

# CFG NINJA AUDITS

Security Assessment

**GOKU INU Token** 

December 3, 2023

Audit Status: Pass

Audit Edition: Standard





# **Risk Analysis**

## **Classifications of Manual Risk Results**

Classification	Description
<b>○</b> Critical	Danger or Potential Problems.
High	Be Careful or Fail test.
Low	Pass, Not-Detected or Safe Item.
■ Informational	Function Detected

### **Manual Code Review Risk Results**

Contract Priviledge	Description
Buy Tax	2%
Sale Tax	2%
Cannot Sale	Pass
Cannot Sale	Pass
■ Max Tax	2%
■ Modify Tax	No
Fee Check	Pass
☐ Is Honeypot?	Not Detected
Trading Cooldown	Not Detected
Can Pause Trade?	Not Detected





Contract Priviledge	Description
Pause Transfer?	Not Detected
⊖ Max Tx?	Fail
☐ Is Anti Whale?	Not Detected
■ Is Anti Bot?	Not Detected
☐ Is Blacklist?	Not Detected
Blacklist Check	Pass
is Whitelist?	Detected
Can Mint?	Pass
■ Is Proxy?	Not Detected
Can Take Ownership?	Not Detected
Hidden Owner?	Not Detected
<ul><li>Owner</li></ul>	0x47b18e3F8FcDA4a8CDfE7Bab67149271E622f80b
Self Destruct?	Not Detected
External Call?	Not Detected
Other?	Not Detected
Holders	1
Auditor Confidence	High
○ KYC Completed	No

The following quick summary it's added to the project overview; however, there are more details about the audit and its results. Please read every detail.





# **Project Overview**

# **Token Summary**

Parameter	Result
Address	0x7dE5Ca7B0B5E590b6767869F854077d7B4Dd7985
Name	GOKU INU
Token Tracker	GOKU INU (GOKUINU)
Decimals	18
Supply	1,000,000,000
Platform	Binance Smart Chain
compiler	v0.8.19+commit.7dd6d404
Contract Name	GOKUINU
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	https://bscscan.com/address/0x7de5ca7b0b5e590b6767869f 854077d7b4dd7985#code
Payment Tx	0xe157ba5267b183b338981dd72f8c1879d3ca00b2888ab4f02 8b497a3e6c90558





# Main Contract Assessed Contract Name

Name	Contract	Live
GOKU INU	0x7dE5Ca7B0B5E590b6767869F854077d7B4Dd7985	Yes

# TestNet Contract Assessed Contract Name

Name	Contract	Live
GOKU INU	0x5A2651AFfc6122431547f883C19b5B472d70F8D2	Yes

## **Solidity Code Provided**

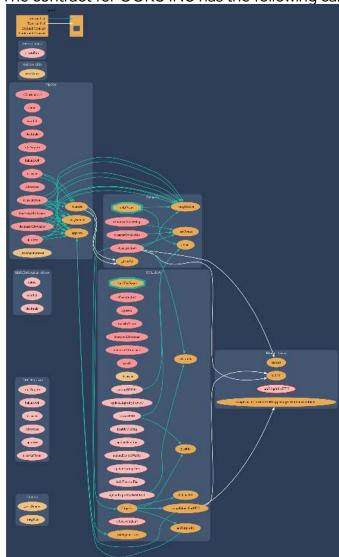
SollD	File Sha-1	FileName
GOKUINU	54929ed37bc3d7cdb6fb599c295420ad44e8bdf	eGOKUINU.sol





# Call Graph

The contract for GOKU INU has the following call graph structure.







# Smart Contract Vulnerability Checks

The Smart Contract Weakness Classification Registry (SWC Registry) is an implementation of the weakness classification scheme proposed in EIP-1470. It is loosely aligned to the terminologies and structure used in the Common Weakness Enumeration (CWE) while overlaying a wide range of weakness variants that are specific to smart contracts.

File ID Severity location Name SWC-100 **Pass** Function Default Visibility **GOKUINU.sol** L: 0 C: 0 SWC-101 Integer Overflow and **GOKUINU.sol** L: 0 C: 0 **Pass** Underflow. L: 0 C: 0 SWC-102 **Pass Outdated Compiler** GOKUINU.sol Version file. SWC-103 A floating pragma is set. GOKUINU.sol L: 8 C: 0 Low **Unchecked Call Return** SWC-104 **Pass** GOKUINU.sol L: 0 C: 0 Value. SWC-105 **Pass Unprotected Ether GOKUINU.sol** L: 0 C: 0 Withdrawal. SWC-106 GOKUINU.sol L: 0 C: 0 **Pass** Unprotected **SELFDESTRUCT** Instruction SWC-107 **Pass** Read of persistent state GOKUINU.sol L: 0 C: 0 following external call. SWC-108 **Pass** State variable visibility is GOKUINU.sol L: 0 C: 0 not set.. SWC-109 **Pass** Uninitialized Storage **GOKUINU.sol** L: 0 C: 0 Pointer. Assert Violation. L: 0 C: 0 SWC-110 **Pass** GOKUINU.sol





