

SMART CONTRACT SECURITY AUDIT OF No FUD Token



SMART CONTRACT AUDIT | TEAM KYC | PROJECT EVALUATION

RELENTLESSLY SECURING THE PUBLIC BLOCKCHAIN | MADE IN CANADA

Summary

Auditing Firm InterFi Network

Architecture InterFi "Echelon" Auditing Standard

Smart Contract Audit Approved By Chris | Blockchain Specialist at InterFi Network

Platform Solidity

Audit Check (Mandatory) Static, Software, Auto Intelligent & Manual Analysis

Project Check (Optional) KYC, Website & Socials Analysis (Not Applicable)

Consultation Request Date November 03, 2021

Report Date November 10, 2021

Audit Summary

InterFi team has performed a line-by-line manual analysis and automated review of the smart contract. The smart contract was analyzed mainly for common smart contract vulnerabilities, exploits, and manipulation hacks. According to the smart contract audit:

- No FUD's smart contract source code has LOW RISK SEVERITY.
- No FUD has PASSED the smart contract audit.

For the detailed understanding of risk severity, source code vulnerability, and functional test, kindly refer to the audit.



Table Of Contents

Project Information

Overview	4
InterFi "Echelon" Audit Standard	
Audit Scope & Methodology	6
InterFi's Risk Classification	8
Smart Contract Risk Assessment	
Static Analysis	9
Software Analysis	12
Manual Analysis	14
SWC Attacks	17
Risk Status & Radar Chart	19
Report Summary	
Auditor's Verdict	20
<u>Legal Advisory</u>	
Important Disclaimer	21
About InterFi Network	22



Project Overview

InterFi was consulted by No FUD on November 03, 2021 to conduct a smart contract security audit of their token source code.

About No FUD Project:

No FUD Token or \$NOFUD is here to provide a cross chain NFT Market Place that provides its holders with royalties as well as savings on listing fee's. No FUD Token gives holders access to upand-coming NFT artists as well as exclusive NFT's PLUS giving holders ETH reflections and NFT airdrops.

Project	No FUD Token
Blockchain	Binance Smart Chain
Language	Solidity
Block Explorer	https://bscscan.com/address/0xcbadf5ale9fd5936c920006d32f228116 875bdc4
Contract	0xCbadf5ale9fd5936C920006d32F228116875bDc4
Website	https://nofudtoken.xyz/
Telegram	https://t.me/NOFUDTOKEN
Twitter	https://twitter.com/nofudtoken
Discord	https://discord.gg/UyNfDFG3kR



Public logo



Solidity Source Code On Blockchain (Verified Contract Source Code)

https://bscscan.com/address/0xcbadf5ale9fd5936c920006d32f228l16875bdc4#code

Contract Name: NOFUDTOKEN

Compiler Version: v0.7.6+commit.7338295f

Optimization Enabled: Yes with 1000 runs

Solidity Source Code On InterFi GitHub

https://github.com/interfinetwork/audited-codes/blob/main/NoFUD.sol

InterFi GitHub Commit

Solidity source code is committed at: le80640f1f93e97cb1cb843731ffcd3cc8hj4fh9

SHA-1 Hash

Solidity source code is audited at hash #le80640flf93e97cblcb84373lffcd3cc74a7b09



Audit Scope & Methodology

The scope of this report is to audit the smart contract source code of NO FUD. The source code can be viewed in its entirety on

https://bscscan.com/address/0xcbadf5ale9fd5936c920006d32f228l16875bdc4#code

InterFi has scanned the contract and reviewed the project for common vulnerabilities, exploits, hacks, and back-doors. Below is the list of commonly known smart contract vulnerabilities, exploits, and hacks:

Category

Re-entrancy (RE)

Unhandled Exceptions (UE)

Transaction Order Dependency (TO)

Integer Overflow (IO)

Unrestricted Action (UA)

Ownership Takeover

Gas Limit and Loops

Deployment Consistency

Repository Consistency

Data Consistency

Token Supply Manipulation

Access Control and Authorization

Operations Trail and Event Generation

Assets Manipulation

Liquidity Access

Source Code Review

Smart Contract Vulnerabilities

Functional Assessment



InterFi's Echelon Audit Standard

The aim of InterFi's "Echelon" standard is to analyze the smart contract and identify the vulnerabilities and the hacks in the smart contract. Mentioned are the steps used by ECHELON-1 to assess the smart contract:

