

Assure DeFi[®]

THE VERIFICATION **GOLD STANDARD**



Security Assessment

TEKNICAi



Date: 23/05/2024

Audit Status: FAILED

Audit Edition: Advanced



ASSURE DEFI[®]
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Risk Analysis

Vulnerability summary

Classification	Description
 High	High-level vulnerabilities can result in the loss of assets or manipulation of data.
 Medium	Medium-level vulnerabilities can be challenging to exploit, but they still have a considerable impact on smart contract execution, such as allowing public access to critical functions.
 Low	Low-level vulnerabilities are primarily associated with outdated or unused code snippets that generally do not significantly impact execution, sometimes they can be ignored.
 Informational	Informational vulnerabilities, code style violations, and informational statements do not affect smart contract execution and can typically be disregarded.

Executive Summary

According to the Assure assessment, the Customer's smart contract is **Poorly Secured**.



Scope

Target Code And Revision

For this audit, we performed research, investigation, and review of the TEKNICAi contracts followed by issue reporting, along with mitigation and remediation instructions outlined in this report.

Target Code And Revision

Project	Assure
Language	Solidity
Codebase	TEKNICAi ERC-20 Contract.sol - [SHA256] 961d059ea8f4c03f021acac0c65d5ba2330fa5b6ed69554a844545aeb9af9bf7
Audit Methodology	Static, Manual

Attacks made to the contract

In order to check for the security of the contract, we tested several attacks in order to make sure that the contract is secure and follows best practices.

Category	Item
Code review & Functional Review	<ul style="list-style-type: none">• Compiler warnings.• Race conditions and Reentrancy. Cross-function race conditions.• Possible delays in data delivery.• Oracle calls.• Front running.• Timestamp dependence.• Integer Overflow and Underflow.• DoS with Revert.• DoS with block gas limit.• Methods execution permissions.• Economy model.• Private user data leaks.• Malicious Event log.• Scoping and Declarations.• Uninitialized storage pointers.• Arithmetic accuracy.• Design Logic.• Cross-function race conditions.• Safe Zeppelin module.• Fallback function security.• Overpowered functions / Owner privileges

AUDIT OVERVIEW



Contract: TEKNICAi ERC-20 Contract.sol

Function: swapAndLiquify()

Issue: The calls to `marketingWallet.call{}` and `developmentWallet.call{}` are not checked, which could lead to a loss of funds if the call fails.

Solution: Implement a `require()` statement to verify the success of the call by checking the boolean sent.



No medium severity issues were found.



No low severity issues were found.



Contract: TEKNICAi ERC-20 Contract.sol

Function: `excludeFromFees()`

Issue: Typographical error in the function name.

Solution: Correct the function name from `exlcudeFromFees` to `excludeFromFees`.

Testing coverage

During the testing phase, custom use cases were written to cover all the logic of contracts. *Check “Annexes” to see the testing code.

