

Blockchain Security | Smart Contract Audits | KYC

MADE IN GERMANY

Audit

Security Assessment 06. January, 2022

For Mammon

YOUR GREED LEADS TO LIMITLESS WEALTH AND TREASURE.

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Version	Date	Description
1.0	06. January 2022	Layout projectAutomated- /Manual-Security TestingSummary

Network

Binance Smart Chain (BEP20)

Website

Telegram

Twitter

Facebook

Instagram

Github

Reddit

Medium

Discord

Youtube

TikTok

Description

Mammon is a project of greed, what does it mean? Well, human greed is limitless considering the fact that we make \$1 we choose to double it over and over at the end no matter how much it doubles we want more. This is the fundamental cause to why we have created the perfect project, we believe our mechanism of Mammon is unique on its way since it increases everyone's greed.

Be part of Mammon you will get limitless wealth and treasure.

A First and foremost, we're delighted to present to you our project "Mammon." There is no question that this will be a great experience, a fresh start, and we think that "Mammon" will bring you tremendous wealth in the form of BTC, ETH, SHIBA, DOGE, and other cryptocurrencies as long as all of the individuals engaged in this project remain true and faithful to it. We hope you thoroughly examine our white paper it might be your final opportunity

Project Engagement

During the 5th of January 20221, **Mammon Team** engaged Solidproof.io to audit smart contracts that they created. The engagement was technical in nature and focused on identifying security flaws in the design and implementation of the contracts. They provided Solidproof.io with access to their code repository and whitepaper.



Contract Link v1.0

https://bscscan.com/address/
 0x219cb63b1dfc5eb456c6204476dde2edf274b997#code

Vulnerability & Risk Level

Risk represents the probability that a certain source-threat will exploit vulnerability, and the impact of that event on the organization or system. Risk Level is computed based on CVSS version 3.0.

Level	Value	Vulnerability	Risk (Required Action)
Critical	9 - 10	A vulnerability that can disrupt the contract functioning in a number of scenarios, or creates a risk that the contract may be broken.	Immediate action to reduce risk level.
High	7 – 8.9	A vulnerability that affects the desired outcome when using a contract, or provides the opportunity to use a contract in an unintended way.	Implementation of corrective actions as soon aspossible.
Medium	4 – 6.9	A vulnerability that could affect the desired outcome of executing the contract in a specific scenario.	Implementation of corrective actions in a certain period.
Low	2 – 3.9	A vulnerability that does not have a significant impact on possible scenarios for the use of the contract and is probably subjective.	Implementation of certain corrective actions or accepting the risk.
Informational	0 – 1.9	A vulnerability that have informational character but is not effecting any of the code.	An observation that does not determine a level of risk

Auditing Strategy and Techniques Applied

Throughout the review process, care was taken to evaluate the repository for security-related issues, code quality, and adherence to specification and best practices. To do so, reviewed line-by-line by our team of expert pentesters and smart contract developers, documenting any issues as there were discovered.

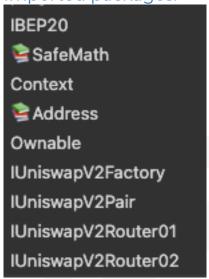
Methodology

The auditing process follows a routine series of steps:

- 1. Code review that includes the following:
 - i) Review of the specifications, sources, and instructions provided to SolidProof to make sure we understand the size, scope, and functionality of the smart contract.
 - ii) Manual review of code, which is the process of reading source code line-byline in an attempt to identify potential vulnerabilities.
 - iii) Comparison to specification, which is the process of checking whether the code does what the specifications, sources, and instructions provided to SolidProof describe.
- 2. Testing and automated analysis that includes the following:
 - i) Test coverage analysis, which is the process of determining whether the test cases are actually covering the code and how much code is exercised when we run those test cases.
 - ii) 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.

Used Code from other Frameworks/Smart Contracts (direct imports)

Imported packages:



Tested Contract Files

This audit covered the following files listed below with a SHA-1 Hash.