- 1. Solidity smart contract source code reviewal:
 - Review of the specifications, sources, and instructions provided to InterFi to make sure we understand the size, scope, and functionality of the smart contract.
 - Manual review of code, which is the process of reading source code line-byline to identify potential vulnerabilities.
- 2. Static, Manual, and Automated Al analysis:
 - Test coverage analysis, which is the process of determining whether the test cases are covering the code and how much code is exercised when we run those test cases.
 - Symbolic execution, which is analysing a program to determine what inputs causes each part of a program to execute.
- 3. Best practices review, which is a review of the smart contracts to improve efficiency, effectiveness, clarify, maintainability, security, and control based on the established industry and academic practices, recommendations, and research.
- 4. Specific, itemized, actionable recommendations to help you take steps to secure your smart contracts

Automated 3P frameworks used to assess the smart contract vulnerabilities

- Slither
- Consensys MythX
- Consensys Surya
- Open Zeppelin Code Analyzer
- Solidity Code Complier



InterFi's Risk Classification

Smart contracts are generally designed to manipulate and hold funds denominated in ETH/BNB. This makes them very tempting attack targets, as a successful attack may allow the attacker to directly steal funds from the contract. Below are the typical risk levels of a smart contract:

Vulnerable: A contract is vulnerable if it has been flagged by a static analysis tool as such. As we will see later, this means that some contracts may be vulnerable because of a false-positive.

Exploitable: A contract is exploitable if it is vulnerable and the vulnerability could be exploited by an external attacker. For example, if the "vulnerability" flagged by a tool is in a function which requires to own the contract, it would be vulnerable but not exploitable.

Exploited: A contract is exploited if it received a transaction on the main network which triggered one of its vulnerabilities. Therefore, a contract can be vulnerable or even exploitable without having been exploited.

5 mart Contract		
Risk severity	Meaning Security Audit	
! Critical	This level vulnerabilities could be exploited easily, and	can lead to asset loss, data
	loss, asset manipulation, or data manipulation. They sho	ould be fixed right away.
! High	This level vulnerabilities are hard to exploit but very im	portant to fix, they carry an
	elevated risk of smart contract manipulation, which can	lead to critical risk severity
	This level vulnerabilities are should be fixed, as they ca	rry an inherent risk of future
! Medium	exploits, and hacks which may or may not impact the sn	nart contract execution.
	This level vulnerabilities can be ignored. They are	code style violations, and
! Low	informational statements in the code. They may not	affect the smart contract
	execution	



