**Software Requirments**

Install geth

Install Node

Install yarn (npm i -g yarn)

Install Metamask Chrome Extension (create 3 accounts: admin, user 1,user 2)

**All steps from here should be repeated when laptop is closed and started.**

**Blockchain Network Setup**

**Step 1**

1 – Terminal 1

For mac or linux

geth --gcmode=archive --http --http.corsdomain="\*" \

--http.api=web3,eth,debug,personal,net,miner,admin \

--allow-insecure-unlock --http.addr "0.0.0.0" --http.port 8545 \

--authrpc.port 30000 --port 33000 \

-dev

For windows

geth --gcmode=archive --http --http.corsdomain="\*" ^

--http.api=web3,eth,debug,personal,net,miner,admin ^

--allow-insecure-unlock --http.addr "0.0.0.0" --http.port 8545 ^

--authrpc.port 30000 --port 33000 ^

-dev

geth --gcmode=archive --datadir "c:/geth-data" --http --http.corsdomain="\*" --http.api=web3,eth,debug,personal,net,miner,admin --allow-insecure-unlock --http.addr "0.0.0.0" --http.port 8545 --http.vhosts "\*" --authrpc.addr "0.0.0.0" --authrpc.vhosts "\*" --authrpc.port 30000 --port 33000 --dev

**Step 2**

2 – Terminal 2

geth attach [http://localhost:8545](http://localhost:8545/)

**Step 3 – One time step (not need to repeat when laptop is restarted)**

Setup Metamask with below details – settings – netword – add manual network



**Step 4**

3 – Terminal 2 – Recharge wallets

eth.sendTransaction({from: eth.coinbase, to: "0xea1159dA3296b40fe70F10d3777f85AeeE27240A", value: web3.toWei(1000, "ether")})

**Step 5: Blockchain Contract Deploy**

* Open remix (<https://remix.ethereum.org/#lang=en&optimize=false&runs=200&evmVersion=null&version=soljson-v0.8.25+commit.b61c2a91.js>)
* Upload file to remix
* Open file
* Goto Soladity Optimizer
* Advanced Configurations
* EVM Version: Byzantium
* Enable Optimization: 200
* Turn on auto compile
* Click Deploy and run transaction
* Click ENVIROMENT on top
* In dropdown click injected provider – metamask
* Accept the request and allow admin wallet
* Click deploy & Accept the deploy request
* Goto Deployed/Unpinned Contracts
* Click Copy Button
* Goto VS Code in project folder
* Open src
* Then constants
* Open contractAddresses.ts and replace the contract address as copied in (9.f)

**Project Installation & Running**

**Step 1: Goto Vs Code**

open terminal and write `yarn`- Installation – **ONE TIME.**

same terminal `yarn run dev` - Run Project – **Every time project you want to run.**