

RAPPORT TD 7 - Using DeFi smart contract - Alec GUESSOUS

1. Create a truffle project and configure it on Infura

```
[(base) alecs-macbook-pro:TD7 inge$ truffle console --network rinkeby
[truffle(rinkeby)>
undefined
truffle(rinkeby)> █
```

2. Import Uniswap and Open Zeppelin libraries

```
[(base) alecs-macbook-pro:TD7 inge$ cat package.json
{
  "name": "td7",
  "version": "1.0.0",
  "description": "",
  "main": "truffle-config.js",
  "directories": {
    "test": "test"
  },
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "author": "",
  "license": "ISC",
  "dependencies": {
    "@openzeppelin/contracts": "^3.3.0",
    "@truffle/hdwallet-provider": "^1.2.0",
    "@uniswap/v2-core": "^1.0.1",
    "@uniswap/v2-periphery": "^1.1.0-beta.0"
  }
}
(base) alecs-macbook-pro:TD7 inge$ █
```

3. Claim tokens from token 0xc7Ff638Ea11817CA05533F4Ec497632cfE07eC5

The screenshot shows the Etherscan interface for a transaction on the Rinkeby Testnet. The transaction is successful and has 2 block confirmations. It was initiated by 0xa817c90b8d0faecb58b09be65a63174eb6286f56 and interacted with a contract at 0xc7ff638ea11817ca05533f4ec497632cf07ec5. The transaction transferred 0.1 TD-ERC20 (TDE) tokens. The value is 0 Ether (\$0.00), the transaction fee is 0.000035177 Ether (\$0.000000), and the gas price is 0.000000001 Ether (1 Gwei).

Transaction Hash:	0x5f30542dd4c5cb7fc01cce268ccc7456c45974b0305e7a79aac68ec6a4150ecd
Status:	Success
Block:	7690653 2 Block Confirmations
Timestamp:	34 secs ago (Dec-09-2020 05:00:30 PM +UTC)
From:	0xa817c90b8d0faecb58b09be65a63174eb6286f56
Interacted With (To):	Contract 0xc7ff638ea11817ca05533f4ec497632cf07ec5
Tokens Transferred:	From 0x0000000000000000... To 0xa817c90b8d0faec... For 0.1 TD-ERC20 (TDE)
Value:	0 Ether (\$0.00)
Transaction Fee:	0.000035177 Ether (\$0.000000)
Gas Price:	0.000000001 Ether (1 Gwei)

4. Buy token 0xc7Ff638Ea11817CA05533F4Ec497632cfE07eC5 on Uniswap

The screenshot shows the Etherscan interface for a transaction on the Rinkeby Testnet. The transaction is successful and has 59 block confirmations. It was initiated by 0xa817c90b8d0faecb58b09be65a63174eb6286f56 and interacted with a contract at 0x7a250d5630b4cf539739df2c5dacb4c659f2488d. The transaction transferred 0.00018908575540273 Ether (\$0.00) and 0.0002 TD-ERC20 (TDE) tokens. The value is 0.00018908575540273 Ether (\$0.00), the transaction fee is 0.00013246 Ether (\$0.000000), and the gas price is 0.000000001 Ether (1 Gwei).

Transaction Hash:	0x43d4c59c798f4812e688f522cc31d268f04b1da566703c36f4416d2cf0749a21
Status:	Success
Block:	7690382 59 Block Confirmations
Timestamp:	14 mins ago (Dec-09-2020 03:52:20 PM +UTC)
From:	0xa817c90b8d0faecb58b09be65a63174eb6286f56
To:	Contract 0x7a250d5630b4cf539739df2c5dacb4c659f2488d
Tokens Transferred:	From 0x7a250d5630b4cf... To 0x0802df6d9e27f2b... For 0.00018908575540273 Wrapped Ethe... (WETH) From 0x0802df6d9e27f2b... To 0xa817c90b8d0faec... For 0.0002 TD-ERC20 (TDE)
Value:	0.00018908575540273 Ether (\$0.00)
Transaction Fee:	0.00013246 Ether (\$0.000000)
Gas Price:	0.000000001 Ether (1 Gwei)

5. Provide liquidity to token 0xc7Ff638Ea11817CA05533F4Ec497632cfE07eC5

The screenshot shows the Etherscan interface for a transaction on the Rinkeby Testnet. The transaction is successful and has 4 block confirmations. The transaction hash is 0x5820e46431d045a7e08007a80fde924f15faa508f8c66708cfe9bf7a84b9ae1. The transaction was sent from 0xa817c90b8d0faecb58b09be65a63174eb8286f56 to the contract 0xc7ff638ea11817ca05533f4ec497632cfe07ec5. The value sent was 0 Ether (\$0.00). The transaction fee was 0.000025286 Ether (\$0.000000) and the gas price was 0.000000001 Ether (1 Gwei).