Smart Contract - Static Analysis

Symbol	Meaning
•	Function can be modified
	Function is payable
	Function is locked
	Function can be accessed
!	Important functionality

```
<mark>**SafeMath**</mark> | Library |
   | add | Internal 🖴 |
 L | sub | Internal 🗎
    sub | Internal 🖴
    mul | Internal 🖴
    div | Internal 🖴
 L | div | Internal 🛍 |
\Pi\Pi\Pi\Pi
 **IBEP20** | Interface | |||
 L | totalSupply | External ! |
 L | symbol | External | | NO! |
 L | name | External | | NO! |
 L | getOwner | External | | NO! |
 L | balanceOf | External | | NO! |
 L | transfer | External 📘 | 🥌
                            L | approve | External 📒 | 🥌
                           |NO |
 👢 | transferFrom | External 🚺 | 🥮 |NO 🖡 |
 **Auth** | Implementation | |||
 L | authorize | Public | | 🛑 | onlyOwner |
 👢 | unauthorize | Public 📒 | 🤛 | onlyOwner |
 L | isOwner | Public | | NO! |
 L | isAuthorized | Public | | NO | |
 👢 | transferOwnership | Public 🍍 | 🥮 | onlyOwner |
111111
 **IDEXFactory** | Interface | |||
 L | createPair | External ! | 🛑 |NO! |
```



```
**IDEXRouter** | Interface | |||
L | factory | External ! |
L | WETH | External | | NO! |
   addLiquidity | External 📒 | 🥌
                                  |N0 | |
👢 | addLiquidityETH | External 📒 | 🝱 |NO 📙 |
   swapExactTokensForTokensSupportingFeeOnTransferTokens | External 👢 | 🥌 |NO 📗 |
   swapExactETHForTokensSupportingFeeOnTransferTokens | External 🖡 | 💹 |NO 🖡 |
   swapExactTokensForETHSupportingFeeOnTransferTokens | External 📒 | 🥌
**IDividendDistributor** | Interface | |||
👢 | setDistributionCriteria | External 👢 | 🥌
                                           |NO | |
L | setShare | External | | 🛑 | NO! |
  | deposit | External | | 🝱 |NO 🖡
L | process | External | | 🛑 |NO! |
   <mark>ividendDistributor</mark>* | Implementation | IDividendDistributor |||
  | <Constructor> | Public ! | • | NO! |
   setDistributionCriteria | External 📒 | 🥮 | onlyToken |
  setShare | External 👢 | 🛑 | onlyToken |
📙 | deposit | External 📒 | 📟 | onlyToken |
👢 | process | External 📒 | 🥮 | onlyToken |
   shouldDistribute | Internal 🖴 |
👢 | distributeDividend | Internal 🔒 | 🥌
  claimDividend | External 📒 | 🥮 |NO 📙 |
| getCumulativeDividends | Internal 🛍 |  | |
👢 | addShareholder | Internal 🛍 | 🥮 | |
👢 | removeShareholder | Internal 🔓 | 🥌 | |
**NOFUDTOKEN** | Implementation | IBEP20, Auth |||
  <Constructor> | Public ! | @
                                | Auth |
   <Receive Ether> | External | | 🝱 |NO! |
   totalSupply | External | | | NO! |
   decimals | External | | |NO! |
   symbol | External | | |NO! |
   name | External | |
                       | getOwner | External | | NO | |
L | balanceOf | Public | |
                            |NO |
   allowance | External | | |NO | |
   approve | Public ! | 🛑 |NO! |
  | approveMax | External ! | 🛑 |NO! |
   transfer | External 📒 | 🥌
                             transferFrom | External 📒 | 🥮 |NO 📙 |
   setMaxWalletPercent_base1000 | External 📒 | 🥮 | onlyOwner |
  setMaxTxPercent_base1000 | External 🚦 | 🛑 | onlyOwner |
   setTxLimit | External 📘 | 🥮 | authorized |
   _transferFrom | Internal 🔒 | 🥮 | |
   _basicTransfer | Internal 🔓 | 🥌
   checkTxLimit | Internal 🖴 |  | |
    shouldTakeFee | Internal 🗎
```



```
takeFee | Internal 🛍 | 🥮 | |
 clearStuckBalance | External [ | 🛑 | authorized |
 | clearStuckBalance_sender | External | | • | authorized |
  set_sell_multiplier | External 📒 | 🥮 | onlyOwner |
  tradingStatus | Public 「 | 🛑 | onlyOwner |
  cooldownEnabled | Public 📒 | 🥮 | onlyOwner |
  swapBack | Internal 🛍 | 🧶 | swapping |
  setIsTxLimitExempt | External | | • | authorized |
  setFees | External | | 🛑 | authorized |
  setFeeReceivers | External 📘 | 🥌 | authorized |
  setSwapBackSettings | External | | _ e | authorized |
setDistributorSettings | External 📒 | 🔴 | authorized |
  isOverLiquified | Public | | NO! |
  multiTransfer | External 📒 | 🥌
```

Smart Contract Security Audit



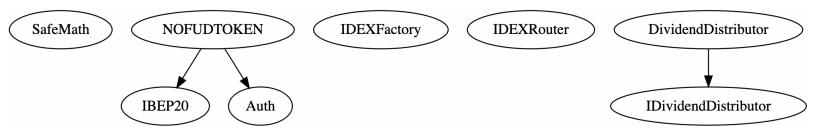
Smart Contract - Software Analysis

Function Signatures

```
88bdd9be => updateDividendTracker(address)
65b8dbc0 => updateUniswapV2Router(address)
c0246668 => excludeFromFees(address,bool)
c492f046 => excludeMultipleAccountsFromFees(address[],bool)
5d098b38 => setMarketingWallet(address)
c9d37d97 => setBUSDRewardsFee(uint256)
adefd90c => setLiquiditFee(uint256)
3f301893 => setMarketingFee(uint256,uint256)
9a7a23d6 => setAutomatedMarketMakerPair(address,bool)
455a4396 => blacklistAddress(address,bool)
ec28438a => setMaxTxAmount(uint256)
825fb668 => setMinimumTokensForSwap(uint256)
a7f7b36f => setAutomatedMarketMakerPair(address,bool)
871c128d => updateGasForProcessing(uint256)
e98030c7 => updateClaimWait(uint256)
a26579ad => getClaimWait()
30bb4cff => getTotalDividendsDistributed()
4fbee193 => isExcludedFromFees(address)
a8b9d240 => withdrawableDividendOf(address)
6843cd84 => dividendTokenBalanceOf(address)
31e79db0 => excludeFromDividends(address)
ad56c13c => getAccountDividendsInfo(address)
f27fd254 => getAccountDividendsInfoAtIndex(uint256)
700bb191 => processDividendTracker(uint256)
4e71d92d => claim()
e7841ec0 => getLastProcessedIndex()
64b0f653 => getNumberOfDividendTokenHolders()
30e0789e => transfer(address,address,uint256)
a210621e => swapAndSendToFee(uint256)
173865ad => swapAndLiquify(uint256)
2eab2841 => swapETHForTokens(uint256)
b28805f4 => swapTokensForEth(uint256)
6a5f7f7c => swapTokensForBUSD(uint256)
9cd441da => addLiguidity(uint256,uint256)
818c19dc => swapAndSendDividends(uint256)
6a474002 => withdrawDividend()
09bbedde => getNumberOfTokenHolders()
fbcbc0f1 => getAccount(address)
5183d6fd => getAccountAtIndex(uint256)
77fdb837 => canAutoClaim(uint256)
e30443bc => setBalance(address.uint256)
ffb2c479 => process(uint256)
bc4c4b37 => processAccount(address,bool)
```



