Part 1 - Requirements

Project Write up –

**Program Versions -**

Truffle v5.4.21 (core: 5.4.21)

Solidity - 0.4.24 (solc-js)

Node v14.17.6

Web3.js v1.5.3

**Contract address on the Rinkeby test network (Etherscan):**

<https://rinkeby.etherscan.io/address/0x1d4396d3dfdfffb57e2ae580f175e7dfcf08759a>

Network name: 'rinkeby' Network id: 4 Block gas limit: 0x989677

Libraries Used –

1. Truffle-hd-Wallet Provider – to sign the transactions

IPFS – Was not used

**References –**

**https://www.youtube.com/watch?v=s-Cp9CYBheo**

[**https://github.com/scliff108/udacity\_SupplyChain**](https://github.com/scliff108/udacity_SupplyChain)

[**https://github.com/andistoev/udacity-blockchain-developer-nanodegree--nd1309/tree/master/project3-ethereum-supply-chain-n-data-auditing-dapp**](https://github.com/andistoev/udacity-blockchain-developer-nanodegree--nd1309/tree/master/project3-ethereum-supply-chain-n-data-auditing-dapp)

[**https://github.com/axelgalicia/blockchain-supply-chain/blob/master/project-6/test/TestSupplychain.js**](https://github.com/axelgalicia/blockchain-supply-chain/blob/master/project-6/test/TestSupplychain.js)

**Ganache Cli Mnemonic -**

ganache-cli -m "vedanta krishna blue amount human itemsong harsh scarce progress discover talent churchill"

Ganache CLI v6.12.2 (ganache-core: 2.13.2)

Available Accounts

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(0) 0x4B2CD4681429AF99608d98c83017EE3f60314E03 (100 ETH)

(1) 0x56b2D91F5bF863993D7c2F05E08A900B062f9f87 (100 ETH)

(2) 0x29271570d295d2c6821b9c236a4CC9b0aF52eAC4 (100 ETH)

(3) 0x280879d384F41D777698F76d47D2c628009A9bB7 (100 ETH)

(4) 0x7654868289a468C9A0c4353d9A2Ef8014Ac0695b (100 ETH)

(5) 0xF49FF11dcc716c4f77E711543a30700A13D92798 (100 ETH)

(6) 0x5670443ddf7901fa7D1C1CB0e0C35E9462eca946 (100 ETH)

(7) 0xfdE9cf1408E5b68A595133fBf19Ef657240A347F (100 ETH)

(8) 0xE713F7220B88923105F05fA462355AE7da234c29 (100 ETH)

(9) 0x417015aFd2Bcd389fF29225FDF5372F7A3Ca4402 (100 ETH)

Private Keys

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(0) 0x994082fa87a181583199df28f393097199edd297be8e8d059353b78a3d1a3873

(1) 0x71768b9c1ab0860ec74b41ebad1ebd977752a2125797c82cd23bb018b4942f7b

(2) 0x70838da62cc5d0b2e12809d1ddea132b1c3d18a3d022b89346dfb66358b82563

(3) 0x1501f3f3bb168aa1f3a4d8c856389efa25e24b635c711d920267d483288374d0

(4) 0x64cd6546225897850d16a662a11f0e907db4aff884ec06aed37e9430cc64b49c

(5) 0x179595e3d1d9f40512f189d8c6bc99665185a753cc3bf0be85fd1ba2c87ba938

(6) 0x5382999e52521fbf9eadd228405c1f4e0f937f9692e13bdef9ca13a6c1fd2fc1

(7) 0xeada62ee927647499d7427ff432913b8d1217b2ecd96631b1ca4704daa7b6e29

(8) 0x8e5c0383fecef08502290ee7f697abf1d04151ca7b4959bd90618e81ee240137

(9) 0xda849d7cfdcd2af0ee2181abb21efbef70af25d53130bb31865372a39aa4fe83

HD Wallet

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Mnemonic: "vedanta krishna blue amount human itemsong harsh scarce progress discover talent churchill"