Testing TEKNICAI contract:

```
tests/test_token.py::test_update_max_tx_amount RUNNING
Transaction sent: 0x5547db6d602ba33595929a9a53e6e78aa818afc4393be739541208f4dc897027
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 0
WETH9.constructor confirmed Block: 1 Gas used: 476546 (3.97%)
WETH9 deployed at: 0x3194cBDC3dbcd3E11a07892e7bA5c3394048Cc87

Transaction sent: 0x7bae2624e4397b7e8bf657828e1e07435f469ad759872b75091dcfb92e64b42d
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 1
UniswapV2Factory.constructor confirmed Block: 2 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0x602C71e4DAC47a042Ee7f46E0aee17F94A3bA0B6

Transaction sent: 0xfe6097b03e1a1a43331440c45f0d3c463a215b9ce3bb912ceff4521bea2b5fc7
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 2
UniswapV2Router02.constructor confirmed Block: 3 Gas used: 3895430 (32.46%)
UniswapV2Router02 deployed at: 0xE7eD6747FaC5360f88a2EFC03E00d25789F69291

Transaction sent: 0x998d01b0d8c310f9198f212755175b83e94bd0fb8dec539c1a8c39479844881c
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 3
Token.constructor confirmed Block: 4 Gas used: 4529723 (37.75%)
Token deployed at: 0x6951b5Bd815043E3F842c1b026b0Fa888Cc2DD85

Transaction sent: 0x3ca115a5db9d3994941187194c1079807988bf386db68b28508bdcdb7b5fdf8d
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 0
Token.updateMaxTxAmount confirmed (Ownable: caller is not the owner) Block: 5 Gas used: 22489 (0.19%)

Transaction sent: 0xf452ef1c134f7c542c7274b6ba27927d23292106c0c9cfe0be7b008574127a8d
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 4
Token.updateMaxTxAmount confirmed (reverted) Block: 6 Gas used: 22455 (0.19%)

Transaction sent: 0xf839c53e0c7854b2c81ae6915dc60c2c27bec657b7cfd9f815e08fd2841616ee
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 5
Token.updateMaxTxAmount confirmed Block: 7 Gas used: 28406 (0.24%)

tests/test_token.py::test_update_max_tx_amount PASSED
tests/test_token.py::test_update_max_wallet_amount RUNNING
Transaction sent: 0x56c2541f92aa306f1209baae3a840ab2c1dffc89c2598d908a5bfac69cac914d
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 6
WETH9.constructor confirmed Block: 8 Gas used: 476546 (3.97%)
WETH9 deployed at: 0x9E4c14403d7d9A8A782044E86a93CAE09D7B2ac9

Transaction sent: 0xa631e8c29bda874e2ef287747e0dbfa547eebc9b053b4c979fc4a8e4d57ae00e
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 7
UniswapV2Factory.constructor confirmed Block: 9 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0xcB53c9429d32594F404d01f9e9E65ED1DCda8D9

Transaction sent: 0x821ffffde57cb491817defa1b492304e3c45333d9e2fa1312b7e048819f82c405
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 8
UniswapV2Router02.constructor confirmed Block: 10 Gas used: 3895430 (32.46%)
UniswapV2Router02 deployed at: 0x420b1099B9eF5baba6D92029594eF45E19A04A4A

Transaction sent: 0xfcac859a7e7d992f7911d0d64ff103908f329b548204c1ec417b4bfa805636d0
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 9
Token.constructor confirmed Block: 11 Gas used: 4529735 (37.75%)
Token deployed at: 0xa3B53dDCd2E3fC28e8E130288F2aBD8d5EE37472

Transaction sent: 0x7673d265595900a2117f07d65233717e67be6c4e719ea7cbe9202972001a6124
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 1
Token.updateMaxWalletAmount confirmed (Ownable: caller is not the owner) Block: 12 Gas used: 22422 (0.19%)

Transaction sent: 0x96cbcab595f8407f97f1d2cc754f604488d1455f8397a64c0b40e2ffcb64486e
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 10
Token.updateMaxWalletAmount confirmed (reverted) Block: 13 Gas used: 22388 (0.19%)

Transaction sent: 0xfca80a4fd9bf7f27c93389bf3602a2c62dfe0e3efef6af37fa303545c262d52bb
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 11
Token.updateMaxWalletAmount confirmed Block: 14 Gas used: 28339 (0.24%)

tests/test_token.py::test_update_max_wallet_amount PASSED
```

```
tests/test_token.py::test_exclude_from_fees RUNNING
Transaction sent: 0x245e15b53adc2f3c22cd4f9070e200886fced164d8648a6d5b0935eaeafb2f845
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 12
WETH9.constructor confirmed Block: 15 Gas used: 476546 (3.97%)
WETH9 deployed at: 0x2c15A3156108fa5248E4CbCbd693320e9D8E03Cc

Transaction sent: 0xb04371b84b89d55c174637daa0b3d2c9a644c08295f9716c6d24bbcc929bf553
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 13
UniswapV2Factory.constructor confirmed Block: 16 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0xe692Cf21B12e0B2717C4bF647F9768Fa58861c8b

Transaction sent: 0x15492ca0a86b385d7018462c011436f1ed1baaabe57e89a7f3d12da9c2cda6ee
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 14
UniswapV2Router02.constructor confirmed Block: 17 Gas used: 3895430 (32.46%)
UniswapV2Router02 deployed at: 0xe65A7a341978d59d40d30FC23F5014FACB4f575A

Transaction sent: 0x0ea914626f44a3104c6a7bf14c196e3c93f4d3c899c2ea40f22c7c0972388b32
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 15
Token.constructor confirmed Block: 18 Gas used: 4529735 (37.75%)
Token deployed at: 0x30375B532345B01cB8c2AD12541b09E9Aa53A93d

Transaction sent: 0x9d73e78deb8d8a979a7685523fa9e04385f82f2769c4c4fa9b732a847c4db7cb
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 2
Token.excludeFromFees confirmed (Ownable: caller is not the owner) Block: 19 Gas used: 23000 (0.19%)

Transaction sent: 0x343c3409dc46b653196762f408011e46a2b4679d630984e94d5b6d103a3189da
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 16
Token.excludeFromFees confirmed Block: 20 Gas used: 44765 (0.37%)

Transaction sent: 0xecfd013273ce0eb06e757d54650c400d4bc3d5a5ea3cf23b7e211c3bc455152a
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 17
Token.excludeFromFees confirmed (reverted) Block: 21 Gas used: 23874 (0.20%)

Transaction sent: 0xd977bd8819e59f3dadf44a657ca28c272cea7b0779b8010839a9541963e28e8f
