



SMART CONTRACT AUDIT REPORT

For

Hayate INU Token (HINU)



Prepared By: SFI Team

Prepared on: 30/12/2021

Contract address:
0x903AE40b7FCbE8dE84A699151c9055F4c0a6Db3

Prepared for: Hayate INU Token Team

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• Disclaimer

This is a limited report on our findings based on our analysis, in accordance with good industry practice as of the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against the team on the basis of what it says or doesn't say, or how team produced it, and it is important for you to conduct your own independent investigations before making any decisions. team go into more detail on this in the below disclaimer below – please make sure to read it in full.

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• Scope of the audit

The scope of this audit was to analyze and document the **Hayate INU** smart contract codebase for quality, security, and correctness.

• Introduction

During the period of **December 29, 2021, to December 30, 2021** - SaferICO

Team performed a security audit for **Hayate INU** smart contracts.

The project has 1 file. It contains approx 1336 lines of Solidity code. Most of the functions and state variables are well commented on using the Nat spec documentation, but that does not create any vulnerability.

Source Code <https://etherscan.io/address/0x903aed40b7fcbe8de84a699151c9055f4c0a6db3#code>

Check Vulnerabilities

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 automatically.

1. Unit tests passing.
2. Compiler warnings;
3. Race Conditions. Reentrancy. Cross-function Race Conditions. Pitfalls in Race Condition solutions;
4. Possible delays in data delivery;
5. Transaction-Ordering Dependence (front running);
6. Timestamp Dependence;

7. Integer Overflow and Underflow;

8. DoS with (unexpected) Revert;

9. DoS with Block Gas Limit

10. Call Depth Attack. Not relevant in modern ethereum network

11. Methods execution permissions;

12. Oracles calls;

13. Economy model. It's important to forecast scenarios when a user is provided with additional economic motivation or faced with limitations. If application logic is based on incorrect economy model, the application will not function correctly and participants will incur financial losses. This type of issue is most often found in bonus rewards systems.

14. The impact of the exchange rate on the logic;

15. Private user data leaks.

• Issue Categories

Every issue in this report has been assigned to a severity level. There are four levels of severity, and each of them has been explained below.

Risk-level	Description
High	A high severity issue or vulnerability means that your smart contract can be exploited. Issues on this level are critical to the smart contract's performance or functionality, and we recommend these issues be fixed before moving to a live environment.
Medium	The issues marked as medium severity usually arise because of errors and deficiencies in the smart contract code. Issues on this level could potentially bring problems, and they should still be fixed.
Low	Low-level severity issues can cause minor impact and or are just warnings that can remain unfixed for now. It would be better to fix these issues at some point in the future.
Informational	These are severity issues that indicate an improvement request, a general question, a cosmetic or documentation error, or a request for information. There is low-to-no impact.

• Issues Found – Code Review

High severity issues

There are no High severity vulnerabilities found

Medium severity issues

There are no Medium severity vulnerabilities found

Low severity issues

#Use of block.timestamp for comparisons

Description

The value of block.timestamp can be manipulated by the miner.
And conditions with strict equality is difficult to achieve -
block.timestamp

Remediation

Avoid use of block.timestamp

Status: [Acknowledged](#)

#Missing Zero Address Validation

Description

Function `_transfer()`: Missing Zero Address Check for to address

```
/**
 * @dev See {IERC20-transfer}.
 *
 * * Requirements:
 *
 * - `recipient` cannot be the zero address.
```

```

* - the caller must have a balance of at least `amount`.
*/
function transfer(address recipient, uint256 amount) public virtual override returns (bool) {
    _transfer(_msgSender(), recipient, amount);
    return true;
}

```

Remediation

Add a 'require' to check to address != address(O)

Status: Acknowledged

#Owner privileges (In the period when the owner isn't renounced)

Description

Owner can change tax, burn, market, and liquidity fees in both(BUY – SELL fees).

```

function updateBuyFees(uint256 _marketingFee, uint256 _liquidityFee, uint256 _devFee) external
onlyOwner {
    buyMarketingFee = _marketingFee;
    buyLiquidityFee = _liquidityFee;
    buyDevFee = _devFee;
    buyTotalFees = buyMarketingFee + buyLiquidityFee + buyDevFee;
    require(buyTotalFees <= 20, "Must keep fees at 20% or less");
}

function updateSellFees(uint256 _marketingFee, uint256 _liquidityFee, uint256 _devFee) external onlyOwner {
    sellMarketingFee = _marketingFee;
    sellLiquidityFee = _liquidityFee;
    sellDevFee = _devFee;
    sellTotalFees = sellMarketingFee + sellLiquidityFee + sellDevFee;
    require(sellTotalFees <= 25, "Must keep fees at 25% or less");
}

```

Remediation

Make these functions internal in next version or the team should announce the investors before change the fees and give them time if they want to use the old fees.