Transaction Details

Overview Logs (1) State

[This is a Rinkeby Testnet transaction only]

Transaction Hash: 0x5820e46431d045a7e08007a80fde924f15faa508f8c66708cfe9bf7a84b9ae1

Status: Success

Block: 7690530 4 Block Confirmations

Timestamp: 50 secs ago (Dec-09-2020 04:29:33 PM +UTC)

From: 0xa817c90b8d0faecb58b09be65a63174eb8286f56

To: Contract 0xc7ff638ea11817ca05533f4ec497632cfe07ec5

Value: 0 Ether (\$0.00)

Transaction Fee: 0.000025286 Ether (\$0.000000)

Gas Price: 0.000000001 Ether (1 Gwei)

[Click to see More](#)

6. Deploy an ERC20 Token 0xff2996A6aFBc808F3B26d968B11b0d62004006F2

```
Starting migrations...
=====
> Network name: 'rinkeby'
> Network id: 4
> Block gas limit: 10000000 (0x989680)

2_deploy_contract.js
=====

Replacing 'ERC20TD'
-----
> transaction hash: 0x0764bc854f8393c49f4a0abcb67e10f698acd89b67324c2b374c68b5ddd1697e
> Blocks: 0 Seconds: 8
> contract address: 0xff2996A6aFBc808F3B26d968B11b0d62004006F2
> block number: 7691355
> block timestamp: 1607543822
> account: 0xA817c90B8d0FaeCB58B09be65a63174EB6286F56
> balance: 0.923841415969611668
> gas used: 1216193 (0x128ec1)
> gas price: 20 gwei
> value sent: 0 ETH
> total cost: 0.02432386 ETH

> Saving artifacts
-----
> Total cost: 0.02432386 ETH

Summary
=====
> Total deployments: 1
> Final cost: 0.02432386 ETH
```

Etherscan

All Filters
Search by Address / Txn Hash / Block / Token / Ens
Rinkeby

Rinkeby Testnet Network
Home
Blockchain
Tokens
Misc

Transaction Details

Overview
Logs (1)
State

[This is a Rinkeby Testnet transaction only]

Transaction Hash:	0x0764bc854f8393c49f4a0abcb67e10f698acd89b67324c2b374c68b5ddd1697e
Status:	Success
Block:	7691355 35 Block Confirmations
Timestamp:	8 mins ago (Dec-09-2020 07:57:02 PM +UTC)
From:	0xa817c90b8d0faecb58b09be65a63174eb6286f56
Interacted With (To):	[Contract 0xff2996a6a1bc808f3b26d968b11b0d62004006f2 Created]
Tokens Transferred:	From 0x0000000000000000... To 0xa817c90b8d0faec... For 1 TD-ERC20 (TDE)
Value:	0 Ether (\$0.00)
Transaction Fee:	0.02432386 Ether (\$0.000000)
Gas Price:	0.00000002 Ether (20 Gwei)

[Click to see More](#)

7. Create a liquidity pool for your token

0xff2996A6aFBc808F3B26d968B11b0d62004006F2

Transaction Details

Overview
Internal Txns
Logs (9)
State

[This is a Rinkeby Testnet transaction only]

Transaction Hash:	0x9dc41640c1b9fd0b3c2a0c8b1cfc68374694656fb30e041f2107ada6c1d01fc4
Status:	Success
Block:	7691378 4 Block Confirmations
Timestamp:	1 min ago (Dec-09-2020 08:02:49 PM +UTC)
From:	0xa817c90b8d0faecb58b09be65a63174eb6286f56
To:	Contract 0x7a250d5630b4cf539739df2c5daccb4c659f2488d L TRANSFER 0.5 Ether From 0x7a250d5630b4cf539739df2... To → 0xc778417e063141139fce01...
Tokens Transferred:	<ul style="list-style-type: none"> From 0xa817c90b8d0faec... To 0xe06c1445ea487c... For 0.5 TD-ERC20 (TDE) From 0x7a250d5630b4cf... To 0xe06c1445ea487c... For 0.5 Wrapped Ethe... (WETH) From 0x0000000000000000... To 0x0000000000000000... For 0.0000000000000001 Uniswap V2 (UNI-V2) From 0x0000000000000000... To 0xa817c90b8d0faec... For 0.4999999999999999 Uniswap V2 (UNI-V2)
Value:	0.5 Ether (\$0.00)
Transaction Fee:	0.002706607 Ether (\$0.000000)
Gas Price:	0.000000001 Ether (1 Gwei)

[Click to see More](#)

ETH/TDE
Manage

Your total pool tokens: 0.4999

Pooled ETH: 0.499999

Pooled TDE: 0.499999

Your pool share: 100.00%

[View accrued fees and analytics](#)

Add Remove

Don't see a pool you joined? [Import it.](#)