

**Blockchain Security - Smart Contract Audits** 

# **Security Assessment**

March 09, 2022



Disclaimer	3
Description	5
Engagement	5
Project Engagement	5
Logo	6
Contract Link	6
Risk Level Classification	7
Methodology	8
Used Code from other Frameworks / Smart Contracts (Imports)	9
Description	10
Scope of Work	12
Inheritance Graph	13
Verify Claim	14
Overall Checkup	19
Write Functions of Contract	20
SWC Attack	21
Audit Result	25
Audit Comments	26

#### **Disclaimer**

**ContractWolf.io** audits and reports should not be considered as a form of project's "advertisement" and does not cover any interaction and assessment from "project's contract" to "external contracts" such as Pancakeswap or similar.

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ContractWolf provides transparent report to all its "clients" and to its "clients participants" and will not claim any guarantee of bug-free code within it's SMART CONTRACT.

**ContractWolf** presence is to analyze, audit and assess the client's smart contract's code.

Each company or projects should be liable to its security flaws and functionalities.

#### **Network**

Binance Smart Chain (BEP20)

## Website

https://www.millionsafuu.com/

# **Twitter**

https://twitter.com/MillionSAFUU

## **Discord**

https://discord.gg/Nn5tHan2UR

# **Telegram**

https://t.me/millionSAFUU

# **Description**

**TBA** 

# **ContractWolf Engagement**

9<sup>th</sup> of March 2022, **MillionSAFUU** engaged and agrees to audit their smart contract's code by ContractWolf. The goal of this engagement was to identify if there is a possibility of security flaws in the implementation of the contract or system.

**ContractWolf** will be focusing on contract issues and functionalities along with the projects claims from smart contract to their website, whitepaper and repository which has been provided by **MillionSAFUU**.

# Logo



#### Contract link:

https://bscscan.com/address/0xd66859a053b42f35c0159e6153f19a250e 23666e

#### **Risk Level Classification**

Risk Level represents the classification or the probability that a certain function or threat that can exploit vulnerability and have an impact within the system or contract.

Risk Level is computed based on CVSS Version 3.0

Level	Value	Vulnerability
Critical	9 - 10	An exposure that can affect the contract functions in several events that can risk and disrupt the contract
High	7 - 8.9	An exposure that can affect the outcome when using the contract that can serve as an opening in manipulating the contract in an unwanted manner
Medium	4 - 6.9	An opening that could affect the outcome in executing the contract in a specific situation
Low	0.1 - 3.9	An opening but doesn't have an impact on the functionality of the contract

Informational	0	An opening that consists of information's but will not risk or affect the contract
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# **Auditing Approach**

Every line of code along with its functionalities will undergo manual review to check its security issues, quality, and contract scope of inheritance. The manual review will be done by our team that will document any issues that there were discovered.

# Methodology

The auditing process follows a routine series of steps:

- 1. Code review that includes the following:
  - Review of the specifications, sources, and instructions provided to ContractWolf to make sure we understand the size, scope, and functionality of the smart contract.
  - Manual review of code, our team will have a process of reading the code line-by-line with the intention of identifying potential vulnerabilities and security flaws.
- 2. Testing and automated analysis that includes:
  - Testing the smart contract functions with common test cases and scenarios, to ensure that it returns the expected results.
- 3. Best practices review, the team will review the contract with the aim to improve efficiency, effectiveness, clarifications, maintainability, security, and control within the smart contract.
- 4. Recommendations to help the project take steps to secure the smart contract.

# Used Code from other Frameworks/Smart Contracts (Direct Imports)

#### **Imported Packages**

- SafeMathInt
- SafeMath
- IERC20
- IPancakeSwapPair
- IPancakeSwapRouter
- IPancakeSwapFactory
- Ownalbe
- ERC20Detailed