Status: Acknowledged

Informational issues

#Naming Conventions

Description

The contract follows a consistent naming convention where we are private variables with leading "_" and public variables without it. But we have missed to comply to the condition for certain variable names "_isExcludedMaxTransactionAmount" which is public

Remediation

Remove "_" from external variable names and add it to private variable names

Status: *Acknowledged*

Constant calculations in the contract

Description

recalculated initialization will save 2847 units of gas in deployment

```
uint256 totalSupply = 1 * 1e12 * 1e18;
```

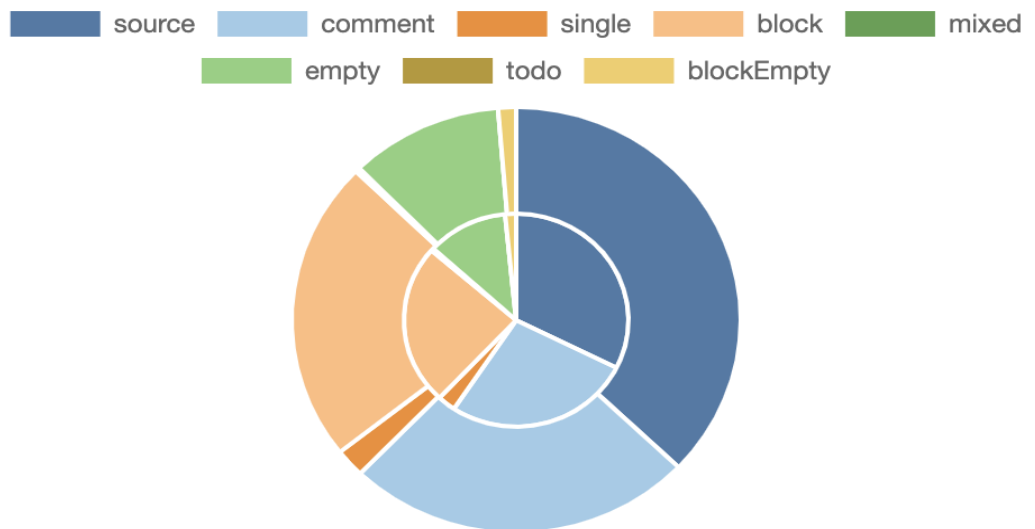
Recommendation

Replace the initialization as

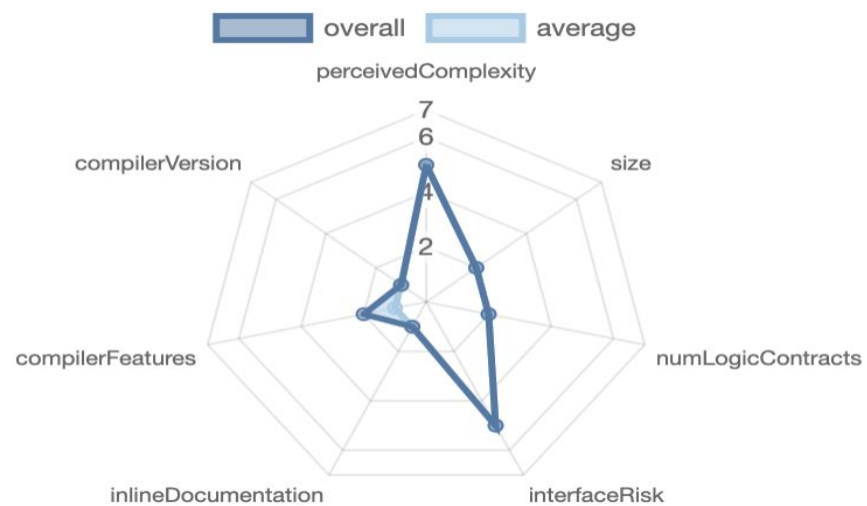
```
uint256 totalSupply = 100000000000000000000000000000000;
```

Status: *Acknowledged*

- Source Lines



- Risk Level



- Testing proves
- Solidity Static Analysis

SOLIDITY STATIC ANALYSIS

ERC

☒ Select ERC

☒ ERC20:
'decimals' should be 'uint8'

Miscellaneous

☒ Select Miscellaneous

☒ Constant/View/Pure functions:
Potentially constant/view/pure functions
 ☒ Similar variable names:
Variable names are too similar
 ☒ No return:
Function with 'returns' not returning
 ☒ Guard conditions:
Ensure appropriate use of require/assert
 ☒ Result not used:
The result of an operation not used
 ☒ String length:
Bytes length != String length
 ☒ Delete from dynamic array:
'delete' leaves a gap in array
 ☒ Data truncated:
Division on int/uint values truncates the result

