ":"x509::C=US/ST=California/L=San Francisco/O=peer0.users.property-registration-network.com","createdAt ":"2020-05-17T22:03:29.952Z","updatedAt ":"2020-05-17T22:03:29.952Z"}'
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer#
```

2. **approveNewUser:** "peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.registrar:approveNewUser","Rajalakshmi","4564564564564564"]}'"

```

Terminal Shell Edit View Window Help
network — root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer# docker exec -it peer0.registrar.property-registration-network.com /bin/bash — 130x35
", "1231231231231231" ] }

2020-05-17 21:49:50.342 UTC [chaincodeCmd] chaincodeInvokeOrQuery -> INFO 001 Chaincode invoke successful. result: status:200 payload: "{\"name\":\"Manikandan\",\"email\":\"manikandanramesh@mail.com\",\"phoneNumber\":\"987654321\",\"aadharId\":\"1231231231231231231\","userId\":\"x509::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.users.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=users.property-registration-network.com/CN=ca.users.property-registration-network.com\",\"createdAt\":\"2020-05-17T21:36:02.942Z\",\"updatedAt\":\"2020-05-17T21:45:08.737Z\",\"upgradCoins\":500,\"registrarId\":\"x509::C=US/ST=California/OU=peer/CN=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\",\"status\":\"Approved\"}"}
root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.registrar:approvePropertyRegistration","001"]}' 

2020-05-17 21:54:31.252 UTC [chaincodeCmd] chaincodeInvokeOrQuery -> INFO 001 Chaincode invoke successful. result: status:200 payload: "{\"propertyId\":\"001\",\"owner\":\"Manikandan-1231231231231231\",\"price\":\"200\",\"createdAt\":\"2020-05-17T21:52:37.875Z\","updatedAt\":\"2020-05-17T21:54:31.229Z\",\"status\":\"registered\",\"approvedBy\":\"x509::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\"}" 
root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.registrar:viewProperty","001"]}' 

2020-05-17 21:58:24.237 UTC [chaincodeCmd] chaincodeInvokeOrQuery -> INFO 001 Chaincode invoke successful. result: status:200 payload: "{\"propertyId\":\"001\",\"owner\":\"Manikandan-1231231231231231\",\"price\":\"200\",\"createdAt\":\"2020-05-17T21:52:37.875Z\","updatedAt\":\"2020-05-17T21:54:31.229Z\",\"status\":\"registered\",\"approvedBy\":\"x509::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\"}" 
root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.registrar:approveNewUser","Rajalakshmi","4564564564564564"]}' 

2020-05-17 22:04:48.040 UTC [chaincodeCmd] chaincodeInvokeOrQuery -> INFO 001 Chaincode invoke successful. result: status:200 payload: "{\"name\":\"Rajalakshmi\",\"email\":\"rajimani.kandan@gmail.com\",\"phoneNumber\":\"9187654321\",\"aadharId\":\"4564564564564564\","userId\":\"x509::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.users.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=users.property-registration-network.com/CN=ca.users.property.registration-network.com\",\"createdAt\":\"2020-05-17T22:04:29.952Z\",\"updatedAt\":\"2020-05-17T22:04:48.024Z\",\"upgradCoins\":0,\"registrarId\":\"x509::C=US/ST=California/L=San Francisco/O=peer/CN=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\",\"status\":\"Approved\"}" 
root@fd3fb7410551:/opt/gopath/src/github.com/hyperledger/fabric/peer#

```

3. rechargeAccount: “`peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.users:rechargeAccount","Rajalakshmi","4564564564564564","upg500"]}'`”