# **Description**

Optimization enabled: Yes

Version: v0.7.6

Decimal: 5

Symbol: \$MillionSAFUU

# **Capabilities**

#### **Components**

Version	Contracts	Libraries	Interfaces	Abstract
1.0	2	2	4	1

#### **Exposed Functions**

V	ersion	Public	Private	
1.0		11		0

Version	External	Internal
1.0	84	24

#### **State Variables**

Version	Total	Public
1.0	43	30

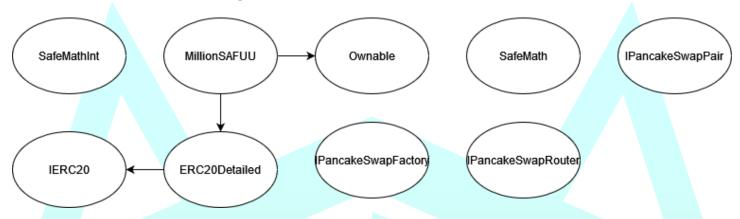
# Capabilities

Version	Solidity Versions Observed	Experimental Features	Can Receive Funds	Uses Assembly	Has Destroyable Contracts
1.0	^0.7.6		Yes	Yes (1 block)	No

# **Scope of Work**

**MillionSAFUU's** 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.

# **Inheritance Graph**



# **Verify Claims**

## **Correct implementation of Token Standard**

Tested	Verified
<b>✓</b>	X

Function	Description	Exist	Tested	Verified
TotalSupply	Information about the total coin or token supply	<b>√</b>	<b>√</b>	<b>√</b>
BalanceOf	Details on the account balance from a specified address	<b>√</b>	<b>√</b>	✓
Transfer	An action that transfers a specified amount of coin or token to a specified address	<b>√</b>	<b>√</b>	<b>✓</b>
TransferFrom	An action that transfers a specified amount of coin or token from a specified address	<b>√</b>	<b>√</b>	✓
Approve	Provides permission to withdraw specified number of coin or token from a specified address	<b>√</b>	<b>√</b>	✓

# **Optional implementation**

Function	Description	Exist	Tested	Verified
renounceOwnership	Owner renounce ownership for more trust	<b>√</b>	<b>√</b>	<b>√</b>

# Deployer cannot mint any new tokens after deployment

Statement	Exist	Tested	Verified	File
Deployer can't mint	<b>√</b>	<b>√</b>	<b>✓</b>	Main
Deployer can't generate  NFT	<b>√</b>	✓	<b>√</b>	Main

Max / Total supply: 325,000

# **Deployer cannot burn or lock user funds**

Statement	Exist	Tested	Verified
Deployer cannot lock	<b>√</b>	<b>√</b>	<b>√</b>
Deployer cannot burn	<b>√</b>	<b>√</b>	<b>√</b>

# **Deployer cannot pause contract**

Statement	Exist	Tested	Verified
Deployer cannot pause	<b>√</b>	<b>√</b>	<b>✓</b>

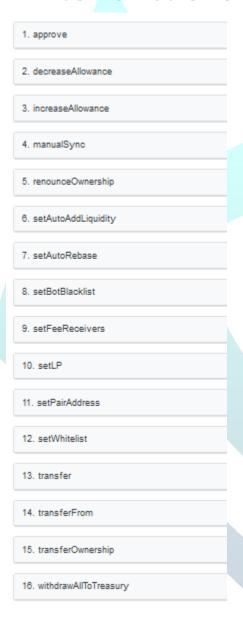
# **Overall Checkup (Smart Contract Security)**



## Legend

Attribute	Symbol
Verified / Checked	<i>✓</i>
Partly Verified	X
Unverified / Not checked	P
Not Available	-

# **Write Functions of Contract**



# **SWC Attacks**

ID	Title	Relationships	Status
SWC-136	Unencrypted Private Data On-Chain	CWE-767: Access to Critical Private Variable via Public Method	PASSED
SWC-135	Code With No Effects	CWE-1164: Irrelevant Code	PASSED
<u>SWC-134</u>	Message call with hardcoded gas amount	CWE-655: Improper Initialization	NOT PASSED
SWC-133	Hash Collisions with Multiple Variable Length Arguments	CWE-294: Authentication Bypass by Capture-replay	PASSED
SWC-132	Unexpected Ether balance	CWE-667: Improper Locking	PASSED
SWC-131	Presence of unused variables	CWE-1164: Irrelevant Code	PASSED
SWC-130	Right-To Left Override control character (U+202E)	CWE-451: User Interface (UI) Misrepresentation of Critical Information	PASSED
SWC-129	Typographical Error	CWE-480: Use of Incorrect Operator	PASSED