Base HD Path: m/44'/60'/0'/0/{account\_index}

Gas Price

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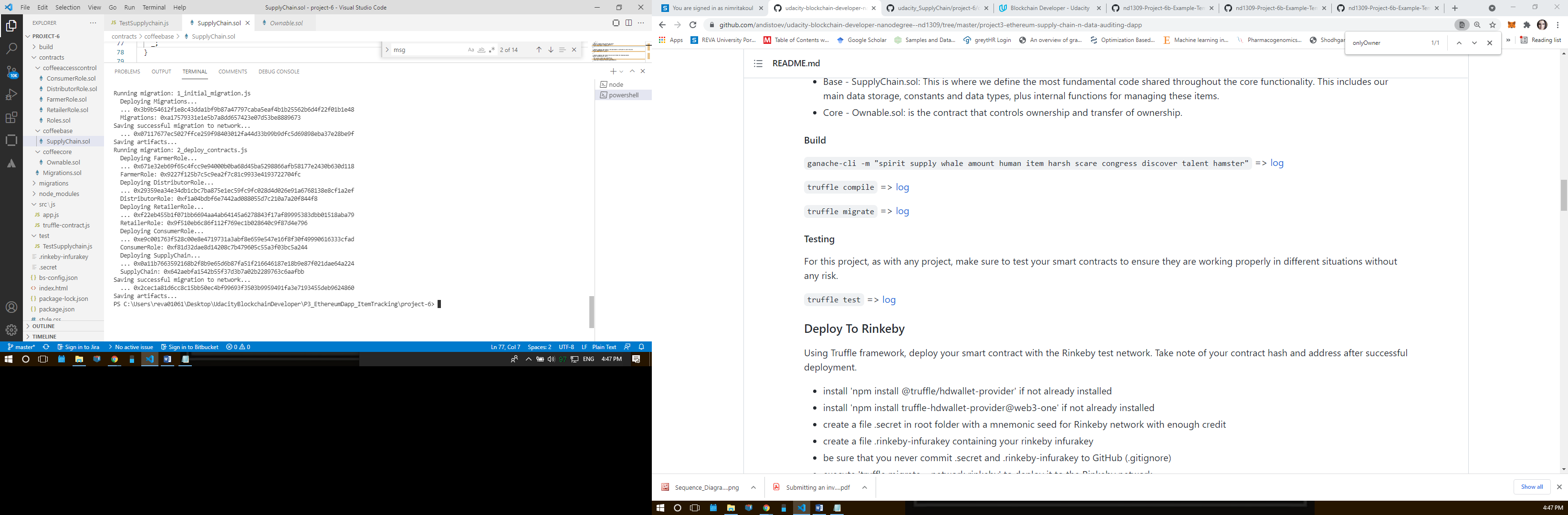
20000000000

