

# CFG NINJA AUDITS

Security Assessment

Mini Grok Token

November 26, 2023

Audit Status: Pass

Audit Edition: Standard



3LADE POOL



## **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	0%
Sale Tax	0%
Cannot Buy	Pass
Cannot Sale	Pass
Max Tax	4%
Modify Tax	Yes
Fee Check	Pass
■ Is Honeypot?	Not Detected
Trading Cooldown	Not Detected
Can Pause Trade?	Fail



Contract Priviledge	Description
Pause Transfer?	Detected, Owner need to enable trade.
● Max Tx?	Pass
■ 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
Owner	Oxe8222921A07B931986045Fd880af4c3032A3A937
Self Destruct?	Not Detected
External Call?	Not Detected
Other?	Not Detected
Holders	1
Auditor Confidence	Medium
■ 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	0x2DF0b6729A1C6ADaFa781479FDb4319b8F84A085
Name	Mini Grok
Token Tracker	Mini Grok (MiniGrok)
Decimals	18
Supply	1,000,000,000
Platform	Binance Smart Chain
compiler	v0.8.17+commit.8df45f5f
Contract Name	MiniGrok
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	https://bscscan.com/address/0x2DF0b6729A1C6ADaFa78147 9FDb4319b8F84A085#code
Payment Tx	Corporate





# Main Contract Assessed Contract Name

Name	Contract	Live
Mini Grok	0x2DF0b6729A1C6ADaFa781479FDb4319b8F84A085	Yes

# TestNet Contract Assessed Contract Name

Name	Contract	Live
Mini Grok	0xc404d35044C96fF644073598Cbc9E6366FAcD0A9	Yes

#### **Solidity Code Provided**

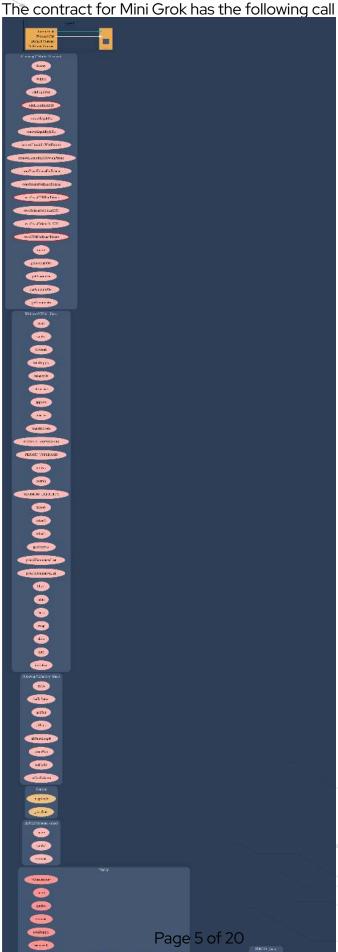
SollD	File Sha-1	FileName
MiniGrok	b5e523309b98ce121ecc83a03f8154fe0021a037	minigrok.sol





## Call Graph

The contract for Mini Grok 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 location ID Severity Name SWC-100 **Pass** Function Default Visibility minigrok.sol L: 0 C: 0 SWC-101 Integer Overflow and **Pass** minigrok.sol L: 0 C: 0 Underflow. SWC-102 **Pass Outdated Compiler** minigrok.sol L: 0 C: 0 Version file. SWC-103 **Pass** A floating pragma is set. minigrok.sol L: 2 C: 0 **Unchecked Call Return** minigrok.sol SWC-104 **Pass** L: 0 C: 0 Value. SWC-105 **Pass Unprotected Ether** minigrok.sol L: 0 C: 0 Withdrawal. SWC-106 L: 0 C: 0 **Pass** Unprotected minigrok.sol **SELFDESTRUCT** Instruction SWC-107 **Pass** Read of persistent state minigrok.sol L: 0 C: 0 following external call. SWC-108 **Pass** State variable visibility is minigrok.sol L: 0 C: 0 not set.. SWC-109 **Pass** Uninitialized Storage minigrok.sol L: 0 C: 0 Pointer. Assert Violation. L: 0 C: 0 SWC-110 **Pass** minigrok.sol





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





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

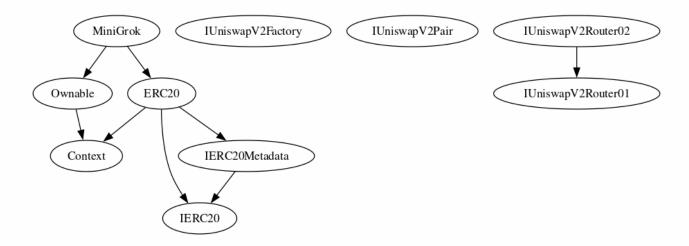
We scan the contract for additional security issues using MYTHX and industry-standard security scanning tools.