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 18
Token.excludeFromFees confirmed Block: 22 Gas used: 14877 (0.12%)

tests/test_token.py::test_exclude_from_fees PASSED
tests/test_token.py::test_update_buy_tax RUNNING
Transaction sent: 0x8eeef26a875d0b720aad785a8bdcd281321c69cc6670524944e71d22efdb675c
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 19
WETH9.constructor confirmed Block: 23 Gas used: 476546 (3.97%)
WETH9 deployed at: 0xDae02e4fE488952cFB8c95177154D188647a0146

Transaction sent: 0x31d9df08dbddd497871c1c02e3700ba776af151abee48d1ed13d95fabf7b718a
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 20
UniswapV2Factory.constructor confirmed Block: 24 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0xdCF93F11ef216cEC9C07fd31dD801c9b2b39Afb4

Transaction sent: 0x8f830ed8f07da52412cbe3a0112e21a440ac8eee3d6cdadc45bb88df9e5df2de
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 21
UniswapV2Router02.constructor confirmed Block: 25 Gas used: 3895430 (32.46%)
UniswapV2Router02 deployed at: 0xBcb61491F1859f53438918F1A5aFCA542Af9D397

Transaction sent: 0xc6a2e1b2c948975cf92ea56dd37ba176e4ed7f3315ca5fc2c88b62928921490c
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 22
Token.constructor confirmed Block: 26 Gas used: 4529725 (37.75%)
Token deployed at: 0xD22363efee93190f82b52FCD62B7Dbcb920eF658

Transaction sent: 0x234c0d9ccf3dba00ac6d1f4bd64a245a615dce6cd0973af39a4606a92f3a668a
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 3
Token.updateSellTax confirmed (Ownable: caller is not the owner) Block: 27 Gas used: 22763 (0.19%)

Transaction sent: 0x9ce877edbee05338d3dec5cb54ee67aa478f350e5f98416db1892746114742fe
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 23
Token.updateSellTax confirmed Block: 28 Gas used: 22841 (0.19%)

Transaction sent: 0xd28c7bcecc064b43475b6121160b1afa8109df7270c9adbbcb52f286f2280d5f
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 24
Token.updateSellTax confirmed Block: 29 Gas used: 34624 (0.29%)

tests/test_token.py::test_update_buy_tax PASSED
```



```
tests/test_token.py::test_update_transfer_tax RUNNING
Transaction sent: 0xb4f0eb925f6414d222fc71632977401ba96cb12dfe72f3ba33392f201d77f49d
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 25
WETH9.constructor confirmed Block: 30 Gas used: 476546 (3.97%)
WETH9 deployed at: 0x654f70d8442EA18904FA1AD79114f7250F7E9336

Transaction sent: 0x2a99cf2a63cb15631203dc34b8210fe6aaddfc4f63edb252c7fc3b099883c125
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 26
UniswapV2Factory.constructor confirmed Block: 31 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0xADeD61D42dE86f9058386D1D0d739d20C7eAfC43

Transaction sent: 0xe8458668f2772f232118d6c4ea5a841852067cb0ce919a8a8a28d600ca006ace
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 27
UniswapV2Router02.constructor confirmed Block: 32 Gas used: 3895430 (32.46%)
UniswapV2Router02 deployed at: 0x832698Daec363C9A7aB036C224Af5B21280b3AC6

Transaction sent: 0x046d7595b333189791e8accebf9a7026819fb376c2b9db3fe5e07e76ff144ae6
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 28
Token.constructor confirmed Block: 33 Gas used: 4529735 (37.75%)
Token deployed at: 0xA95916C3D979400C7443961330b3092510a229Ba

Transaction sent: 0x8d2e38b9f180f085a2609b69cc3798f7e23d7c07c09e00252c527202fac2c2c1
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 4
Token.updateTransferTax confirmed (Ownable: caller is not the owner) Block: 34 Gas used: 22783 (0.19%)

Transaction sent: 0xd315977787067c84e20560bea21623f210ff661ea21c4ce0a62b75a6923148d1
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 29
Token.updateTransferTax confirmed Block: 35 Gas used: 22861 (0.19%)

Transaction sent: 0xc576f19a924c32948bb3136ad206924e5226f5c15e41254861779890f838e17b
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 30
Token.updateTransferTax confirmed Block: 36 Gas used: 34643 (0.29%)

tests/test_token.py::test_update_transfer_tax PASSED
tests/test_token.py::test_update_wallets RUNNING
Transaction sent: 0x9c926fa0967078f77d561b73c26da6fee2b96787a4657080270082726385932c
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 31
WETH9.constructor confirmed Block: 37 Gas used: 476546 (3.97%)
WETH9 deployed at: 0x82c83b7f88aef2eD99d4869D547b6ED28e69C8df

Transaction sent: 0xd7f058d8a133c1d4aac27e15eeb0c53821c41b809c5625189bfe19399e894959
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 32
UniswapV2Factory.constructor confirmed Block: 38 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0x724Ca58E1e6e64BFB1E15d7Eec0fe1E5f581c7bD

Transaction sent: 0xb520f3621dd6c078e7d655695bf329616f2f1b437e8c3c2d766b32430d766bfd
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 33
UniswapV2Router02.constructor confirmed Block: 39 Gas used: 3895430 (32.46%)
UniswapV2Router02 deployed at: 0x34b97ffa01dc0DC959c5f1176273D0de3be914C1

Transaction sent: 0xc4d9496bc6396207aaf907e49839294bff4fc2e8fdffbba00ca4353d11e2b0e48
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 34
Token.constructor confirmed Block: 40 Gas used: 4529735 (37.75%)
Token deployed at: 0xc830Ad2FDfCC2f368fE5DeC93b1Dc72ecABb3691

Transaction sent: 0xb11302e1092679b3f4b0b90c44db9bfc1cd7d14a0f6daba81573fdbd781807b0
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 5
Token.updateWallets confirmed (Ownable: caller is not the owner) Block: 41 Gas used: 23719 (0.20%)

Transaction sent: 0x1714546dc5d6fb0ff29454153dc0ee1d836cbb69b6d5c9fbea8700e31beb0de9
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 35
Token.updateWallets confirmed (reverted) Block: 42 Gas used: 23515 (0.20%)

Transaction sent: 0x1f607c7ae14c00f13232434506680aa433175ea6c2b7c46b58a7cab0ec65af8e
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 36
Token.updateWallets confirmed Block: 43 Gas used: 41240 (0.34%)

tests/test_token.py::test_update_wallets PASSED
```

