CFG NINJA AUDITS

Security Assessment

InSpace Token

June 19, 2023

Audit Status: Pass

Audit Edition: Advanced

POWERED BY
BLADE POOL

Risk Analysis

Classifications of Manual Risk Results

Classification	Description
🔴 Critical	Danger or Potential Problems.
🟠 High	Be Careful or Fail test.
🟢 Low	Pass, Not-Detected or Safe Item.
ℹ Informational	Function Detected

Manual Code Review Risk Results

Contract Priviledge	Description
🟢 Buy Tax	8%
🟢 Sale Tax	8%
🟢 Cannot Sale	Pass
🟢 Cannot Sale	Pass
🟢 Max Tax	16%
ℹ Modify Tax	Yes
🟢 Fee Check	Pass
🟢 Is Honeypot?	Not Detected
🟢 Trading Cooldown	Not Detected
🔴 Can Pause Trade?	Detected, SAFU Dev need to enable trade.
🔴 Pause Transfer?	Detected, SAFU dev needs to enable trading.

Contract Priviledge	Description
🟠 Max Tx?	Fail
🟠 Is Anti Whale?	Detected
🟠 Is Anti Bot?	Detected
🟢 Is Blacklist?	Not Detected
🟢 Blacklist Check	Pass
🟢 is Whitelist?	Not Detected
🟢 Can Mint?	Pass
🟢 Is Proxy?	Not Detected
🟢 Can Take Ownership?	Not Detected
🟢 Hidden Owner?	Not Detected
ℹ Owner	
🟢 Self Destruct?	Not Detected
🟢 External Call?	Not Detected
ℹ Other?	Detected
🟢 Holders	1
🟢 Auditor Confidence	Low

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	0x
Name	InSpace
Token Tracker	InSpace (INSP)
Decimals	18
Supply	1,000,000,000,000
Platform	Binance Smart Chain
compiler	v0.8.9+commit.e5eed63a
Contract Name	GoldLion
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	https://bscscan.com/token/0x#code
Payment Tx	Corporate

Main Contract Assessed
Contract Name

Name	Contract	Live
InSpace	0x	Yes

TestNet Contract Assessed
Contract Name

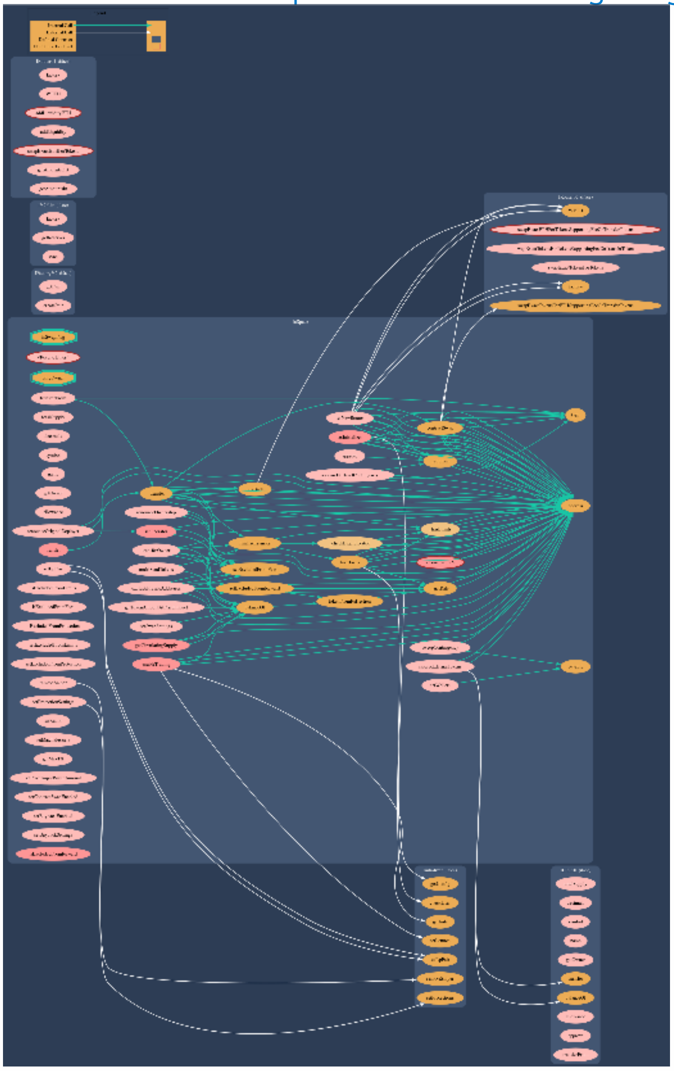
Name	Contract	Live
InSpace	0x74D7fE0E79657C2C4C2920bAb1CAF743d1AE5d48	Yes

Solidity Code Provided

SolID	File Sha-1	FileName
InSpace	cca460491ba6cc6179324b755a211119a65bd119	6-15-2023 InSpace.sol
InSpace		
InSpace		
InSpace		

Call Graph

The contract for InSpace 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.

