BLOCKCHAIN ASSIGNMENT 4

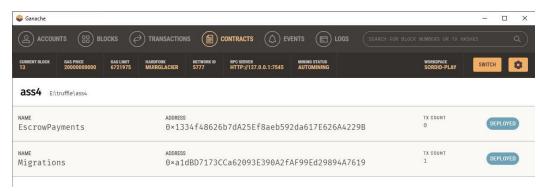
EscrowPayments Smart Contract using Truffle and Ganache

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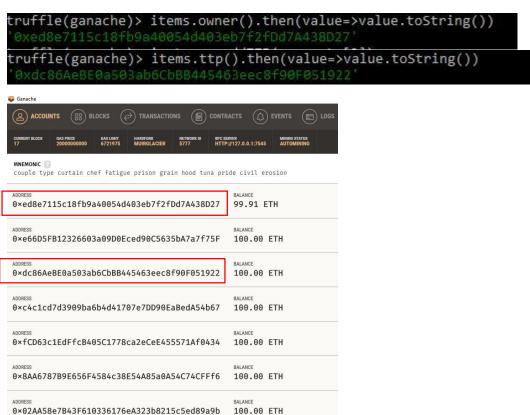
Date: 17th December 2021

Successful contract deployed using truffle with the name 'EscrowPayments'

As we can see contract is deployed on ganache (local blockchain) using truffle



Using truffle console we view the owner of our contract and the trusted third party (TTP) we have set and we can double check the account hash with ganache,



After adding items to the list stored in contract, we can view the items as shown below:

Success Scenario

Item B is bought by account[1] and we can see it is now in pending i.e awaiting confirmation from buyer of successful item reception.

Payment is deducted from buyer

```
truffle(ganache)> web3.eth.getBalance(accounts[1])
'7999873026000000000000000
```

After Item is received successfully buyer confirms and item is considered Confirm (C)

Owner can then retrieve item payment as shown below owner's account balance before and after retrieving amount

```
truffle(ganache)> web3.eth.getBalance(accounts[0])
'119868381820000000000'
truffle(ganache)> web3.eth.getBalance(accounts[0])
'998692613800000000000'
```

Dispute Scenario

If item not successfully received buyer can open a dispute as shown in below scenario.

In case of dispute, it is handled externally and then TTP will update the item status in the blockchain. In this case object needed to be returned thus status was updated to 'R' i.e return as shown below:

Since item is returned thus buyer (accounts[4]) can retrieve their amount back from using the contract as shown below in the before and after retrieving payment:

```
truffle(ganache)> web3.eth.getBalance(accounts[4])
'999968446400000000000'

truffle(ganache)> web3.eth.getBalance(accounts[4])
'69997805980000000000
```