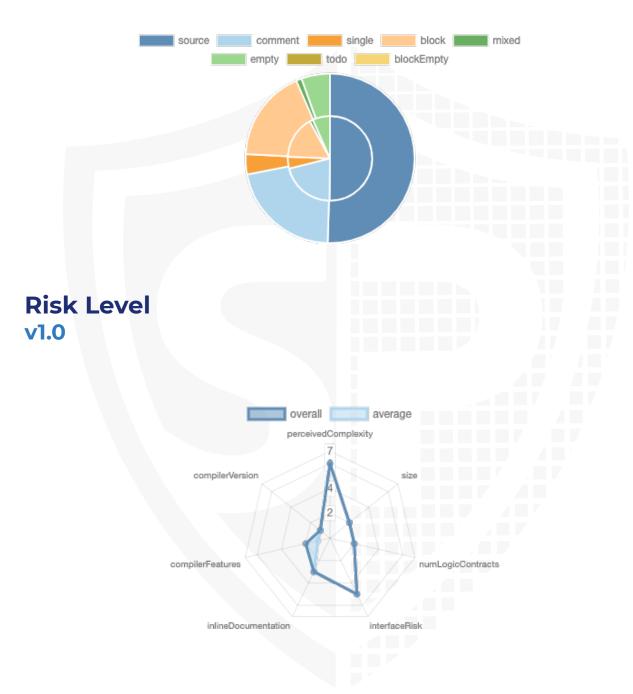
A file with a different Hash has been modified, intentionally or otherwise, after the security review. A different Hash could be (but not necessarily) an indication of a changed condition or potential vulnerability that was not within the scope of this review.

v1.0

File Name	SHA-1 Hash
contracts/mammon.sol	8a5c75b5beb4035617ea06475e215c45321f5188

Metrics

Source Lines v1.0



Capabilities

Components

Version	Contracts	Libraries	Interfaces	Abstract
1.0	2	2	5	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.

Version	Public	Payable
1.0	116	5

Version External		Internal	Private	Pure	View
1.0	82	113	28	21	39

State Variables

Version	Total	Public
1.0	54	28

Capabilities

Version	Solidity Versions observed	Experim ental Features	Can Receive Funds	Uses Assembl Y	Has Destroya ble Contract s
1.0	^0.8.4		yes	yes (2 asm blocks)	

Version	Transf ers ETH	Low- Level Calls	Delega teCall	Uses Hash Functi ons	ECRec over	New/ Create/ Create 2
1.0	yes			yes		



Scope of Work

The above token Team provided us with the files that needs to be tested (Github, Bscscan, Etherscan, files, etc.). The scope of the audit is the main contract (usual the same name as team appended with .sol).

We will verify the following claims:

- 1. Correct implementation of Token standard
- 2. Deployer cannot mint any new tokens
- 3. Deployer cannot burn or lock user funds
- 4. Deployer cannot pause the contract
- 5. Overall checkup (Smart Contract Security)

Inheritance Graph v1.0



Verify Claims

Correct implementation of Token standard

Tested	Verified
√	√

Function	Description	Exist	Tested	Verified
TotalSupply	provides information about the total token supply	\checkmark	√	\checkmark
BalanceOf	provides account balance of the owner's account	\checkmark	√	\checkmark
Transfer	executes transfers of a specified number of tokens to a specified address	√	√	√
TransferFrom	executes transfers of a specified number of tokens from a specified address	√	√	√
Approve	allow a spender to withdraw a set number of tokens from a specified account	√	√	√
Allowance	returns a set number of tokens from a spender to the owner	√	1	✓

Write functions of contract

. approve	29. setMaxTxPercent
. decreaseAllowance	
s. excludeFromFee	30. setNumTokensSellToAddToLiquidity
. includeInFee	04 - 10 - 1 - 11 - 11 - 11 - 1
. increaseAllowance	31. setSwapAndLiquidityEnabled
isLuckAddress	32. setTxgoldAddress
'. lockLongTime	
3. lockShortTime	33. setTxgoldFeePercent
). recoverTokens	
0. renounceOwnership	34. setUniswapPair
1. rescueBNB	35. setUniswapRouter
2. rescueBUSD	or ottomorphisms
3. rescueUSDT	36. transfer
4. rescueWBNB	
5. setAntiWhaleEnabled	37. transferFrom
6. setAntiWhaleThreshold	38. transferOwnership
7. setBurnFeePercent	oo. danalel Ownership
8. setDaySellNumber	39. unlock
9. setDrawNumerator	
20. setDrawTime	
21. setExcludedFromAntiWhale	
22. setExcludedSendDraw	
23. setFomoEnable	
4. setFomoFeePercent	
5. setFomoSpacedTime	
26. setLiquidityFeePercent	
7. setMarketingAddress	
8. setMarketingFeePercent	