tests/test_token.py::test_transfer **RUNNING**

Transaction sent: **0x32c6f627f16346b7a0ca7b314c560df8da1e834b3ee9bf04cf68468eac7018a7**

Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **37**

WETH9.constructor confirmed Block: **44** Gas used: **476546** (3.97%)

WETH9 deployed at: **0x4B0FccF53589c1F185B35db88bB315a0bBF9a3e0**

Transaction sent: **0x7dc2a993603b22a48e8d1af2b5b50d4e34873a68bfea8e1cec497b8b0711bcc0**

Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **38**

UniswapV2Factory.constructor confirmed Block: **45** Gas used: **2412730** (20.11%)

UniswapV2Factory deployed at: **0xFE0F4Cf81B5c0a6Fd65a610FD9488F33aE9095cB**

Transaction sent: **0x715f753bbfca31e8d4a869d3f7a0fa73abd556d51e815e1cdd0196b5dcb9bfed**

Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **39**

UniswapV2Router02.constructor confirmed Block: **46** Gas used: **3895430** (32.46%)

UniswapV2Router02 deployed at: **0x4e3E7dC9D84dA7BE8f017f4C36153A61341736d4**

Transaction sent: **0x85a8e3ac795d64ed3ca8d08276b19da471b4af8cb99f1ad913cbe158459f652e**

Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **40**

Token.constructor confirmed Block: **47** Gas used: **4529725** (37.75%)

Token deployed at: **0x0AC45e945A008D3fc19da8f591be8601C1F63130**

Transaction sent: **0x522ed908e855434dc857d209b9c532994a73e4dd66ae526b81041b72134c44f9**

Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **41**

Token.transfer confirmed Block: **48** Gas used: **53729** (0.45%)

Transaction sent: **0x25b4951ad53bd3011da3979b61c965118b77889de436e275e0fd578f54e5be1a**

Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **6**

Token.transfer confirmed (**reverted**) Block: **49** Gas used: **24761** (0.21%)

Transaction sent: **0xf115e6f1fd801b8ebc6f5b06f61e89d1368182d19c4258ab994195720e0fa0d8**

Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **7**

Token.enableTrading confirmed (**Ownable: caller is not the owner**) Block: **50** Gas used: **22218** (0.19%)

Transaction sent: **0x63bfa604f7969930a6800c6bf600946f20de0a68f61d20bfdbd0376346c6c963**

Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **42**

Token.enableTrading confirmed Block: **51** Gas used: **48783** (0.41%)