Gas Limit

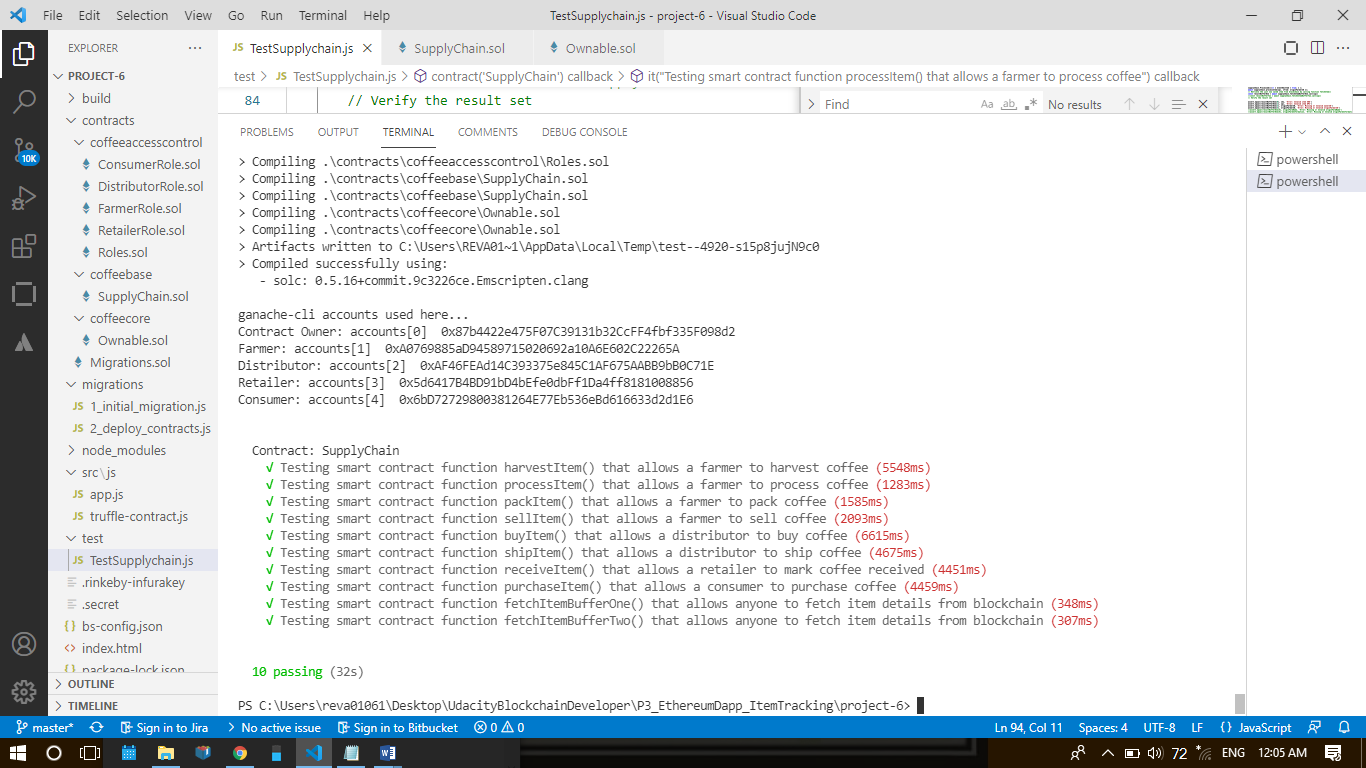
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