ID	Severity	Name	File	location
SWC-100	Pass	Function Default Visibility	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-101	Pass	Integer Overflow and Underflow.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-102	Pass	Outdated Compiler Version file.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-103	Pass	A floating pragma is set.	6-15-2023 InSpace.sol	L: 2 C: 0
SWC-104	Pass	Unchecked Call Return Value.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-105	Pass	Unprotected Ether Withdrawal.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-106	Pass	Unprotected SELFDESTRUCT Instruction	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-107	Pass	Read of persistent state following external call.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-108	Low	State variable visibility is not set..	6-15-2023 InSpace.sol	L: 125 C: 30
SWC-109	Pass	Uninitialized Storage Pointer.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-110	Pass	Assert Violation.	6-15-2023 InSpace.sol	L: 0 C: 0

ID	Severity	Name	File	location
SWC-111	Pass	Use of Deprecated Solidity Functions.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-112	Pass	Delegate Call to Untrusted Callee.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-113	Pass	Multiple calls are executed in the same transaction.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-114	Pass	Transaction Order Dependence.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-115	Low	Authorization through tx.origin.	6-15-2023 InSpace.sol	L: 527 C: 80
SWC-116	Pass	A control flow decision is made based on The block.timestamp environment variable.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-117	Pass	Signature Malleability.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-118	Pass	Incorrect Constructor Name.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-119	Pass	Shadowing State Variables.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-120	Low	Potential use of block.number as source of randonmness.	6-15-2023 InSpace.sol	L: 660 C: 34
SWC-121	Pass	Missing Protection against Signature Replay Attacks.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-122	Pass	Lack of Proper Signature Verification.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-123	Low	Requirement Violation.	6-15-2023 InSpace.sol	L: 680 C: 11
SWC-124	Pass	Write to Arbitrary Storage Location.	6-15-2023 InSpace.sol	L: 0 C: 0

ID	Severity	Name	File	location
SWC-125	Pass	Incorrect Inheritance Order.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-126	Pass	Insufficient Gas Griefing.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-127	Pass	Arbitrary Jump with Function Type Variable.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-128	Pass	DoS With Block Gas Limit.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-129	Pass	Typographical Error.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-130	Pass	Right-To-Left-Override control character (U +202E).	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-131	Pass	Presence of unused variables.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-132	Pass	Unexpected Ether balance.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-133	Pass	Hash Collisions with Multiple Variable Length Arguments.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-134	Pass	Message call with hardcoded gas amount.	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-135	Pass	Code With No Effects (Irrelevant/Dead Code).	6-15-2023 InSpace.sol	L: 0 C: 0
SWC-136	Pass	Unencrypted Private Data On-Chain.	6-15-2023 InSpace.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-108 - State Variable Default Visibility

CWE-710: Improper Adherence to Coding Standards

Description:

Labeling the visibility explicitly makes it easier to catch incorrect assumptions about who can access the variable.

Remediation:

Variables can be specified as being public, internal or private. Explicitly define visibility for all state variables.

References:

Ethereum Smart Contract Best Practices - Explicitly mark visibility in functions and state variables

Smart Contract Vulnerability Details

SWC-115 - Authorization through tx.origin

CWE-477: Use of Obsolete Function

Description:

tx.origin is a global variable in Solidity which returns the address of the account that sent the transaction. Using the variable for authorization could make a contract vulnerable if an authorized account calls into a malicious contract. A call could be made to the vulnerable contract that passes the authorization check since tx.origin returns the original sender of the transaction which in this case is the authorized account.

Remediation:

tx.origin should not be used for authorization. Use msg.sender instead.

References:

Solidity Documentation - tx.origin

Ethereum Smart Contract Best Practices - Avoid using tx.origin

SigmaPrime - Visibility.

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.

Smart Contract Vulnerability Details

SWC-123 - Requirement Violation

CWE-573: Improper Following of Specification by Caller

Description:

The Solidity require() construct is meant to validate external inputs of a function. In most cases, such external inputs are provided by callers, but they may also be returned by callees. In the former case, we refer to them as precondition violations. Violations of a requirement can indicate one of two possible issues:

A bug exists in the contract that provided the external input.
The condition used to express the requirement is too strong.