Transaction sent: **0x457bd6a9d859187b00e1e4f3a6f83a98185d7cf323f6b447d0f95f3a04737670**

Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **43**

Token.enableTrading confirmed (**reverted**) Block: **52** Gas used: **22995** (0.19%)

Transaction sent: **0x63777acbc16b281159020257abdf71207ec623cf4572b13aaf9bf954cf7b7247**

Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **8**

Token.transfer confirmed Block: **53** Gas used: **84801** (0.71%)

Transaction sent: **0xcc433712d03c5e4c3d90143e4be7ffa8fed96dbcc49c5b9e501b40ec7c2096e8**

Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **9**

Token.transfer confirmed Block: **54** Gas used: **70638** (0.59%)

Transaction sent: **0xe12248dd3e6b53012219443e910cd4d07b0465da02bf5bfaa2e241b1b9d0aae6**

Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **1**

Token.transfer confirmed Block: **55** Gas used: **40591** (0.34%)

Transaction sent: **0xbd3d457dbf7e9f93863a8525011871c9a16dc1c27fe240cca73ae9ff52f15ef1**

Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **44**

Token.updateTransferTax confirmed Block: **57** Gas used: **23831** (0.20%)

Transaction sent: **0x66c2c06cf8860cb01b68541c5539f0291f12788c4471d946967326d9a1e43f77**

Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **10**

Token.transfer confirmed Block: **58** Gas used: **53836** (0.45%)

Transaction sent: **0x077aa9ad4c0c00b55707ed38f2f82a2ef29294dad936574b5991e2058132a896**

Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **11**

Token.transfer confirmed Block: **59** Gas used: **69673** (0.58%)

tests/test_token.py::test_transfer **PASSED**

tests/test_token.py::test_claim_stucked_eth **RUNNING**

Transaction sent: **0xc6e2e74ae8590e18e85b9a1828f83a943496762d8d68766c48c834a59bddd15c**
Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **45**
WETH9.constructor confirmed Block: **60** Gas used: **476546** (3.97%)
WETH9 deployed at: **0xa1910C6e0Fbd0E38cfBabAeC5D1C1D539F81CC63**

Transaction sent: **0x00df4e56c09bc2a82599e092dbeeb3a057c7debeedd65cffa87b130f2aec9c8a**
Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **46**
UniswapV2Factory.constructor confirmed Block: **61** Gas used: **2412730** (20.11%)
UniswapV2Factory deployed at: **0x8BE16B874F47371C42498b499837Ed87D7661E86**

Transaction sent: **0x888acfla66c57aa8692e86dfe7c58db2c0a5bab0df57e65a799b858583363fad**
Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **47**
UniswapV2Router02.constructor confirmed Block: **62** Gas used: **3895430** (32.46%)
UniswapV2Router02 deployed at: **0x1aa96efd2B002541E830CB7f60e473AA24e31F9A**

Transaction sent: **0x1ecb62ecd8d737555ee92b2ccfeae7d377a4f437282ad770fb993c8604c6ddf48**
Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **48**
Token.constructor confirmed Block: **63** Gas used: **4529713** (37.75%)
Token deployed at: **0x8b1B440724DCe2EE9779B58af841Ec59F545838B**

Transaction sent: **0x188a4d8d1327b4877b01c508bc146f669af888854a383dbbalad8b7cc7af3cba**
Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **12**
Token.claimStuckedEth confirmed (**reverted**) Block: **64** Gas used: **22743** (0.19%)

Transaction sent: **0x9b67673cab4f93a67c5d98d4a0534e2ee79863265ee827b4bfca7381393557a3**
Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **0**
Token.claimStuckedEth confirmed Block: **66** Gas used: **55242** (0.46%)

tests/test_token.py::test_claim_stucked_eth **PASSED**

tests/test_token.py::test_claim_stucked_erc20 **RUNNING**

Transaction sent: **0xe04e04165c93eee4fd408d5eaaa4235271e4e086ef1007e112fffabcd2366ee87**
Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **49**
ERC20Mock.constructor confirmed Block: **67** Gas used: **619637** (5.16%)
ERC20Mock deployed at: **0xC6D563d5c2243b27e7294511063f563ED701EA2C**

Transaction sent: **0x361a87fb4e1d81bcdcd27a444752170d51c62e53710f0620c1dbd9dfc107115a**
Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **50**
WETH9.constructor confirmed Block: **68** Gas used: **476546** (3.97%)
WETH9 deployed at: **0xD537bF4b795b7D07Bd5F4bAf7017e3ce8360B1DE**