Deployer cannot mint any new tokens

Name	Exist	Tested	Verified
Deployer cannot mint	-	-	-

Max / Total Supply: 100.000.000.000



Deployer cannot burn or lock user funds

Name	Exist	Tested	Verified
Deployer cannot lock	√	√	X
Deployer cannot burn	√	√	✓

Comments:

v1.0

- · Tokens will burn while transfer
- Deployer can lock user funds
 - By setting maxTxAmount to 0
- Address can only transfer if the address state is luck true and the sellNumber is higher than
- If anti whale is enabled
 - Amount must be lower than antiwhalethreshold which can be set without any limitations

Deployer cannot pause the contract

Name	Exist	Tested	Verified
Deployer cannot pause	_	_	-



Overall checkup (Smart Contract Security)

Tested	Verified
\checkmark	\checkmark

Legend

Attribute	Symbol
Verfified / Checked	\checkmark
Partly Verified	
Unverified / Not checked	X
Not available	-

Modifiers

onlyOwner

setUniswapRouter

setUniswapPair

excludeFromFee

includeInFee

setTxgoldFeePercent

setMarketingFeePercent

setBurnFeePercent

setFomoFeePercent

setFomoEnable

setNumTokensSellToAddToLiquidity

setTxgoldAddress

setMarketingAddress

setLiquidityFeePercent

setFomoSpacedTime

setMaxTxPercent

setSwapAndLiquidityEnabled

setAntiWhaleEnabled

setAntiWhaleThreshold

setExcludedFromAntiWhale

setExcludedSendDraw

setDrawNumerator

setDrawTime

setDaySellNumber

rescueWBNB

rescueUSDT

rescueBUSD

rescueBNB

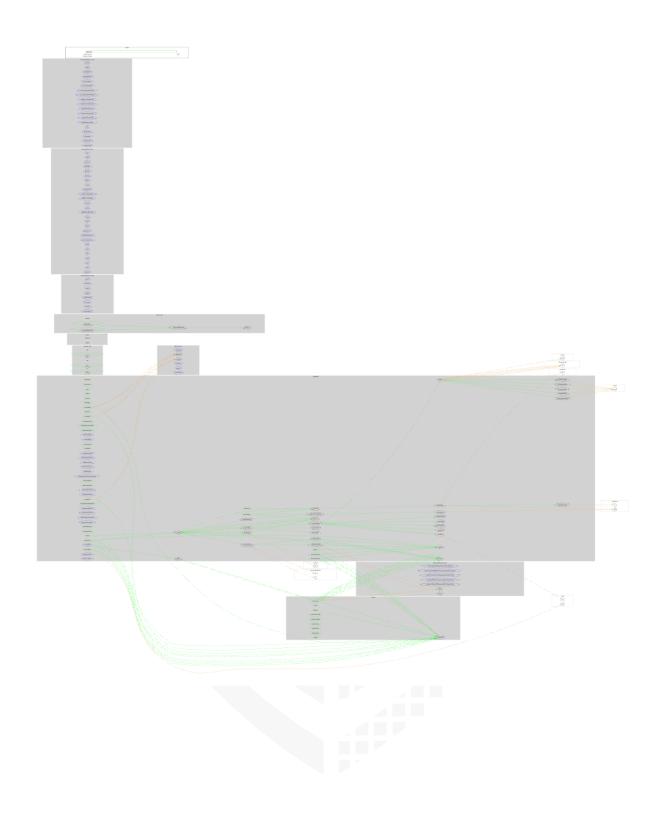
recoverTokens

Comments

- · Deployer can set following state variables without any limitations
 - _numTokensSellToAddToLiquidity
 - _liquidityFee
 - fomoSpacedTime
 - maxTxAmount
 - isExcludedFromAntiWhale
 - _isExcludedSendDraw
 - fixedTime
 - _floatTime
 - _daySellNumber