```

Terminal Shell Edit View Window Help
network — root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer — docker exec -it peer0.users.property-registration-network.com/bin/bash — 142x40
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.users:propertyRegistrationRequest","001","200","Manikan dan","1231231231231231"]}'
2020-05-17 21:52:37.897 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\\"prop ertyId\":\"001\",\"owner\":\"Manikan dan-1231231231231231\",\"price\":\"200\",\"createdAt\":\"2020-05-17T21:52:37.875Z\",\"updatedAt\":\"2020-05-17T21:52:37.875Z\"}"
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.users:viewProperty","001"]}'
2020-05-17 21:56:50.915 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\\"prop ertyId\":\"001\",\"owner\":\"Manikan dan-1231231231231231\",\"price\":\"200\",\"createdAt\":\"2020-05-17T21:52:37.875Z\",\"updatedAt\":\"2020-05-17T21:54:31.229Z\"},\"status\":\"registered\",\"approvedBy\":\"x509::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.registrar.property-registrat ion-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registrat ion-network.com\"}"
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.users:updateProperty","001","Manikan dan","1231231231231231"]}'
2020-05-17 22:00:47.319 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\\"prop ertyId\":\"001\",\"owner\":\"Manikan dan-1231231231231231\",\"price\":\"200\",\"createdAt\":\"2020-05-17T21:52:37.875Z\",\"updatedAt\":\"2020-05-17T21:54:31.229Z\"},\"status\":\"onSale\",\"approvedBy\":\"x509::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.registrar.property-registrat ion-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registrat ion-network.com\"}"
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.users:requestNewUser","Rajalakshmi","rajimanikandan@mail.com","9187654321","4564564564564564"]}'
2020-05-17 22:03:29.967 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\\"name \":\"Rajalakshmi\",\"email\":\"rajimanikandan@mail.com\",\"phoneNumber\":\"9187654321\",\"aadharId\":\"4564564564564564\",\"userId\":\"x509::/C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.users.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=users.prope rty-registration-network.com/CN=ca.users.property-registration-network.com\"},\"createdAt\":\"2020-05-17T22:03:29.952Z\",\"updatedAt\":\"2020-05-17T22:03:29.952Z\"}"
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.users:rechargeAccount","Rajalakshmi","4564564564564564","upg500"]}'
2020-05-17 22:06:08.070 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\\"name \":\"Rajalakshmi\",\"email\":\"rajimanikandan@mail.com\",\"phoneNumber\":\"9187654321\",\"aadharId\":\"4564564564564564\",\"userId\":\"x509::/C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.users.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=users.prope rty-registration-network.com/CN=ca.users.property-registration-network.com\"},\"createdAt\":\"2020-05-17T22:06:08.045Z\",\"updatedAt\":\"2020-05-17T22:06:08.045Z\"},\"upgradCoins\":500,\"registrarId\":\"x509::C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.registrar.property-registrat ion-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registrat ion-network.com\"},\"status\":\"Approved\"}"
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer#

```

4. **purchaseProperty:** "peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c'{"Args":["org.property-registration-network.regnet.users:purchaseProperty","001","Rajalakshmi","4564564564564564"]}'"

```
Terminal Shell Edit View Window Help
network — root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer — docker exec -it peer0.users.property-registration-network.com/bin/bash — 142x40
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer# peer chaincode invoke -o orderer.property-registration-network.com:7050 -C registrationchannel -n regnet -c '{"Args":["org.property-registration-network.regnet.users:purchaseProperty","001","Rajalakshmi","4564564564564564"]}'  
2020-05-17 22:08:26.356 UTC [chaincodeCmd] chaincodeInvokeOrQuery > INFO 001 Chaincode invoke successful. result: status:200 payload:"{\\"propertyId\":\"001\",\"owner\":\"Rajalakshmi-4564564564564564\",\"price\":\"200\",\"createdAt\":\"2020-05-17T21:52:37.875Z\",\"updatedAt\":\"2020-05-17T22:08:26.332Z\",\"status\":\"registered\",\"approvedBy\":\"\\x509::/C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\\\"},\\\"name\":\"Rajalakshmi\",\"email\":\"rajimanikandan@mail.com\",\"phoneNumber\":\"9187654321\",\"aadharId\":\"4564564564564564\",\"userId\":\"\\x509::/C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.users.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=users.property-registration-network.com/CN=ca.users.property-registration-network.com\\\",\\\"createdAt\":\"2020-05-17T22:08:26.332Z\\\",\\\"upgradCoins\":300,\\\"registrarId\":\"\\x509::/C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.registrar.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\\\",\\\"status\":\"Approved\\\"},\\\"name\":\"Manikandan\",\"email\":\"manikandanramesh@mail.com\",\"phoneNumber\":\"9887654321\",\"aadharId\":\"1231231231231\\\",\\\"userId\":\"\\x509::/C=US/ST=California/L=San Francisco/OU=peer/CN=peer0.users.property-registration-network.com::/C=US/ST=California/L=San Francisco/O=users.property-registration-network.com/CN=ca.users.property-registration-network.com\\\",\\\"createdAt\":\"2020-05-17T21:36:02.942Z\\\",\\\"updatedAt\":\"2020-05-17T22:08:26.332Z\\\",\\\"upgradCoins\":700,\\\"registrarId\":\"\\x509::/C=US/ST=California/L=San Francisco/OU=registrar.property-registration-network.com/CN=ca.registrar.property-registration-network.com\\\",\\\"status\":\"Approved\\\"}"  
root@f5f3a75f832f:/opt/gopath/src/github.com/hyperledger/fabric/peer#
```