ID	Severity	Name	File	location
SWC-111	Pass	Use of Deprecated Solidity Functions.	GOKUINU.sol	L: 0 C: 0
SWC-112	Pass	Delegate Call to Untrusted Callee.	GOKUINU.sol	L: 0 C: 0
SWC-113	Pass	Multiple calls are executed in the same transaction.	GOKUINU.sol	L: 0 C: 0
SWC-114	Pass	Transaction Order Dependence.	GOKUINU.sol	L: 0 C: 0
SWC-115	Pass	Authorization through tx.origin.	GOKUINU.sol	L: 0 C: 0
SWC-116	Pass	A control flow decision is made based on The block.timestamp environment variable.	GOKUINU.sol	L: 0 C: 0
SWC-117	Pass	Signature Malleability.	GOKUINU.sol	L: 0 C: 0
SWC-118	Pass	Incorrect Constructor Name.	GOKUINU.sol	L: 0 C: 0
SWC-119	Pass	Shadowing State Variables.	GOKUINU.sol	L: 0 C: 0
SWC-120	Low	Potential use of block.number as source of randonmness.	GOKUINU.sol	L: 573 C: 12, L: 693 C: 24
SWC-121	Pass	Missing Protection against Signature Replay Attacks.	GOKUINU.sol	L: 0 C: 0
SWC-122	Pass	Lack of Proper Signature Verification.	GOKUINU.sol	L: 0 C: 0
SWC-123	Pass	Requirement Violation.	GOKUINU.sol	L: 0 C: 0
SWC-124	Pass	Write to Arbitrary Storage Location.	GOKUINU.sol	L: 0 C: 0
SWC-125	Pass	Incorrect Inheritance Order.	GOKUINU.sol	L: 0 C: 0





ID	Severity	Name	File	location
SWC-126	Pass	Insufficient Gas Griefing.	GOKUINU.sol	L: 0 C: 0
SWC-127	Pass	Arbitrary Jump with Function Type Variable.	GOKUINU.sol	L: 0 C: 0
SWC-128	Pass	DoS With Block Gas Limit.	GOKUINU.sol	L: 0 C: 0
SWC-129	Pass	Typographical Error.	GOKUINU.sol	L: 0 C: 0
SWC-130	Pass	Right-To-Left-Override control character (U +202E).	GOKUINU.sol	L: 0 C: 0
SWC-131	Pass	Presence of unused variables.	GOKUINU.sol	L: 0 C: 0
SWC-132	Pass	Unexpected Ether balance.	GOKUINU.sol	L: 0 C: 0
SWC-133	Pass	Hash Collisions with Multiple Variable Length Arguments.	GOKUINU.sol	L: 0 C: 0
SWC-134	Pass	Message call with hardcoded gas amount.	GOKUINU.sol	L: 0 C: 0
SWC-135	Pass	Code With No Effects (Irrelevant/Dead Code).	GOKUINU.sol	L: 0 C: 0
SWC-136	Pass	Unencrypted Private Data On-Chain.	GOKUINU.sol	L: 0 C: 0

We scan the contract for additional security issues using MYTHX and industry-standard security scanning tools.





# Smart Contract Vulnerability Details

SWC-103 - Floating Pragma.

CWE-664: Improper Control of a Resource Through it	ts
Lifetime.	

**References:** 

#### **Description:**

Contracts should be deployed with the same compiler version and flags that they have been tested with thoroughly. Locking the pragma helps to ensure that contracts do not accidentally get deployed using, for example, an outdated compiler version that might introduce bugs that affect the contract system negatively.

#### Remediation:

Lock the pragma version and also consider known bugs (https://github.com/ethereum/solidity/releases) for the compiler version that is chosen.

Pragma statements can be allowed to float when a contract is intended for consumption by other developers, as in the case with contracts in a library or EthPM package.

Otherwise, the developer would need to manually update the pragma in order to compile locally.

#### **References:**

Ethereum Smart Contract Best Practices - Lock pragmas to specific compiler version.





# Smart Contract Vulnerability Details

# SWC-120 - Weak Sources of Randomness from Chain Attributes

**CWE-330: Use of Insufficiently Random Values** 

#### **Description:**

Solidity allows for ambiguous naming of state variables when inheritance is used. Contract A with a variable x could inherit contract B that also has a state variable x defined. This would result in two separate versions of x, one of them being accessed from contract A and the other one from contract B. In more complex contract systems this condition could go unnoticed and subsequently lead to security issues.

Shadowing state variables can also occur within a single contract when there are multiple definitions on the contract and function level.

#### Remediation:

Using commitment scheme, e.g. RANDAO. Using external sources of randomness via oracles, e.g. Oraclize. Note that this approach requires trusting in oracle, thus it may be reasonable to use multiple oracles. Using Bitcoin block hashes, as they are more expensive to mine.

#### References:

How can I securely generate a random number in my smart contract?)

When can BLOCKHASH be safely used for a random number? When would it be unsafe?