- Deployer can enable/disable following state variables
 - _isExcludedFromFee
 - _sendFomoEnable
 - swapAndLiquidityEnabled
 - _isAntiWhaleEnabled
 - antiWhaleThreshold
- · Owner can recover tokens by calling recoverTokens
 - tOwned will be subtract from contract and will be added to tOwned owner

CallGraph



Source Units in Scope v1.0

Туре	File	Logic Contracts	Interfaces	Lines	nLines	nSLOC	Comment Lines	Complex. Score	Capabilities
∌≧ Q 6	contracts/mammon.sol	5	5	1344	1106	726	379	690	■ Š →Ⅲ ☆
≥ €Q	Totals	5	5	1344	1106	726	379	690	■ Š → E

Legend

Attribute	Description
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,)

Audit Results

AUDIT PASSED

Critical issues

- no critical issues found -

High issues

- no high issues found -

Medium issues

Issue	File	Type	Line	Description
#1	Main	Unchecked tokens transfer	987, 980, 973	Use `SafeERC20`, or ensure that the transfer/ transferFrom return value is checked

Low issues

Issue	File	Type	Line	Description
#1	Main	Contract doesn't import npm packages from source (like OpenZeppelin etc.)		We recommend to import all packages from npm directly without flatten the contract. Functions could be modified or can be susceptible to vulnerabilities
#2	Main	A floating pragma is set	40	The current pragma Solidity directive is ""^0.8.4"".
#3	Main	Local variables shadowing	1147, 820	Rename the local variables that shadow another component

Informational issues

|--|

#1	Main	Unused return values	1308	Ensure that all the return values of the function calls are used and handle both success and failure cases if needed by the business logic
#2	Main	Functions that are not used	362, 326, 335, 349, 358, 276, 302, 250	Remove unused functions
#3	Main	Unused state variables	666	Remove unused state variables
#4	Main	Include old state variables into fee/ antiwhale/draw after changing	909, 918,	Old state variables are not excluded from fee/antiwhale/ draw after setting new variables
#5	Main	Naming convention	677, 684, 676, 682, 683	Constants are not upper cased

Commented Code exist

There are some instances of code being commented out in the following files that should be removed:

Line	Comment
211	// assert(a == $b * c + a % b$); // There is no case in which this doesn't hold
470, 482, 525, 617	// pragma solidity >=0.5.0;

Recommendation

Remove the commented code, or address them properly.

Audit Comments 06. January 2022:

· Deployer can lock user funds

SWC Attacks

ID	Title	Relationships	Status
<u>SW</u> <u>C-1</u> <u>36</u>	Unencrypted Private Data On-Chain	CWE-767: Access to Critical Private Variable via Public Method	PASSED
<u>SW</u> <u>C-1</u> <u>35</u>	Code With No Effects	CWE-1164: Irrelevant Code	PASSED
<u>SW</u> <u>C-1</u> <u>34</u>	Message call with hardcoded gas amount	CWE-655: Improper Initialization	PASSED
<u>SW</u> <u>C-1</u> <u>33</u>	Hash Collisions With Multiple Variable Length Arguments	CWE-294: Authentication Bypass by Capture-replay	PASSED
<u>SW</u> <u>C-1</u> <u>32</u>	Unexpected Ether balance	CWE-667: Improper Locking	PASSED
<u>SW</u> <u>C-1</u> <u>31</u>	Presence of unused variables	CWE-1164: Irrelevant Code	PASSED
<u>SW</u> <u>C-1</u> <u>30</u>	Right-To-Left- Override control character (U+202E)	CWE-451: User Interface (UI) Misrepresentation of Critical Information	PASSED
<u>SW</u> <u>C-1</u> <u>29</u>	Typographical Error	CWE-480: Use of Incorrect Operator	PASSED
<u>SW</u> <u>C-1</u> <u>28</u>	DoS With Block Gas Limit	CWE-400: Uncontrolled Resource Consumption	PASSED