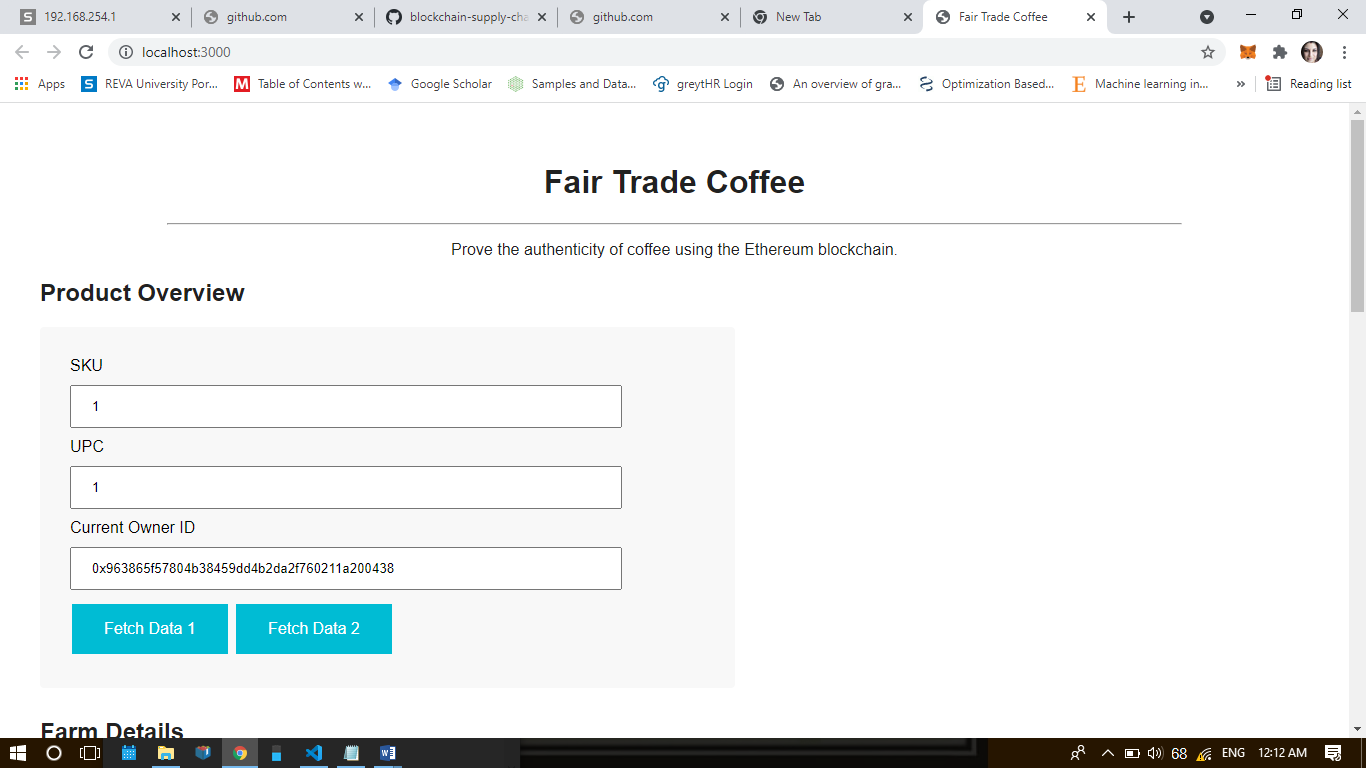
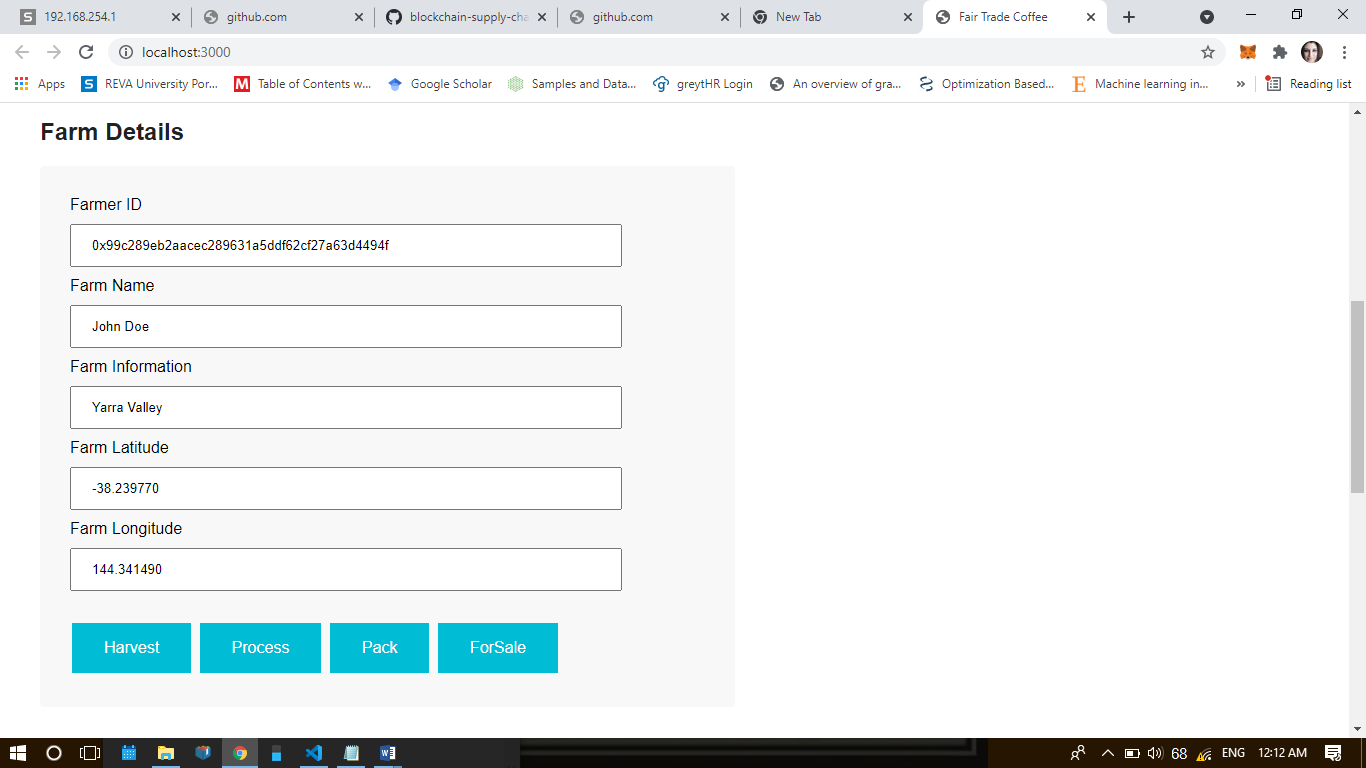
6721975