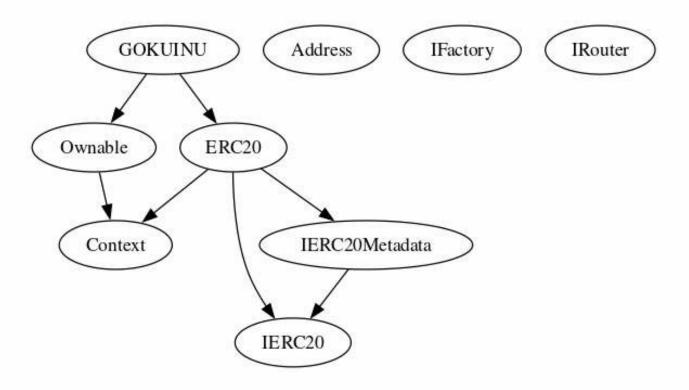
The Run smart contract.





# **Inheritance**

The contract for GOKU INU has the following inheritance structure.







## **GOKUINU-05 | Missing Event Emission.**

Category	Severity	Location	Status
Volatile Code	Low	GOKUINU.sol: L: 690 C: 22	Detected

#### **Description**

Detected missing events for critical arithmetic parameters. There are functions that have no event emitted, so it is difficult to track off-chain changes. The linked code does not create an event for the transfer.

#### Recommendation

Emit an event for critical parameter changes. It is recommended emitting events for the sensitive functions that are controlled by centralization roles.

#### Mitigation

#### References:

Understanding Events in Smart Contracts





# Technical Findings Summary

### **Classification of Risk**

Severity	Description
Critical	Risks are those that impact the safe functioning of a platform and must be addressed before launch. Users should not invest in any project with outstanding critical risks.
High	Risks can include centralization issues and logical errors. Under specific circumstances, these major risks can lead to loss of funds and/or control of the project.
○ Medium	Risks may not pose a direct risk to users' funds, but they can affect the overall functioning of a platform
Low	Risks can be any of the above but on a smaller scale. They generally do not compromise the overall integrity of the Project, but they may be less efficient than other solutions.
1 Informational	Errors are often recommended to improve the code's style or certain operations to fall within industry best practices. They usually do not affect the overall functioning of the code.

## **Findings**

Severity	Found	Pending	g Resolve	ed
Critical	0	0	0	
High	0	0	0	
○ Medium	0	0	0	
Low	1	0	0	
1 Informational	0	0	0	
Total	1	0	0	





# **Social Media Checks**

Social Media	URL	Result
Twitter	https://twitter.com/GOKUINUTOKEN	Pass
Other		Fail
Website	https://www.gokuinutoken.com/	Pass
Telegram	https://t.me/gokuinureal	Pass

We recommend to have 3 or more social media sources including a completed working websites.

**Social Media Information Notes:** 

**Auditor Notes: undefined** 

**Project Owner Notes:** 







# **Assessment Results**

#### **Score Results**

Review	Score
Overall Score	85/100
Auditor Score	85/100
Review by Section	Score
Manual Scan Score	16
SWC Scan Score	33
Advance Check Score	36

The Following Score System Has been Added to this page to help understand the value of the audit, the maximun score is 100, however to attain that value the project most pass and provide all the data needed for the assessment. Our Passing Score has been changed to 80 Points, if a project does not attain 80% is an automatic failure. Read our notes and final assessment below.

## **Audit Passed**







### **Assessment Results**

## **Important Notes:**

- Owner can't set max tx amount.
- No high-risk Exploits/Vulnerabilities Were Found in the Source Code.

# Auditor Score =85 Audit Passed







# **Appendix**

## **Finding Categories**

#### **Centralization / Privilege**

Centralization / Privilege findings refer to either feature logic or implementation of components that actagainst the nature of decentralization, such as explicit ownership or specialized access roles incombination with a mechanism to relocate funds.

#### **Gas Optimization**

Gas Optimization findings do not affect the functionality of the code but generate different, more optimalEVM opcodes resulting in a reduction on the total gas cost of a transaction.

#### **Logical Issue**

Logical Issue findings detail a fault in the logic of the linked code, such as an incorrect notion on howblock.timestamp works.

#### **Control Flow**

Control Flow findings concern the access control imposed on functions, such as owneronly functionsbeing invoke-able by anyone under certain circumstances.

#### **Volatile Code**

Volatile Code findings refer to segments of code that behave unexpectedly on certain edge cases that mayresult in a vulnerability.

#### **Coding Style**

Coding Style findings usually do not affect the generated byte-code but rather comment on how to makethe codebase more legible and, as a result, easily maintainable.

#### **Inconsistency**

Inconsistency findings refer to functions that should seemingly behave similarly yet contain different code, such as a constructor assignment imposing different require statements on the input variables than a setterfunction.





## **Coding Best Practices**

ERC 20 Conding Standards are a set of rules that each developer should follow to ensure the code meet a set of creterias and is readable by all the developers.





### Disclaimer

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