<u>SW</u> <u>C-1</u> <u>27</u>	Arbitrary Jump with Function Type Variable	CWE-695: Use of Low-Level Functionality	PASSED
<u>SW</u> <u>C-1</u> <u>25</u>	Incorrect Inheritance Order	CWE-696: Incorrect Behavior Order	PASSED
<u>SW</u> <u>C-1</u> <u>24</u>	Write to Arbitrary Storage Location	CWE-123: Write-what-where Condition	PASSED
<u>SW</u> <u>C-1</u> <u>23</u>	Requirement Violation	CWE-573: Improper Following of Specification by Caller	PASSED
<u>SW</u> <u>C-1</u> <u>22</u>	Lack of Proper Signature Verification	CWE-345: Insufficient Verification of Data Authenticity	PASSED
<u>SW</u> <u>C-1</u> <u>21</u>	Missing Protection against Signature Replay Attacks	CWE-347: Improper Verification of Cryptographic Signature	PASSED
SW C-1 20	Weak Sources of Randomness from Chain Attributes	CWE-330: Use of Insufficiently Random Values	PASSED
<u>SW</u> <u>C-11</u> <u>9</u>	Shadowing State Variables	CWE-710: Improper Adherence to Coding Standards	PASSED
<u>SW</u> <u>C-11</u> <u>8</u>	Incorrect Constructor Name	CWE-665: Improper Initialization	PASSED
<u>SW</u> <u>C-11</u> <u>7</u>	Signature Malleability	CWE-347: Improper Verification of Cryptographic Signature	PASSED

<u>SW</u> <u>C-11</u> <u>6</u>	Timestamp Dependence	CWE-829: Inclusion of Functionality from Untrusted Control Sphere	PASSED
<u>SW</u> <u>C-11</u> <u>5</u>	Authorization through tx.origin	CWE-477: Use of Obsolete Function	PASSED
<u>SW</u> <u>C-11</u> <u>4</u>	Transaction Order Dependence	CWE-362: Concurrent Execution using Shared Resource with Improper Synchronization ('Race Condition')	PASSED
<u>SW</u> <u>C-11</u> <u>3</u>	DoS with Failed Call	CWE-703: Improper Check or Handling of Exceptional Conditions	PASSED
<u>SW</u> <u>C-11</u> <u>2</u>	Delegatecall to Untrusted Callee	CWE-829: Inclusion of Functionality from Untrusted Control Sphere	PASSED
<u>SW</u> <u>C-11</u> <u>1</u>	Use of Deprecated Solidity Functions	CWE-477: Use of Obsolete Function	PASSED
<u>SW</u> <u>C-11</u> <u>O</u>	Assert Violation	CWE-670: Always-Incorrect Control Flow Implementation	PASSED
<u>SW</u> <u>C-1</u> <u>09</u>	Uninitialized Storage Pointer	CWE-824: Access of Uninitialized Pointer	PASSED
<u>SW</u> <u>C-1</u> <u>08</u>	State Variable Default Visibility	CWE-710: Improper Adherence to Coding Standards	PASSED
<u>SW</u> <u>C-1</u> <u>07</u>	Reentrancy	CWE-841: Improper Enforcement of Behavioral Workflow	PASSED
SW C-1 06	Unprotected SELFDESTRUC T Instruction	CWE-284: Improper Access Control	PASSED

<u>SW</u> <u>C-1</u> <u>05</u>	Unprotected Ether Withdrawal	CWE-284: Improper Access Control	PASSED
<u>SW</u> <u>C-1</u> <u>04</u>	Unchecked Call Return Value	CWE-252: Unchecked Return Value	PASSED
SW C-1 03	Floating Pragma	CWE-664: Improper Control of a Resource Through its Lifetime	NOT PASSED
SW C-1 02	Outdated Compiler Version	CWE-937: Using Components with Known Vulnerabilities	PASSED
<u>SW</u> <u>C-1</u> <u>O1</u>	Integer Overflow and Underflow	CWE-682: Incorrect Calculation	PASSED
<u>SW</u> <u>C-1</u> <u>00</u>	Function Default Visibility	CWE-710: Improper Adherence to Coding Standards	PASSED



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