SOLIDITY STATIC ANALYSIS

☒ Select all
 ☒ Autorun
 Run

Security

☒ Select Security

☒ Transaction origin:
'tx.origin' used
 ☒ Check-effects-interaction:
Potential reentrancy bugs
 ☒ Inline assembly:
Inline assembly used
 ☒ Block timestamp:
Can be influenced by miners
 ☒ Low level calls:
Should only be used by experienced devs
 ☒ Block hash:
Can be influenced by miners
 ☒ Selfdestruct:
Contracts using destructed contract can be broken

Gas & Economy

☒ Select Gas & Economy

☒ Gas costs:
Too high gas requirement of functions
 ☒ This on local calls:
Invocation of local functions via 'this'
 ☒ Delete dynamic array:
Use require/assert to ensure complete deletion
 ☒ For loop over dynamic array:
Iterations depend on dynamic array's size
 ☒ Ether transfer in loop:
Transferring Ether in a for/while/do-while loop

- **Solidity Unit Testing Code & Results**

```
// SPDX-License-Identifier: GPL-3.0

pragma solidity >=0.4.22 <0.9.0;

// This import is automatically injected by Remix
import "remix_tests.sol";

// This import is required to use custom transaction context
// Although it may fail compilation in 'Solidity Compiler' plugin
// But it will work fine in 'Solidity Unit Testing' plugin
import "remix_accounts.sol";
import "../Hayate INU.sol";

// File name has to end with '_test.sol', this file can contain more than one testSuite contracts
contract testSuite {

    /// 'beforeAll' runs before all other tests
    /// More special functions are: 'beforeEach', 'beforeAll', 'afterEach' & 'afterAll'
    function beforeAll() public {
        // <instantiate contract>
        Assert.equal(uint(1), uint(1), "1 should be equal to 1");
    }

    function checkSuccess() public {
        // Use 'Assert' methods: https://remix-ide.readthedocs.io/en/latest/assert\_library.html
        Assert.ok(2 == 2, 'should be true');
        Assert.greaterThan(uint(2), uint(1), "2 should be greater than to 1");
        Assert.lessThan(uint(2), uint(3), "2 should be lesser than to 3");
    }

    function checkSuccess2() public pure returns (bool) {
        // Use the return value (true or false) to test the contract
        return true;
    }
}
```

SOLIDITY UNIT TESTING



Test your smart contract in Solidity.

Select directory to load and generate test files.

Test directory:

tests

Create

Generate

How to use...



Run



Stop

☒ Select all

☒ tests/Hayate INU_test.sol

Progress: 1 finished (of 1)

testSuite (tests/Hayate INU_test.sol)