Transaction sent: **0x7983cde837c0c28a702c348bb3290e46987c4ff681160129b2db09907d212c9d**
Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **51**
UniswapV2Factory.constructor confirmed Block: **69** Gas used: **2412730** (20.11%)
UniswapV2Factory deployed at: **0x70bC6D873D110Da59a9c49E7485a27B0F605E5db**

Transaction sent: **0xb503efa966832361fe500342d9703240b0edd4452b8b0b9051499dc72969e0dc**
Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **52**
UniswapV2Router02.constructor confirmed Block: **70** Gas used: **3895430** (32.46%)
UniswapV2Router02 deployed at: **0xFb7C5F938835aE34aF48c278C6763E134907Acdb**

Transaction sent: **0x0f4ba395e17f272db2b45aef27ee8a66ad10154007a97af6d720c7ae420fefac**
Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **53**
Token.constructor confirmed Block: **71** Gas used: **4529725** (37.75%)
Token deployed at: **0xb291024F4b2E4C3767A96aB44566a8e93cC828C5**

Transaction sent: **0xc80e8ca797337a4e2d754c326b0c48cccfef07aabb98a55cf26f884669027f9**
Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **13**
Token.claimStuckedERC20 confirmed (**reverted**) Block: **72** Gas used: **22920** (0.19%)

Transaction sent: **0x340be9b90d4d29f628613677c76372f9b563c0b827d7b0e1eb6308134594dbc8**
Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **1**
Token.claimStuckedERC20 confirmed (**TOKEN: TOKEN_CLAIM_FAILED**) Block: **73** Gas used: **26850** (0.22%)

Transaction sent: **0xffbc52c4e301a8ddb6fbce678ad5d78ea72671435c9fad83349260b85765bd27**
Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **54**
ERC20Mock.mint confirmed Block: **74** Gas used: **65637** (0.55%)

Transaction sent: **0xc1c36ab43c7a0d1f2989d284245642d1e7f21f3459a062f2b2482fcdddb80785**
Gas price: **0.0** gwei Gas limit: **12000000** Nonce: **2**

Annexes

Testing code:

`tecnica1.py:`

```
from brownie import (
    reverts, accounts
)

from scripts.helpful_scripts import (
    ZERO_ADDRESS,
    DAY_TIMESTAMP,
    get_account,
    increase_timestamp
)

from scripts.deploy import (
    deploy_erc,
    deploy_weth,
    deploy_factory,
    deploy_router,
    deploy_token
)

def test_update_max_tx_amount(only_local):
    # Arrange
    owner = get_account(0)
    other = get_account(1)

    weth = deploy_weth(owner)
    factory = deploy_factory(owner, owner)
    router = deploy_router(owner, factory.address, weth.address)
    token = deploy_token(owner, router.address)

    with reverts("Ownable: caller is not the owner"):
        token.updateMaxTxAmount(0.1, {"from": other})
    with reverts("MinOnePercent: "):
        token.updateMaxTxAmount(0.1, {"from": owner})
    token.updateMaxTxAmount(5, {"from": owner})

def test_update_max_wallet_amount(only_local):
    # Arrange
    owner = get_account(0)
```



```

other = get_account(1)

weth = deploy_weth(owner)
factory = deploy_factory(owner, owner)
router = deploy_router(owner, factory.address, weth.address)
token = deploy_token(owner, router.address)

with reverts("Ownable: caller is not the owner"):
    token.updateMaxWalletAmount(0.1, {"from": other})
with reverts("MinOnePercent: "):
    token.updateMaxWalletAmount(0.1, {"from": owner})
token.updateMaxWalletAmount(5, {"from": owner})

```

```

def test_exclude_from_fees(only_local):
    # Arrange
    owner = get_account(0)
    other = get_account(1)
    extra = get_account(2)

    weth = deploy_weth(owner)
    factory = deploy_factory(owner, owner)
    router = deploy_router(owner, factory.address, weth.address)
    token = deploy_token(owner, router.address)

    with reverts("Ownable: caller is not the owner"):
        token.excludeFromFees(extra, True, {"from": other})
    token.excludeFromFees(extra, True, {"from": owner})
    with reverts("UpdateBoolValue: "):
        token.excludeFromFees(extra, True, {"from": owner})
    token.excludeFromFees(extra, False, {"from": owner})

```

```

def test_update_buy_tax(only_local):
    # Arrange
    owner = get_account(0)
    other = get_account(1)

    weth = deploy_weth(owner)
    factory = deploy_factory(owner, owner)
    router = deploy_router(owner, factory.address, weth.address)
    token = deploy_token(owner, router.address)

    with reverts("Ownable: caller is not the owner"):
        token.updateBuyTax(5, 5, 5, {"from": other})
    token.updateBuyTax(5, 5, 5, {"from": owner})