<u>Inheritance Graph</u>



Interfi

Smart Contract Security Audit



Smart Contract – Manual Analysis

Function	Description	Tested	Verdict
Total Supply	provides information about the total token	Yes	Passed
	supply		
Balance Of	provides account balance of the owner's	Yes	Passed
	account	. 00	
Transfer	executes transfers of a specified number of	Yes	Passed
Tulisiei	tokens to a specified address	res	Pusseu
Approve	allow a spender to withdraw a set number of	.,	
Approve	tokens from a specified account	Yes	Passed
Allowance	returns a set number of tokens from a spender to	Yes	Passed
	is an action in which the project buys back its		
Buy Back	tokens from the existing holders usually at a	NA	NA
,	market price north Contract	NA.	NA
	executes transfers of a specified number of		
Burn	tokens to a burn address	NA	NA
Mint	executes creation of a specified number of		
Mint	tokens and adds it to the total supply	NA	NA
	circulating token supply adjusts (increases or		
Rebase	decreases) automatically according to a token's	NA	NA
	price fluctuations		
	stops specified wallets from interacting with the		
Blacklist	smart contract function modules	NA	NA
	stops or locks all function modules of the smart		
Lock	contract	NA	NA



Important Information

- Be aware that active smart contract owner privileges constitute an elevated impact to smart contract's safety and security.
- Owner can-not lock or burn user assets.
- Owner can-not stop or pause the smart contract.
- Owner can-not mint tokens after launch.
- The smart contract uses cooldown timer.

```
bool public buyCooldownEnabled = false;
uint8 public cooldownTimerInterval = 60;
mapping (address => uint) private cooldownTimer;
```

NO FUD's smart contract utilizes "SafeMath" function to avoid common smart contract vulnerabilities.

```
library SafeMath {
function add(uint256 a, uint256 b) internal pure returns (uint256) {
    uint256 c = a + b;
    require(c >= a, 'SafeMath: addition overflow');

    return c;
}
function sub(uint256 a, uint256 b) internal pure returns (uint256) {
    return sub(a, b, 'SafeMath: subtraction overflow');
}
uint256 c = a * b;
    require(c / a == b, 'SafeMath: multiplication overflow');

    return c;
}
```



NO FUD's smart contract utilizes "Sell Tax Multiplier" to multiply the sell tax at the owner's discretion.

```
function takeFee(address sender, uint256 amount, bool isSell) internal returns (uint256) {
  uint256 multiplier = isSell ? sellMultiplier : 100;
  uint256 feeAmount = amount.mul(totalFee).mul(multiplier).div(feeDenominator * 100);
```

NO FUD's smart contract has I low severity issue which may or may not create any functional vulnerability.

```
"resource": "/NO FUD.sol",

"owner": "_generated_diagnostic_collection_name_#0",

"severity": 8, (! Low Severity)

"Expected pragma, import directive or contract/interface/library definition",

"source": "solc",

Security Audit
```



Smart Contract - SWC Attacks

SWC ID	Description	Verdict
SWC-101	Integer Overflow and Underflow	Passed
SWC-102	Outdated Compiler Version	! Low
SWC-103	Floating Pragma	Passed
SWC-104	Unchecked Call Return Value	Passed
SWC-105	Unprotected Ether Withdrawal	Passed
SWC-106	Unprotected SELFDESTRUCT Instruction	Passed
SWC-107	Re-entrancy	Passed
SWC-108	State Variable Default Visibility	Passed
SWC-109	Uninitialized Storage Pointer	Passed
SWC-110	Assert Violation Smart Contract	Passed
swc-111	Use of Deprecated Solidity Functions	Passed
SWC-112	Delegate Call to Untrusted Callee	Passed
SWC-113	DoS with Failed Call	Passed
SWC-114	Transaction Order Dependence	Passed
SWC-115	Authorization through tx.origin	Passed
SWC-116	Block values as a proxy for time	Passed
SWC-117	Signature Malleability	Passed
SWC-118	Incorrect Constructor Name	Passed