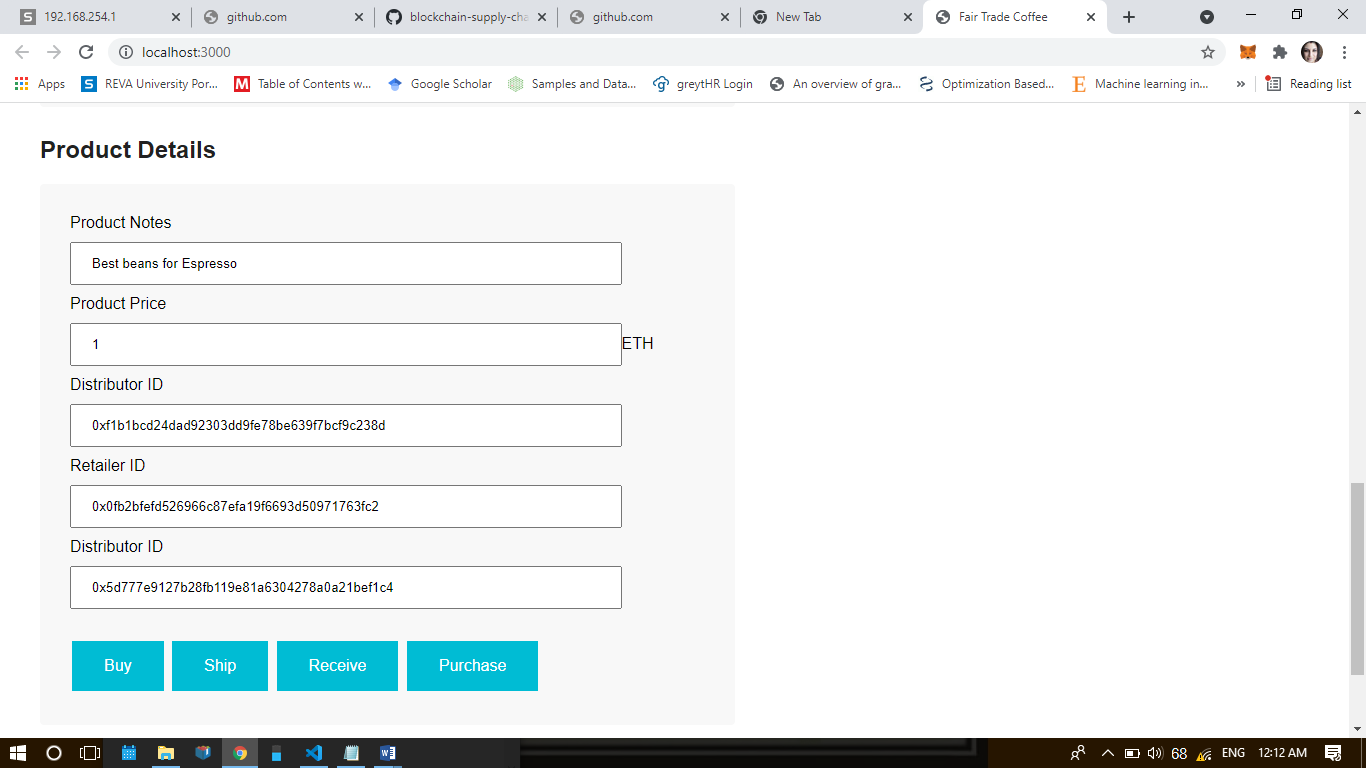
Call Gas Limit

9007199254740991

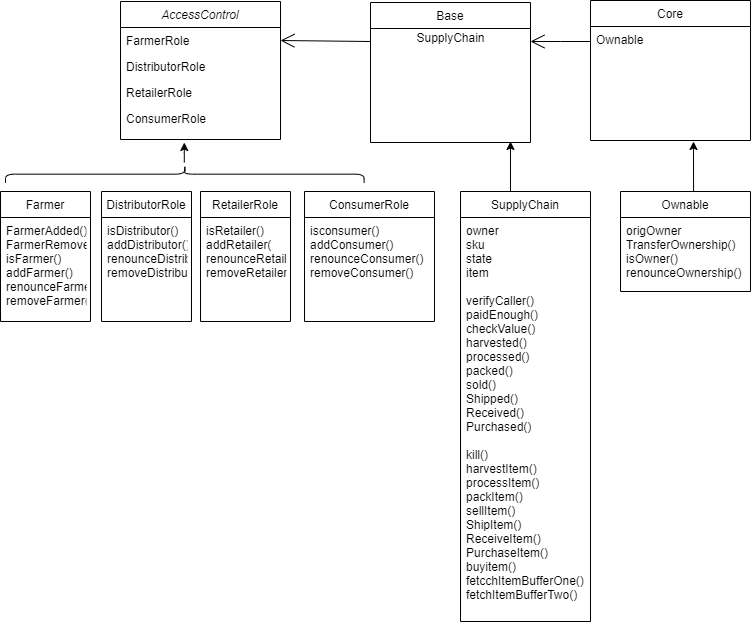
Listening on 127.0.0.1:8545