## **Inheritance**

The contract for Mini Grok has the following inheritance structure.







#### MiniGrok-13 | Extra Gas Cost For User.

Category	Severity	Location	Status
Logical Issue	1 Informational	minigrok.sol : L: 569 C: 17	Detected

#### **Description**

The user may trigger a tax distribution during the transfer process, which will cost a lot of gas and it is unfair to let a single user bear it.

#### Recommendation

We advise the client to make the owner responsible for the gas costs of the tax distribution.

#### Mitigation

#### **References:**

Writing Clean Code for Solidity: Best Practices for Solidity Development





#### MiniGrok-18 | Stop Transactions by using Enable Trade.

Category	Severity	Location	Status
Logical Issue	Critical	minigrok.sol : L: 619 C: 14	Detected

#### **Description**

Enable Trade is present on the following contract and when combined with Exclude from fees it can be considered a whitelist process, this will allow anyone to trade before others and can represent and issue for the holders.

#### Recommendation

We recommend the project owner to carefully review this function and avoid problems when performing both actions.

#### Mitigation

#### References:

Writing Clean Code for Solidity: Best Practices for Solidity Development





#### MiniGrok-19 | Centralization Privileges of MiniGrok

Category	Severity	Location	Status
Coding Style	Medium	minigrok.sol : L: 0 C: 0	Detected

#### **Description**

Centralized Privileges are found on the following functions.

Function Name	Parameters	Visibility
renounceOwnership		Public
transferOwnership	address newOwner	Public
enableTrading		External
setSwapTokensAtAmount		External
changeGrokWallet		External
setFees		External
excludeFromFees		External
aclaimStuckTokens		External

#### Recommendation

Inheriting from Ownable and calling its constructor on yours ensures that the address deploying your contract is registered as the owner. The onlyOwner modifier makes a function revert if not called by the address registered as the owner. It is important that deployr or owner secure the credentials that has owner priviledge to ensure the security of the project.

#### Mitigation





#### References:

Guide to Ownership and Access Control in Solidity

Writing Clean Code for Solidity: Best Practices for Solidity Development





## 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	Resolved
Critical	1	0	0
High	0	0	0
○ Medium	1	0	0
Low	0	0	0
1 Informational	1	0	0
Total	3	0	o





## **Social Media Checks**

Social Media	URL	Result
Twitter	https://t.me/minigrokcoin	Pass
Other		Fail
Website https://www.minigrokcoin.io/		Pass
Telegram	https://x.com/minigrokworld	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	88/100
Auditor Score	90/100
Review by Section	Score
Manual Scan Score	30
SWC Scan Score	37
Advance Check Score	21

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:**

- The contract needs optimization and fixes.
- The contract has an Open Trade function, however, it has a validation not to close the function.

# Auditor Score = 90 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

CFGNINJA 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 advocation 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.

All information provided in this report does not constitute financial or investment advice, nor should it be used to signal that any persons reading this report should invest their funds without sufficient individual due diligence, regardless of the findings presented. Information is provided 'as is, and CFGNINJA is under no covenant to audited completeness, accuracy, or solidity of the contracts. In no event will CFGNINJA or its partners, employees, agents, or parties related to the provision of this audit report be liable to any parties for, or lack thereof, decisions or actions with regards to the information provided in this audit report.

The assessment services provided by CFGNINJA are subject to dependencies and are under continuing development. You agree that your access or use, including but not limited to any services, reports, and materials, will be at your sole risk on an as-is, where-is, and as-available basis. Cryptographic tokens are emergent technologies with high levels of technical risk and uncertainty. The assessment reports could include false positives, negatives, and unpredictable results. The services may access, and depend upon, multiple layers of third parties.