```

```

    assert token.buyFee()[0] == 3
    assert token.buyFee()[1] == 1
    assert token.buyFee()[2] == 1
    token.updateBuyTax(1, 1, 1, {"from": owner})
    assert token.buyFee()[0] == 1
    assert token.buyFee()[1] == 1
    assert token.buyFee()[2] == 1

def test_update_buy_tax(only_Local):
    # Arrange
    owner = get_account(0)
    other = get_account(1)

    weth = deploy_weth(owner)
    factory = deploy_factory(owner, owner)
    router = deploy_router(owner, factory.address, weth.address)
    token = deploy_token(owner, router.address)

    with reverts("Ownable: caller is not the owner"):
        token.updateSellTax(5, 5, 5, {"from": other})
    token.updateSellTax(5, 5, 5, {"from": owner})
    assert token.sellFee()[0] == 3
    assert token.sellFee()[1] == 1
    assert token.sellFee()[2] == 1
    token.updateSellTax(1, 1, 1, {"from": owner})
    assert token.sellFee()[0] == 1
    assert token.sellFee()[1] == 1
    assert token.sellFee()[2] == 1

def test_update_transfer_tax(only_Local):
    # Arrange
    owner = get_account(0)
    other = get_account(1)

    weth = deploy_weth(owner)
    factory = deploy_factory(owner, owner)
    router = deploy_router(owner, factory.address, weth.address)
    token = deploy_token(owner, router.address)

    with reverts("Ownable: caller is not the owner"):
        token.updateTransferTax(5, 5, 5, {"from": other})
    token.updateTransferTax(5, 5, 5, {"from": owner})
    assert token.transferFee()[0] == 3
    assert token.transferFee()[1] == 1
    assert token.transferFee()[2] == 1

```

```

token.updateTransferTax(1, 1, 1, {"from": owner})
assert token.transferFee()[0] == 1
assert token.transferFee()[1] == 1
assert token.transferFee()[2] == 1

def test_update_wallets(only_Local):
    # Arrange
    owner = get_account(0)
    other = get_account(1)
    extra = get_account(2)

    weth = deploy_weth(owner)
    factory = deploy_factory(owner, owner)
    router = deploy_router(owner, factory.address, weth.address)
    token = deploy_token(owner, router.address)

    with reverts("Ownable: caller is not the owner"):
        token.updateWallets(extra, extra, extra, {"from": other})
    with reverts("ZeroAddress: "):
        token.updateWallets(extra, ZERO_ADDRESS, extra, {"from": owner})
    token.updateWallets(extra, extra, extra, {"from": owner})
    assert token.marketingWallet() == extra
    assert token.developmentWallet() == extra
    assert token.lpReceiverWallet() == extra

def test_transfer(only_Local):
    # Arrange
    owner = get_account(0)
    other = get_account(1)
    extra = get_account(2)

    weth = deploy_weth(owner)
    factory = deploy_factory(owner, owner)
    router = deploy_router(owner, factory.address, weth.address)
    token = deploy_token(owner, router.address)

    token.transfer(other, 10e18, {"from": owner})
    with reverts("TradingIsNotLiveYet: "):
        token.transfer(extra, 1e18, {"from": other})
    with reverts("Ownable: caller is not the owner"):
        token.enableTrading({"from": other})
    token.enableTrading({"from": owner})
    with reverts("TradingIsAlreadyLive: "):
        token.enableTrading({"from": owner})
    # early transfer

```

```

tx = token.transfer(extra, 1e18, {"from": other})
assert tx.events['Transfer'][0]['from'] == other
assert tx.events['Transfer'][0]['to'] == token.address
assert tx.events['Transfer'][0]['value'] == 0.05e18
assert tx.events['Transfer'][1]['from'] == other
assert tx.events['Transfer'][1]['to'] == extra
assert tx.events['Transfer'][1]['value'] == 0.95e18

tx = token.transfer(token.uniswapPair(), 1e18, {"from": other})
assert tx.events['Transfer'][0]['from'] == other
assert tx.events['Transfer'][0]['to'] == token.address
assert tx.events['Transfer'][0]['value'] == 0.3e18
assert tx.events['Transfer'][1]['from'] == other
assert tx.events['Transfer'][1]['to'] == token.uniswapPair()
assert tx.events['Transfer'][1]['value'] == 0.7e18

tx = token.transfer(other, 0.7e18, {"from": token.uniswapPair()})
assert tx.events['Transfer'][0]['from'] == token.uniswapPair()
assert tx.events['Transfer'][0]['to'] == token.address
assert tx.events['Transfer'][0]['value'] == 0.21e18
assert tx.events['Transfer'][1]['from'] == token.uniswapPair()
assert tx.events['Transfer'][1]['to'] == other
assert tx.events['Transfer'][1]['value'] == 0.49e18

increase_timestamp(DAY_TIMESTAMP)
token.updateTransferTax(1, 1, 0, {"from": owner})
tx = token.transfer(extra, 1e18, {"from": other})
assert tx.events['Transfer'][0]['from'] == other
assert tx.events['Transfer'][0]['to'] == token.address
assert tx.events['Transfer'][0]['value'] == 0.02e18
assert tx.events['Transfer'][1]['from'] == other
assert tx.events['Transfer'][1]['to'] == extra
assert tx.events['Transfer'][1]['value'] == 0.98e18

tx = token.transfer(token.uniswapPair(), 1e18, {"from": other})
assert tx.events['Transfer'][0]['from'] == other
assert tx.events['Transfer'][0]['to'] == token.address
assert tx.events['Transfer'][0]['value'] == 0.05e18
assert tx.events['Transfer'][1]['from'] == other
assert tx.events['Transfer'][1]['to'] == token.uniswapPair()
assert tx.events['Transfer'][1]['value'] == 0.95e18