✓ Before all



✓ Check success



✓ Check success2



✓ Check failure



✓ Check sender and value



Result for tests/Hayate INU_test.sol

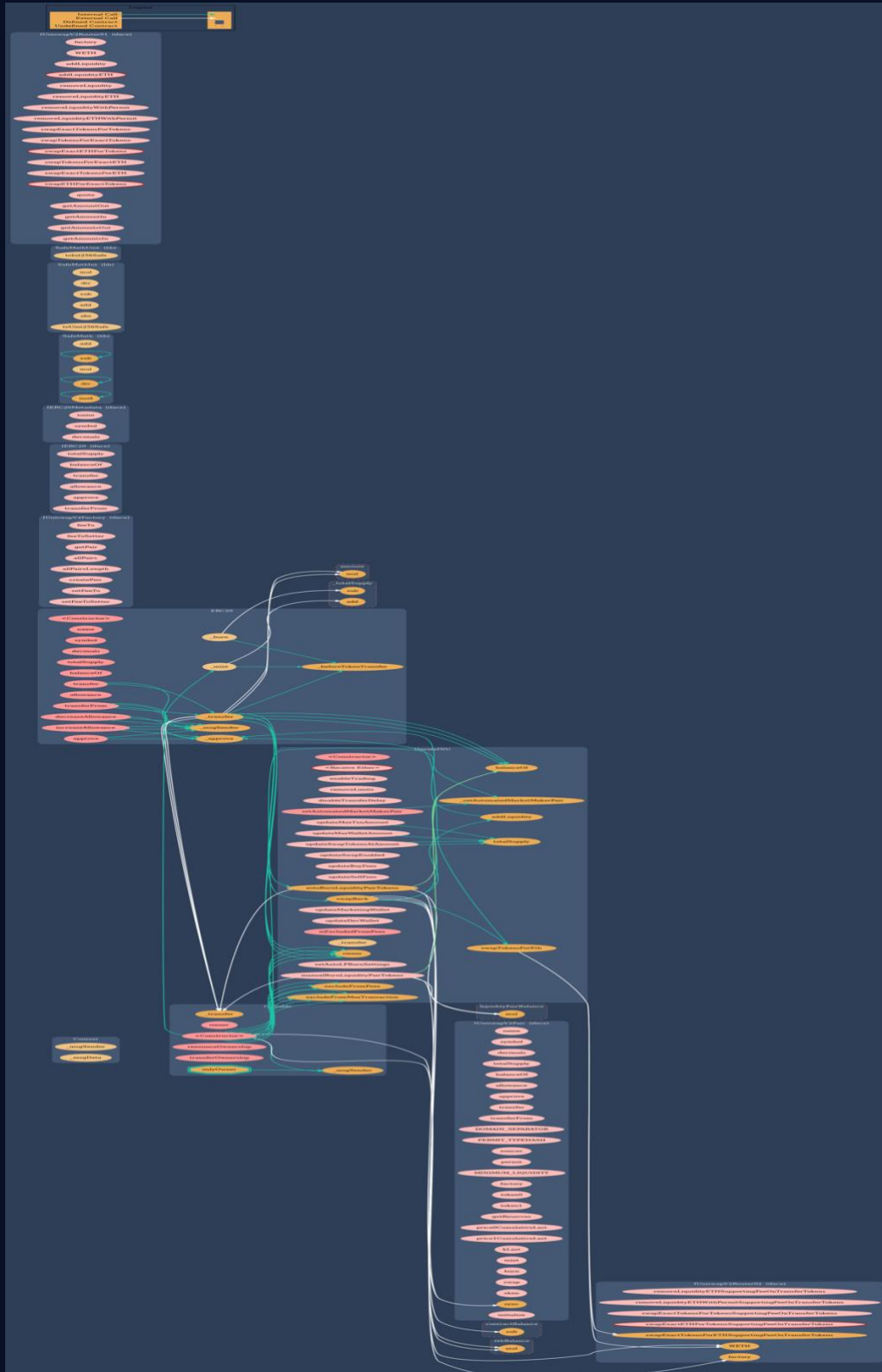
Passing: 5

Total time: 0.35s

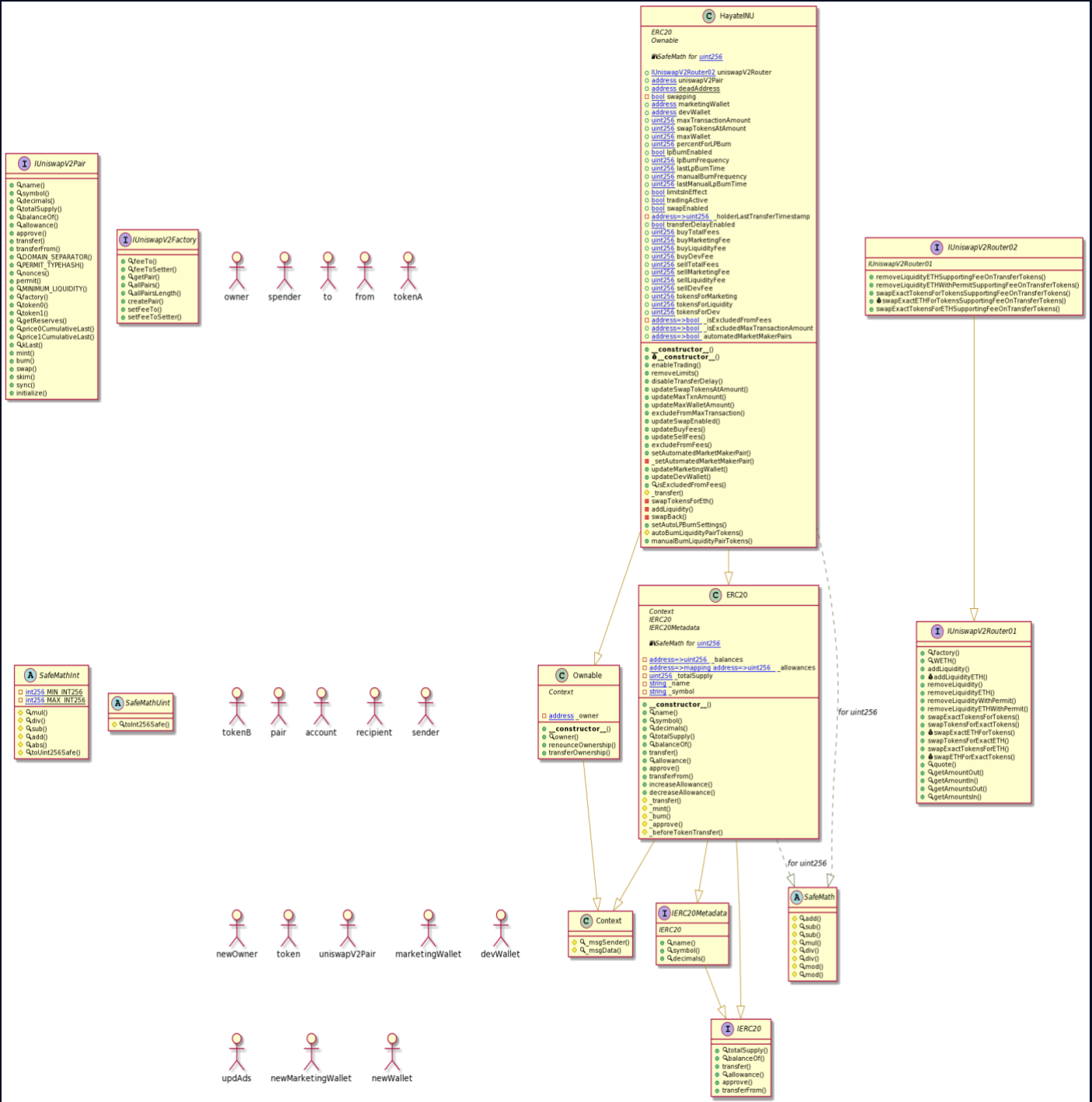
```
function checkFailure() public {
    Assert.notEqual(uint(1), uint(2), "1 should not be equal to 1");
}

/// Custom Transaction Context: https://remix-
ide.readthedocs.io/en/latest/unittesting.html#customization
/// #sender: account-1
/// #value: 100
function checkSenderAndValue() public payable {
    // account index varies 0-9, value is in wei
    Assert.equal(msg.sender, TestsAccounts.getAccount(1), "Invalid
sender");
    Assert.equal(msg.value, 100, "Invalid value");
}
}
```

