

# Blockchain Programming

*TD5*

- Créer un repo github et le partager avec le prof

OK

- Install Truffle & Create a truffle project

truffle version

```
Truffle v5.1.15 (core: 5.1.15)
Solidity - 0.4.21 (solc-js)
Node v13.6.0
Web3.js v1.2.1
```

- Create an ERC20 token contract

See files : SuperCoin.sol

- Implement all ERC20 functions

See files : SuperCoin.sol

- Create a migration to deploy your contract

```

C:\Users\Dieu\Desktop\Blockchain Programming\blockchain_programming_esilv2020_td5\SuperCoin>truffle migrate ganache

Compiling your contracts...
=====
> Compiling .\contracts\Migrations.sol
> Artifacts written to C:\Users\Dieu\Desktop\Blockchain Programming\blockchain_programming_esilv2020_td5\SuperCoin\build\contracts
> Compiled successfully using:
  - solc: 0.5.16+commit.9c3226ce.Emscripten.clang

Starting migrations...
=====
> Network name:      'ganache'
> Network id:        5777
> Block gas limit:   0x6691b7

1_initial_migration.js
=====

  Replacing 'Migrations'
  -----
  > transaction hash:  0x098a782ccd2fb0f8a69e9ec74fe3665650c4517b45d132ade4523eec98f8faef
  > Blocks: 0         Seconds: 0
  > contract address: 0x6709ee10633cC1a0A7C1eECb3c0d55Ff4A79Cdcd
  > block number:     1
  > block timestamp:   1583359069
  > account:          0x7d59A382291d829118A31cdc4699872B521d3948
  > balance:          99.99623034
  > 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

Summary
=====
> Total deployments:  1
> Final cost:         0.00376966 ETH

```

BLOCK 2	MINED ON 2020-03-04 22:57:49	GAS USED 42001	1 TRANSACTION
BLOCK 1	MINED ON 2020-03-04 22:57:49	GAS USED 188483	1 TRANSACTION
BLOCK 0	MINED ON 2020-03-04 22:27:41	GAS USED 0	NO TRANSACTIONS

- **Implement customer white listing**

See files : WhiteList.sol