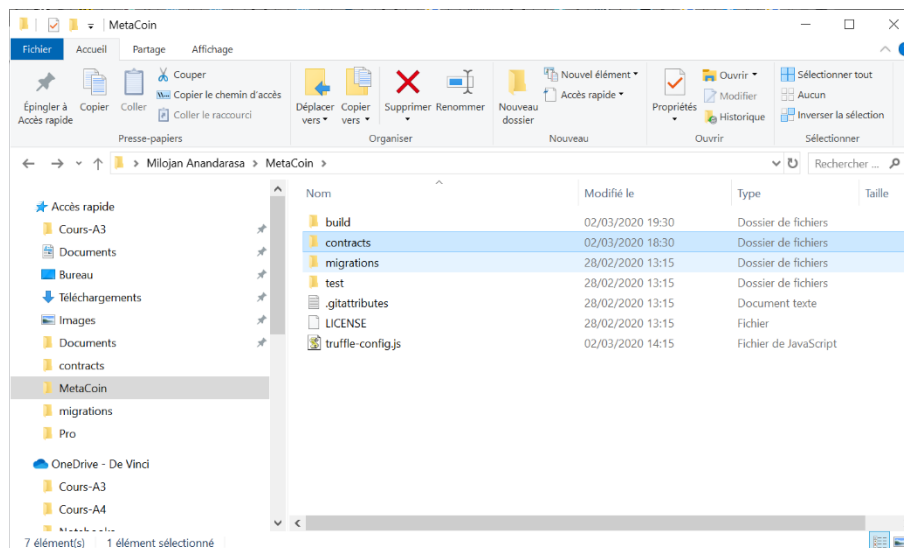


REPORT

- **Install Truffle & create a truffle project**



- **Create an ERC20 token contract**
 - Chose a ticker
 - Chose a total supply
 - Chose a decimal number

```
pragma solidity >=0.4.25 <0.7.0;  
  
contract ERC20{  
  
    string public constant _name="TD5Token";  
    string public constant _symbol="TDT";  
    uint8 public constant _decimals=8;  
    uint256 _totalSupply=100;
```

- **Implement all ERC20 functions**

Check the file: ERC20.sol

- **Create a migration to deploy your contract(s)**

- **Migrate to Ganache**

```
1_initial_migration.js
=====
Deploying 'Migrations'
> transaction hash: 0x202ee68f8665f25e9be7ff0bace323871eced8337493e3f503cab55071e66efa
> blocks: 0
> contract address: 0x596116801cc5c7E2db9c31C7a38e51874ca7F671
> block number: 18
> block timestamp: 1583173831
> account: 0x30eb53b8e169818f4037993Ad491ca6C8ED1B48
> balance: 99.90633164
> gas used: 188483
> gas price: 20 gwei
> value sent: 0 ETH
> total cost: 0.00376966 ETH

> Saving migration to chain.
> Saving artifacts
> Total cost: 0.00376966 ETH

2_deploy_contracts.js
=====
Deploying 'ERC20'
> transaction hash: 0x9513bfc5160ebdebe60bc3dfec41823b6da0ab86d338f3739c5ebec18115bda7
> blocks: 0
> contract address: 0xaD60D6dD4D35334e510B8Cc623D0f1216DAe168b
> block number: 20
> block timestamp: 1583173831
> account: 0x30eb53b8e169818f4037993Ad491ca6C8ED1B48
> balance: 99.88413646
> gas used: 1067758
> gas price: 20 gwei
> value sent: 0 ETH
> total cost: 0.02135516 ETH

> Saving migration to chain.
> Saving artifacts
> Total cost: 0.02135516 ETH

Summary
-----
> Total deployments: 2
> Final cost: 0.02512482 ETH
```

Ganache

ACCOUNTS BLOCKS TRANSACTIONS **CONTRACTS** EVENTS LOGS

SEARCH FOR BLOCK NUMBERS OR TX HASHES

CURRENT BLOCK	GAS PRICE	GAS LIMIT	HARDFORK	NETWORK ID	RPC SERVER	MINING STATUS	WORKSPACE
21	20000000000	6721975	PETERSBURG	5777	HTTP://127.0.0.1:8545	AUTOMINING	CUT-SKIN

SWITCH

MetaCoin C:\Users\Miloj\MetaCoin

NAME	ADDRESS	TX COUNT	
AirDrop	Not Deployed	0	
Distribution	Not Deployed	0	
ERC20	0xaD60D6dD4D35334e510B8Cc623D0f1216DAe168b	0	DEPLOYED
Migrations	0x596116801cc5C7E2db9c31C7a38e51874ca7F671	1	DEPLOYED
Ownable	Not Deployed	0	
Whitelist	Not Deployed	0	

Taper ici pour rechercher

19:45 02/03/2020

- **Implement customer white listing**

```
contract WhiteList is Ownable{  
    mapping(address => bool) whitelist;  
}
```

Check the file: WhiteList.sol

- **Implement multi level distribution**

```
function HowMany() public returns(uint256){  
    if(nb_client<=4)  
    {  
        amount=10;  
    }  
    if(4<nb_client && nb_client<=6)  
    {  
        amount=5;  
    }  
    if(nb_client>6)  
    {  
        amount=1;  
    }  
    return amount;  
}
```

Check the file: Distribution.sol

- Implement air drop functions

```
pragma solidity >=0.4.25 <0.7.0;

import "./Ownable.sol";
import "./ERC20.sol";
import "./Distribution.sol";
import "./WhiteList.sol";

contract AirDrop is Ownable, Distribution, ERC20, WhiteList {

    ERC20 token;

    /**
     * We decide to give our token for free :)
     * Just call this function and we check at first if you have already take our token if not
     * we send you some TD5Token.
     * Be quick! :)
     */

    function airdrop(address tokenAddress) public {
        require(balances[own] != 0);
        require(isWhitelisted(msg.sender) == false);
        uint256 amount = HowMany();
        token = ERC20(tokenAddress);
        token.transferFrom(own, msg.sender, amount);
        add(msg.sender);
        Increase();
    }
}
```