- Call Graph







- **Unified Modeling Language (UML)**



• Capabilities

Components

 Contracts	 Libraries	 Interfaces	 Abstract
3	3	6	1

Exposed Functions

This section lists functions that are explicitly declared public or payable. Please note that getter methods for public stateVars are not included.











 Public	 Payable
100	5

External	Internal	Private	Pure	View
82	90	4	25	35

StateVariables

Total	 Public
42	31











Capabilities

Solidity Versions observed	 Experimental Features	 Can Receive Funds	 Uses Assembly	 Has Destroyable Contracts	
0.8.9		yes			
 Transfers ETH	 Low-Level Calls	 DelegateCall	 Uses Hash Functions	 ECRecover	 New/Create/Create2
 TryCatch	Σ Unchecked				

• Source Units In Scope

Source Units in Scope

Source Units Analyzed: 1
Source Units in Scope: 1 (100%)

Type	File	Logic Contracts	Interfaces	Lines	nLines	nSLOC	Comment Lines	Complex. Score	Capabilities
   	Hayate INU.sol	7	6	1336	1054	494	468	546	
   	Totals	7	6	1336	1054	494	468	546	

Legend: [-]

- **Lines**: total lines of the source unit
- **nLines**: normalized lines of the source unit (e.g. normalizes functions spanning multiple lines)
- **nSLOC**: normalized source lines of code (only source-code lines; no comments, no blank lines)
- **Comment Lines**: lines containing single or block comments
- **Complexity Score**: a custom complexity score derived from code statements that are known to introduce code complexity (branches, loops, calls, external interfaces, ...)