Remediation:

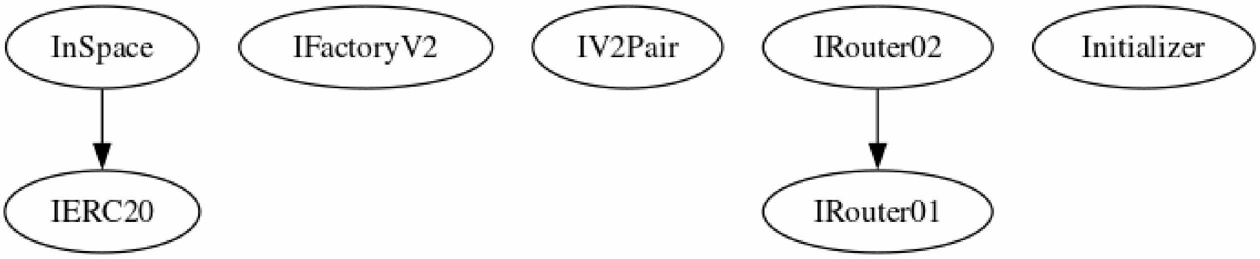
If the required logical condition is too strong, it should be weakened to allow all valid external inputs.Otherwise, the bug must be in the contract that provided the external input and one should consider fixing its code by making sure no invalid inputs are provided.

References:

The use of revert(), assert(), and require() in Solidity, and the new REVERT opcode in the EVM

Inheritance

The contract for InSpace has the following inheritance structure.



Smart Contract Advance Checks

ID	Severity	Name	Result	Status
INSP-01	Low	Potential Sandwich Attacks.	Pass	Not Detected
INSP-02	Low	Function Visibility Optimization	Pass	Not Detected
INSP-03	High	Lack of Input Validation.	Pass	Not Detected
INSP-04	High	Centralized Risk In addLiquidity.	Pass	Not Detected
INSP-05	Low	Missing Event Emission.	Pass	Not Detected
INSP-06	Low	Conformance with Solidity Naming Conventions.	Pass	Not Detected
INSP-07	Low	State Variables could be Declared Constant.	Pass	Not Detected
INSP-08	Low	Dead Code Elimination.	Pass	Not Detected
INSP-09	High	Third Party Dependencies.	Pass	Not Detected
INSP-10	High	Initial Token Distribution.	Pass	Not Detected
INSP-11	High		Pass	Not Detected
INSP-12	High	Centralization Risks In The X Role	Pass	Not Detected
INSP-13	Informational	Extra Gas Cost For User..	Pass	Not Detected
INSP-14	Medium	Unnecessary Use Of SafeMath	Pass	Not Detected
INSP-15	Medium	Symbol Length Limitation due to Solidity Naming Standards.	Pass	Not Detected
INSP-16	Medium	Taxes can be up to 100%	Pass	Not Detected

ID	Severity	Name	Result	Status
INSP-17	Informational	Conformance to numeric notation best practice.	Pass	Not Detected
INSP-18	Informational	Stop Transactions by using Enable Trade.	Fail	Detected

INSP-18 | Stop Transactions by using Enable Trade.

Category	Severity	Location	Status
Logical Issue	🔴 Informational	6-15-2023 InSpace.sol: L: 629 C: 14	Detected

Description

Enable Trade is presend 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.

Remediation

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

Project Action

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.
ℹ 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	0	0	0
🟢 Low	0	0	0
ℹ Informational	0	0	0
Total	1	0	0

Social Media Checks

Social Media	URL	Result
Twitter	https://twitter.com/InSpaceCoin/	Pass
Other	https://www.youtube.com/@inspacecoin	Pass
Website	https://inspace.finance	Pass
Telegram	https://t.me/InSpaceBSC	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	81/100
Auditor Score	81/100
Review by Section	**Score**
Manual Scan Score	20/53
SWC Scan Score	29 /37
Advance Check Score	32 /19

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 has been developed by Trynos.
- The contract cant be deployed by the owner without Dev, this is very important otherwise it will fail.
- Safu dev or Owner needs to enable trade, otherwise holders cant claim.
- Dev needs to configure lp pair and validate liquidity in order for trading to work.
- Simulation failed for auditor since auditor needs safu dev.
- Please DYOR on the project.

Auditor Score =81

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 owner-only 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.

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