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SWC-128	DoS With Block	CWE-400: Uncontrolled	NOT PASSED
	Gas Limit	Resource Consumption	
	Arbitrary Jump	CWE-695: Use of Low-Level	
<u>SWC-127</u>	with Function	<u>Functionality</u>	PASSED
	Type Variable		
SWC-126	Insufficient Gas	CWE-691: Insufficient	NOT PASSED
3WC-120	Griefing	Control Flow Management	NOT PASSED
CVA/C 12F	Incorrect	CWE-696: Incorrect	DACCED
SWC-125	Inheritance Order	Behavior Order	PASSED
	Write to	CWE-123: Write-what-	
SWC-124	Arbitrary	where Condition	PASSED
	Storage Location		
	Requirement	CWE-573: Improper	
SWC-123	Violation	Following of Specification	PASSED
		by Caller	
	Lack of Proper	CWE-345: Insufficient	
SWC-122	Signature	Verification of Data	PASSED
	Verification	Authenticity	
	Missing Protection	CWE-347: Improper	
	against Signature	Verification of	
SWC-121	Replay Attacks	Cryptographic	PASSED
		Signature	
	Weak Sources of	CWE-330: Use of	
SWC-120	Randomness from	Insufficiently	NOT PASSED
	Chain Attributes	Random Values	
	Shadowing State	CWE-710: Improper	
SWC-119	Variables	Adherence to Coding	PASSED
		Standards	
_	Incorrect	CWE-665: Improper	
<u>SWC-118</u>	Constructor	Initialization	PASSED

	Name		
<u>SWC-117</u>	Signature Malleability	CWE-347: Improper Verification of Cryptographic Signature	PASSED
SWC-116	Timestamp Dependence	CWE-829: Inclusion of Functionality from Untrusted Control Sphere	NOT PASSED
<u>SWC-115</u>	Authorization through tx.origin	CWE-477: Use of Obsolete Function	PASSED
<u>SWC-114</u>	Transaction Order Dependence	CWE-362: Concurrent Execution using Shared Resource with Improper Synchronization ('Race Condition')	PASSED
SWC-113	DoS with Failed Call	CWE-703: Improper Check or Handling of Exceptional Conditions	PASSED
SWC-112	Delegate call to Untrusted Callee	CWE-829: Inclusion of Functionality from Untrusted Control Sphere	PASSED
<u>SWC-111</u>	Use of Deprecated Solidity Functions	CWE-477: Use of Obsolete Function	PASSED
<u>SWC-110</u>	Assert Violation	CWE-670: Always- Incorrect Control Flow Implementation	PASSED
<u>SWC-109</u>	Uninitialized Storage Pointer	CWE-824: Access of Uninitialized Pointer	PASSED

<u>SWC-108</u>	State Variable Default Visibility	CWE-710: Improper Adherence to Coding Standards	PASSED
SWC-107	Reentrancy	CWE-841: Improper Enforcement of Behavioral Workflow	PASSED
SWC-106	Unprotected SELFDESTRUCT Instruction	CWE-284: Improper Access Control	PASSED
SWC-105	Unprotected Ether Withdrawal	CWE-284: Improper Access Control	PASSED
<u>SWC-104</u>	Unchecked Call Return Value	CWE-252: Unchecked Return Value	PASSED
SWC-103	Floating Pragma	CWE-664: Improper Control of a Resource Through its Lifetime	PASSED
SWC-102	Outdated Compiler Version	CWE-937: Using Components with Known Vulnerabilities	PASSED
SWC-101	Integer Overflow and Underflow	CWE-682: Incorrect Calculation	PASSED
SWC-100	Function Default Visibility	CWE-710: Improper Adherence to Coding Standards	PASSED

# AUDIT PASSED

#### **Critical Issues**

No critical issues found

**High Issues** 

No high issues found

**Medium Issues** 

No medium issues found

Low Issues

No low issues found

**Informational Issues** 

No informational issues found

**Function Issues** 

No informational issues found

## **Audit Comments**

Deployer cannot mint after initial deployment

Deployer cannot pause/lock the contract

Deployer cannot set max transaction limit

Deployer cannot burn tokens

Deployer can set and modify taxes/fees

Contract has a rebase variable

Read report for more information.