- **Function Signature**

```
39509351 => increaseAllowance(address,uint256)
43509138 => div(int256,int256)
119df25f => _msgSender()
8b49d47e => _msgData()
06fdde03 => name()
95d89b41 => symbol()
313ce567 => decimals()
18160ddd => totalSupply()
70a08231 => balanceOf(address)
dd62ed3e => allowance(address,address)
095ea7b3 => approve(address,uint256)
a9059cbb => transfer(address,uint256)
23b872dd => transferFrom(address,address,uint256)
3644e515 => DOMAIN_SEPARATOR()
30adf81f => PERMIT_TYPEHASH()
7ecebe00 => nonces(address)
d505accf => permit(address,address,uint256,uint256,uint8,bytes32,bytes32)
ba9a7a56 => MINIMUM_LIQUIDITY()
c45a0155 => factory()
0dfe1681 => token0()
d21220a7 => token1()
0902f1ac => getReserves()
5909c0d5 => price0CumulativeLast()
5a3d5493 => price1CumulativeLast()
7464fc3d => kLast()
6a627842 => mint(address)
89afcb44 => burn(address)
022c0d9f => swap(uint256,uint256,address,bytes)
bc25cf77 => skim(address)
fff6cae9 => sync()
485cc955 => initialize(address,address)
017e7e58 => feeTo()
094b7415 => feeToSetter()
e6a43905 => getPair(address,address)
1e3dd18b => allPairs(uint256)
```

```
574f2ba3 => allPairsLength()
c9c65396 => createPair(address,address)
f46901ed => setFeeTo(address)
a2e74af6 => setFeeToSetter(address)
a457c2d7 => decreaseAllowance(address,uint256)
30e0789e => _transfer(address,address,uint256)
4e6ec247 => _mint(address,uint256)
6161eb18 => _burn(address,uint256)
104e81ff => _approve(address,address,uint256)
cad3be83 => _beforeTokenTransfer(address,address,uint256)
771602f7 => add(uint256,uint256)
b67d77c5 => sub(uint256,uint256)
e31bdc0a => sub(uint256,uint256,string)
c8a4ac9c => mul(uint256,uint256)
a391c15b => div(uint256,uint256)
b745d336 => div(uint256,uint256,string)
f43f523a => mod(uint256,uint256)
71af23e8 => mod(uint256,uint256,string)
8da5cb5b => owner()
715018a6 => renounceOwnership()
f2fde38b => transferOwnership(address)
bbe93d91 => mul(int256,int256)
adefc37b => sub(int256,int256)
a5f3c23b => add(int256,int256)
1b5ac4b5 => abs(int256)
744f7c7d => toUint256Safe(int256)
e823b9bf => toInt256Safe(uint256)
ad5c4648 => WETH()
e8e33700 => addLiquidity(address,address,uint256,uint256,uint256,uint256,address,uint256)
f305d719 => addLiquidityETH(address,uint256,uint256,uint256,address,uint256)
baa2abde => removeLiquidity(address,address,uint256,uint256,uint256,address,uint256)
02751cec => removeLiquidityETH(address,uint256,uint256,uint256,address,uint256)
2195995c => removeLiquidityWithPermit(address,address,uint256,uint256,uint256,address,uint256,bool,uint8,bytes32,bytes32)
ded9382a => removeLiquidityETHWithPermit(address,uint256,uint256,uint256,address,uint256,bool,uint8,bytes32,bytes32)
38ed1739 => swapExactTokensForTokens(uint256,uint256,address[],address,uint256)
8803dbee => swapTokensForExactTokens(uint256,uint256,address[],address,uint256)
7ff36ab5 => swapExactETHForTokens(uint256,address[],address,uint256)
4a25d94a => swapTokensForExactETH(uint256,uint256,address[],address,uint256)
```

```
18cbafe5 => swapExactTokensForETH(uint256,uint256,address[],address,uint256)
fb3bdb41 => swapETHForExactTokens(uint256,address[],address,uint256)
ad615dec => quote(uint256,uint256,uint256)
054d50d4 => getAmountOut(uint256,uint256,uint256)
85f8c259 => getAmountIn(uint256,uint256,uint256)
d06ca61f => getAmountsOut(uint256,address[])
1f00ca74 => getAmountsIn(uint256,address[])
af2979eb => removeLiquidityETHSupportingFeeOnTransferTokens(address,uint256,uint256,uint256,address,uint256)
5b0d5984 =>
removeLiquidityETHWithPermitSupportingFeeOnTransferTokens(address,uint256,uint256,uint256,address,uint256,bool,uint8,bytes
32,bytes32)
5c11d795 => swapExactTokensForTokensSupportingFeeOnTransferTokens(uint256,uint256,address[],address,uint256)
b6f9de95 => swapExactETHForTokensSupportingFeeOnTransferTokens(uint256,address[],address,uint256)
791ac947 => swapExactTokensForETHSupportingFeeOnTransferTokens(uint256,uint256,address[],address,uint256)
8a8c523c => enableTrading()
751039fc => removeLimits()
e884f260 => disableTransferDelay()
d257b34f => updateSwapTokensAtAmount(uint256)
203e727e => updateMaxTxnAmount(uint256)
c18bc195 => updateMaxWalletAmount(uint256)
7571336a => excludeFromMaxTransaction(address,bool)
924de9b7 => updateSwapEnabled(bool)
8095d564 => updateBuyFees(uint256,uint256,uint256)
c17b5b8c => updateSellFees(uint256,uint256,uint256)
c0246668 => excludeFromFees(address,bool)
9a7a23d6 => setAutomatedMarketMakerPair(address,bool)
a7f7b36f => _setAutomatedMarketMakerPair(address,bool)
aacebbe3 => updateMarketingWallet(address)
1816467f => updateDevWallet(address)
4fbee193 => isExcludedFromFees(address)
b28805f4 => swapTokensForEth(uint256)
9cd441da => addLiquidity(uint256,uint256)
6ac5eeee => swapBack()
730c1888 => setAutoLPBurnSettings(uint256,uint256,bool)
6ede04d6 => autoBurnLiquidityPairTokens()
fe72b27a => manualBurnLiquidityPairTokens(uint256)
```