```

```

def test_claim_stucked_eth(only_local):
    # Arrange
    owner = get_account(0)

```



```

other = get_account(1)
extra = get_account(2)
random_addr = "0x61B6187172B052c516E20276760eAaF81f319B8C"

weth = deploy_weth(owner)
factory = deploy_factory(owner, owner)
router = deploy_router(owner, factory.address, weth.address)
token = deploy_token(owner, router.address)

with reverts("OnlyMarketingWallet: "):
    token.claimStuckedEth(other, {"from": other})

extra.transfer(token.address, "1 ether")
token.claimStuckedEth(random_addr, {"from": token.marketingWallet()})
acc = accounts.at(random_addr, force=True)
acc.balance() == 1e18

def test_claim_stucked_erc20(only_local):
    # Arrange
    owner = get_account(0)
    other = get_account(1)
    extra = get_account(2)
    random_addr = "0x61B6187172B052c516E20276760eAaF81f319B8C"

    mock_erc = deploy_erc(owner, "test", "TEST")
    weth = deploy_weth(owner)
    factory = deploy_factory(owner, owner)
    router = deploy_router(owner, factory.address, weth.address)
    token = deploy_token(owner, router.address)

    with reverts("OnlyMarketingWallet: "):
        token.claimStuckedERC20(mock_erc.address, 1e18, {"from": other})
    with reverts("TOKEN: TOKEN_CLAIM_FAILED"):
        token.claimStuckedERC20(mock_erc.address, 1e18, {"from": token.marketingWallet()})
    mock_erc.mint(token.address, 1e18)
    token.claimStuckedERC20(mock_erc.address, 1e18, {"from": token.marketingWallet()})
    assert mock_erc.balanceOf(token.marketingWallet()) == 1e18

```

Technical Findings Summary

Findings

Vulnerability Level	Total	Pending	Not Apply	Acknowledged	Partially Fixed	Fixed
<div><div></div>High</div>	1					
<div><div></div>Medium</div>	0					
<div><div></div>Low</div>	0					
<div><div></div>Informational</div>	1					

Assessment Results

Score Results

Review	Score
Global Score	75/100
Assure KYC	Not completed
Audit Score	75/100

The Following Score System Has been Added to this page to help understand the value of the audit, the maximum score is 100, however to attain that value the project must pass and provide all the data needed for the assessment. Our Passing Score has been changed to 84 Points for a higher standard, if a project does not attain 85% is an automatic failure. Read our notes and final assessment below. The Global Score is a combination of the evaluations obtained between having or not having KYC and the type of contract audited together with its manual audit.

Audit FAILED

Following our comprehensive security audit of the staking contract for TEKNICAi project, we regret to inform you that our audit has identified a significant issue in the smart contract that poses a risk of fund loss. Specifically, in the `swapAndLiquify()` function, the calls to `marketingWallet.call{}` and `developmentWallet.call{}` are not properly checked. This oversight could result in a loss of funds if these calls fail.

Disclaimer

Assure Defi has conducted an independent security assessment to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the reviewed code for the scope of this assessment. This report does not constitute agreement, acceptance, or advocating for the Project, and users relying on this report should not consider this as having any merit for financial advice in any shape, form, or nature. The contracts audited do not account for any economic developments that the Project in question may pursue, and the veracity of the findings thus presented in this report relate solely to the proficiency, competence, aptitude, and discretion of our independent auditors, who make no guarantees nor assurance that the contracts are entirely free of exploits, bugs, vulnerabilities or deprecation of technologies.

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