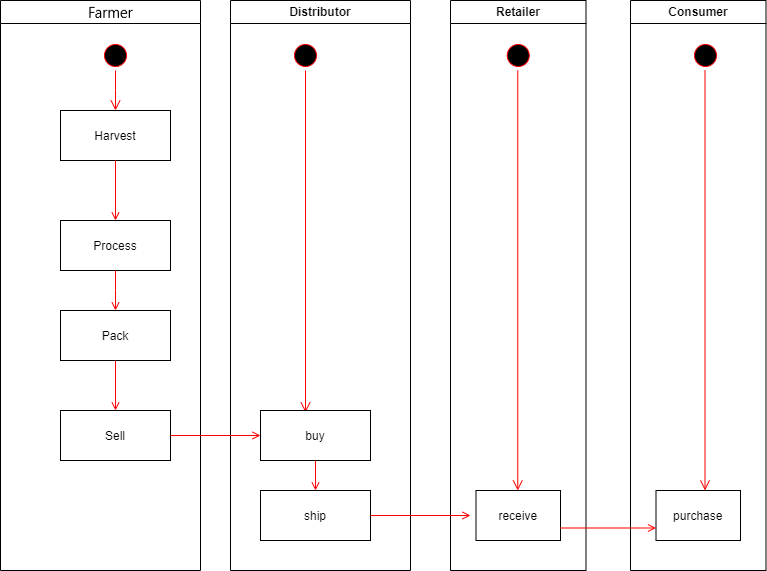




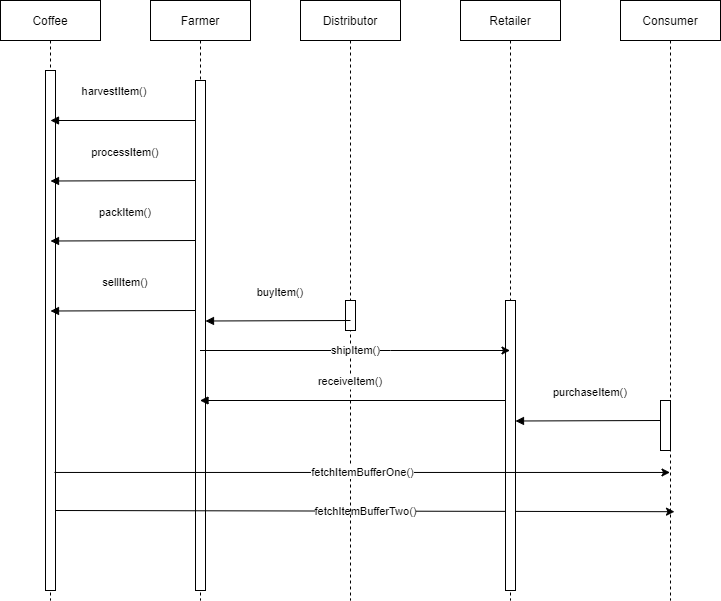
**UML Diagrams**

Class Diagram

Activity Diagram



Sequence Diagram



State Diagram