SWC-119	Shadowing State Variables	Passed
SWC-120	Weak Sources of Randomness from Chain Attributes	Passed
SWC-121	Missing Protection against Signature Replay Attacks	Passed
SWC-122	Lack of Proper Signature Verification	Passed
SWC-123	Requirement Violation	Passed
SWC-124	Write to Arbitrary Storage Location	Passed
SWC-125	Incorrect Inheritance Order	Passed
SWC-126	Insufficient Gas Griefing	Passed
SWC-127	Arbitrary Jump with Function Type Variable	Passed
SWC-128	DoS With Block Gas Limit	Passed
SWC-129	Typographical Error	Passed
SWC-130	Right-To-Left-Override control character (U+202E)	Passed
SWC-131	Presence of unused variables	Passed
SWC-132	Unexpected Ether balance	Passed
SWC-133	Hash Collisions With Multiple Variable Length Arguments	Passed
SWC-134	Message call with hardcoded gas amount	Passed
SWC-135	Code With No Effects (Irrelevant/Dead Code)	Passed
SWC-136	Unencrypted Private Data On-Chain	Passed



Smart Contract - Risk Status & Radar Chart

Risk Severity	Status
! Critical	None critical severity issues identified
! High	None high severity issues identified
! Medium	None medium severity issues identified
! Low	1 low severity issue identified
Passed	41 functions and instances verified and passed
	Score out of 100
	Compiler Check 100 95 Static Analysis 80 Manual Analysis Software Analysis
	Compiler Check 95
	Static Analysis 95

Software Analysis

Manual Analysis

Interface Safety

92

90

91



Auditor's Verdict

InterFi team has performed a line-by-line manual analysis and automated review of the smart contract. The smart contract was analyzed mainly for common smart contract vulnerabilities, exploits, and manipulation hacks.

NO FUD's smart contract source code has LOW RISK SEVERITY.

NO FUD has PASSED the smart contract audit.



Auditor's Note:

- Be aware that active smart contract owner privileges constitute an elevated impact to smart contract's safety and security.
- Project owner's KYC isn't checked and verified due to out of scope.
- Project's liquidity pair isn't checked and verified due to out of scope.
- Project website is not checked due to out of scope. The website hasn't been reviewed for SSL and lighthouse report.



Important Disclaimer

InterFi Network provides contract auditing and project verification services for blockchain projects. The purpose of the audit is to analyse the on-chain smart contract source code, and to provide basic overview of the project. This report should not be transmitted, disclosed, referred to, or relied upon by any person for any purposes without InterFi's prior written consent.

InterFi provides the easy-to-understand assessment of the project, and the smart contract (otherwise known as the source code). The audit makes no statements or warranties on the security of the code. It also cannot be considered as an enough assessment regarding the utility and safety of the code, bug-free status, or any other statements of the contract. While we have used all the data at our disposal to provide the transparent analysis, it is important to note that you should not rely on this report only — we recommend proceeding with several independent audits and a public bug bounty program to ensure the security of smart contracts. Be aware that smart contracts deployed on a blockchain aren't resistant from external vulnerability, or a hack. Be aware that active smart contract owner privileges constitute an elevated impact to smart contract's safety and security. Therefore, InterFi does not guarantee the explicit security of the audited smart contract.

The analysis of the security is purely based on the smart contracts alone. No applications or operations were reviewed for security. No product code has been reviewed.

This report should not be considered as an endorsement or disapproval of any project or team.

The information provided on this report does not constitute investment advice, financial advice, trading advice, or any other sort of advice and you should not treat any of the report's content as such. Do conduct your own due diligence and consult your financial advisor before making any investment decisions.



About InterFi Network

InterFi Network provides intelligent blockchain solutions. InterFi is developing an ecosystem that is seamless and responsive. Some of our services: Blockchain Security, Token Launchpad, NFT Marketplace, etc. InterFi's mission is to interconnect multiple services like Blockchain Security, DeFi, Gaming, and Marketplace under one ecosystem that is seamless, multi-chain compatible, scalable, secure, fast, responsive, and easy-to-use.

InterFi is built by a decentralized team of UI experts, contributors, engineers, and enthusiasts from all over the world. Our team currently consists of 6+ core team members, and 10+ casual contributors. InterFi provides manual, static, and automatic smart contract analysis, to ensure that project is checked against known attacks and potential vulnerabilities.

To learn more, visit https://interfi.network

To view our audit portfolio, visit https://github.com/interfinetwork

To book an audit, message https://t.me/interfiaudits