• Automatic General Report

Files Description Table

File Name	SHA-1 Hash
/Users/macbook/Desktop/smart contracts/Hayate INU.sol	44845b3b26651ba98dc72ba703e9de891fe66735

Contracts Description Table

Contract	Type	Bases		
↳	**Function Name**	**Visibility**	**Mutability**	**Modifiers**
Context Implementation				
↳	_msgSender	Internal	🔒	
↳	_msgData	Internal	🔒	
IUniswapV2Pair Interface				
↳	name	External	🔓	NO🔓
↳	symbol	External	🔓	NO🔓
↳	decimals	External	🔓	NO🔓
↳	totalSupply	External	🔓	NO🔓
↳	balanceOf	External	🔓	NO🔓
↳	allowance	External	🔓	NO🔓
↳	approve	External	🔓	NO🔓
↳	transfer	External	🔓	NO🔓
↳	transferFrom	External	🔓	NO🔓
↳	DOMAIN_SEPARATOR	External	🔓	NO🔓
↳	PERMIT_TYPEHASH	External	🔓	NO🔓
↳	nonces	External	🔓	NO🔓
↳	permit	External	🔓	NO🔓
↳	MINIMUM_LIQUIDITY	External	🔓	NO🔓
↳	factory	External	🔓	NO🔓
↳	token0	External	🔓	NO🔓

```

|  L | token1 | External  | |  NO  |
|  L | getReserves | External  | |  NO  |
|  L | price0CumulativeLast | External  | |  NO  |
|  L | price1CumulativeLast | External  | |  NO  |
|  L | kLast | External  | |  NO  |
|  L | mint | External  | |  NO  |
|  L | burn | External  | |  NO  |
|  L | swap | External  | |  NO  |
|  L | skim | External  | |  NO  |
|  L | sync | External  | |  NO  |
|  L | initialize | External  | |  NO  |

```

```

|||||

```

```

| **IUniswapV2Factory** | Interface | |||

```

```

|  L | feeTo | External  | |  NO  |
|  L | feeToSetter | External  | |  NO  |
|  L | getPair | External  | |  NO  |
|  L | allPairs | External  | |  NO  |
|  L | allPairsLength | External  | |  NO  |
|  L | createPair | External  | |  NO  |
|  L | setFeeTo | External  | |  NO  |
|  L | setFeeToSetter | External  | |  NO  |

```

```

|||||

```

```

| **IERC20** | Interface | |||

```

```

|  L | totalSupply | External  | |  NO  |
|  L | balanceOf | External  | |  NO  |
|  L | transfer | External  | |  NO  |
|  L | allowance | External  | |  NO  |
|  L | approve | External  | |  NO  |
|  L | transferFrom | External  | |  NO  |

```

```

|||||

```

```

| **IERC20Metadata** | Interface | IERC20 |||

```

```

|  L | name | External  | |  NO  |
|  L | symbol | External  | |  NO  |
|  L | decimals | External  | |  NO  |

```

```

|||||

```

```

| **ERC20** | Implementation | Context, IERC20, IERC20Metadata |||

```

```

|  L | <Constructor> | Public  | |  NO  |
|  L | name | Public  | |  NO  |













































































```

```































| L | symbol | Public | | | NO |
| L | decimals | Public | | | NO |
| L | totalSupply | Public | | | NO |
| L | balanceOf | Public | | | NO |
| L | transfer | Public | | | NO |
| L | allowance | Public | | | NO |
| L | approve | Public | | | NO |
| L | transferFrom | Public | | | NO |
| L | increaseAllowance | Public | | | NO |
| L | decreaseAllowance | Public | | | NO |
| L | _transfer | Internal | | | |
| L | _mint | Internal | | | |
| L | _burn | Internal | | | |
| L | _approve | Internal | | | |
| L | _beforeTokenTransfer | Internal | | | |
|||||
| **SafeMath** | Library | |||
| L | add | Internal | | | |
| L | sub | Internal | | | |
| L | sub | Internal | | | |
| L | mul | Internal | | | |
| L | div | Internal | | | |
| L | div | Internal | | | |
| L | mod | Internal | | | |
| L | mod | Internal | | | |
|||||
| **Ownable** | Implementation | Context |||
| L | <Constructor> | Public | | | NO |
| L | owner | Public | | | NO |
| L | renounceOwnership | Public | | | onlyOwner |
| L | transferOwnership | Public | | | onlyOwner |
|||||
| **SafeMathInt** | Library | |||
| L | mul | Internal | | | |
| L | div | Internal | | | |
| L | sub | Internal | | | |
| L | add | Internal | | | |
| L | abs | Internal | | | |

```

```

|  ↳ | toUint256Safe | Internal  |  ||
|||||
| **SafeMathUint** | Library |  |||
|  ↳ | toInt256Safe | Internal  |  ||
|||||
| **IUniswapV2Router01** | Interface |  |||
|  ↳ | factory | External  |  |NO |
|  ↳ | WETH | External  |  |NO |
|  ↳ | addLiquidity | External  |  |NO |
|  ↳ | addLiquidityETH | External  |  |NO |
|  ↳ | removeLiquidity | External  |  |NO |
|  ↳ | removeLiquidityETH | External  |  |NO |
|  ↳ | removeLiquidityWithPermit | External  |  |NO |
|  ↳ | removeLiquidityETHWithPermit | External  |  |NO |
|  ↳ | swapExactTokensForTokens | External  |  |NO |
|  ↳ | swapTokensForExactTokens | External  |  |NO |
|  ↳ | swapExactETHForTokens | External  |  |NO |
|  ↳ | swapTokensForExactETH | External  |  |NO |
|  ↳ | swapExactTokensForETH | External  |  |NO |
|  ↳ | swapETHForExactTokens | External  |  |NO |
|  ↳ | quote | External  |  |NO |
|  ↳ | getAmountOut | External  |  |NO |
|  ↳ | getAmountIn | External  |  |NO |
|  ↳ | getAmountsOut | External  |  |NO |
|  ↳ | getAmountsIn | External  |  |NO |
|||||
| **IUniswapV2Router02** | Interface | IUniswapV2Router01 |||
|  ↳ | removeLiquidityETHSupportingFeeOnTransferTokens | External  |  |NO |
|  ↳ | removeLiquidityETHWithPermitSupportingFeeOnTransferTokens | External  |  |NO |
|  ↳ | swapExactTokensForTokensSupportingFeeOnTransferTokens | External  |  |NO |
|  ↳ | swapExactETHForTokensSupportingFeeOnTransferTokens | External  |  |NO |
|  ↳ | swapExactTokensForETHSupportingFeeOnTransferTokens | External  |  |NO |
|||||
| **HayateINU** | Implementation | ERC20, Ownable |||
|  ↳ | <Constructor> | Public  |  |ERC20 |
|  ↳ | <Receive Ether> | External  |  |NO |
|  ↳ | enableTrading | External  |  |onlyOwner |
|  ↳ | removeLimits | External  |  |onlyOwner |


```


^L	disableTransferDelay	External 		onlyOwner
^L	updateSwapTokensAtAmount	External 		onlyOwner
^L	updateMaxTxnAmount	External 		onlyOwner
^L	updateMaxWalletAmount	External 		onlyOwner
^L	excludeFromMaxTransaction	Public 		onlyOwner
^L	updateSwapEnabled	External 		onlyOwner
^L	updateBuyFees	External 		onlyOwner
^L	updateSellFees	External 		onlyOwner
^L	excludeFromFees	Public 		onlyOwner
^L	setAutomatedMarketMakerPair	Public 		onlyOwner
^L	_setAutomatedMarketMakerPair	Private 		
^L	updateMarketingWallet	External 		onlyOwner
^L	updateDevWallet	External 		onlyOwner
^L	isExcludedFromFees	Public 		NO 
^L	_transfer	Internal 		
^L	swapTokensForEth	Private		
^L	addLiquidity	Private		
^L	swapBack	Private		
^L	setAutoLPBurnSettings	External		onlyOwner
^L	autoBurnLiquidityPairTokens	Internal		
^L	manualBurnLiquidityPairTokens	External		onlyOwner

Legend

| Symbol | Meaning |

|:-----:|-----|

|  | Function can modify state |

|  | Function is payable |

- **Summary of the Audit**

According to automatically test, the customer`s solidity smart contract is **Secured**.

The general overview is presented in the Project Information section and all issues found are located in the audit overview section.

The test found 0 critical, 0 high, 0 medium, 3 low issues, and 2 notes.