



RugFreeCoins Audit



NFT Magic Token

Smart Contract Security Audit

January 16, 2022

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Audit details



Audited project

NFT Magic Token



Contract Address

0x932f1e2992a95Be2d0E576fE0292e96415920592



Client contact

NFT Magic Team



Blockchain

Binance smart chain



Project website

<https://nftmagic.app/>

Disclaimer

This is a limited report on our findings based on our analysis, in accordance with good industry practice as at the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the disclaimer below – please make sure to read it in full.

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Background

Rugfreecoins was commissioned by NFT Magic Token to perform an audit of the smart contract.

<https://bscscan.com/address/0x932f1e2992a95Be2d0E576fE0292e96415920592>

The focus of this audit is to verify that the smart contract is secure, resilient and working according to the specifications.

The information in this report should be used to understand the risk exposure of the smart contract, project feasibility, long term sustainability and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

About the project

NFT Magic is a token built on the Binance Smart Chain that is with an innovative investment use case the main purpose of which is to seek out constant revenue sources, and heading towards building a one stop platform that allow users to get an overview of all of their holdings, well needed statistics and future investment advise based on current and historical holdings. Each transaction, purchase incurs 12% fee, and sale incurs a 13% fee.

Features

- ❖ The **NFT Magic Token rewards** will be distributed among every holder proportional to how many tokens each individual holds in values of **1% when buying and selling**.
- ❖ The **sustainability fee of 10% when buying and selling for marketing and dev** is what allows NFT Magic to hold the aforementioned promise. Tokens will be sent to a marketing and dev wallet per transaction.
- ❖ The additional component included under the sustainability section is a **liquidity fee of 2% when buying and selling**, which is a redistribution mechanism that ensures the trading pool always has sufficient liquidity.

Tokenomics

13% fee when buying and selling

- ❖ 1% of trade goes to holders' pockets in NFT Magic tokens.
- ❖ 2% of trade goes to the liquidity pool.
- ❖ 10% of trade goes to the marketing and Dev wallet in tokens.

Phase 1

JAN - FEB 2022

- ✓ Creation of Smart contract
- ✓ MAJOR crypto influencer partnerships (no less than 2m + following)
- ✓ Completion of Website
- ✓ First long-term partnership with Massive profile
- ⚡ Creation and build of all social medias (Facebook, Medium, Telegram, Instagram, Twitter, Reddit, Bitcointalk)
- ⚡ Whitepaper completion and publication on Medium
- ⚡ Begin development of our cross-chain NFT platform
- ⚡ Presale on Pinksale Finance, SC/HC at 100/200 BNB
- 🔧 Launch of token with initial LP of 120 BNB
- 🔧 Massive marketing campaign (Poocoin ads, Telegram Call groups, CMS and Reddit posts, Articles on Yahoo Finance and similar news sites) - We are first on the market with this product but others will copy, therefore we will have to grow aggressively to claim market shares and assert dominance

Phase 2

FEB - MARCH 2022

- ▣ Hiring of crypto marketing agency
- ▣ Coingecko application
- ▣ Coinmarketcap application
- ▣ Continued development of machine learning algo that will detect what you own and give recommendations on valuable buys that is similar
- ▣ Further development of our cross-chain NFT analytics platform
- ▣ Development of staking function
- ▣ Coingecko expedited listing
- ▣ Coinmarketcap expedited listing
- ▣ Listing on Coinhunt, Coinvote, Coinmooner and all similar sites
- ▣ Surpass 1000 holders
- ▣ LP growing to 200+ BNB
- ▣ Continue previous marketing on a bigger scale
- ▣ More and bigger influencer partnerships
- ▣ Second Long-term partnership with massive profile
- ▣ SpaceX and Times Square Billboards
- ▣ Dextools trending
- ▣ Coinmarketcap trending
- ▣ Coingecko trending

Phase 3

MARCH - APRIL 2022

- ▣ Launching Alpha version of our Cross-chain NFT analytics platform (supporting SOL)
- ▣ Staking going live
- ▣ Dextools trending
- ▣ Coinmarketcap trending
- ▣ Coingecko trending
- ▣ Third, Fourth and Fifth long-term partnerships secured
- ▣ Continued aggressive marketing
- ▣ Surpass 5000+ holders
- ▣ LP grown to a minimum of 1000+ BNB
- ▣ Further development of platform, focus on cross-chain
- ▣ First CEX listing - Tier 2 CEX


Phase 4

Q2 - Q3 2022

- ▣ Beta version of our Cross-chain NFT analytics platform (now supporting SOL & ETH)
- ▣ Further massive marketing push to grow aggressively
- ▣ Second CEX listing - Tier 1 CEX
- ▣ Surpass 25000+ holders
- ▣ LP grown to a minimum of 6000+ BNB
- ▣ Further development of the platform to support other popular NFT-chains & creating our own cross-chain NFT marketplace

The team


Founders



Martin S.

Background in business, sales and marketing since he was 16. Have worked as an employee, employer and has run several businesses, some more successful than others. Has since 1.5 years back been involved in crypto, both as an investor as well as an admin in various projects and other leadership positions. Has a passion for football, dogs and gaming outside of crypto.

Is one of the co-founders and the CEO of the project.




Jeffrey G.

Worked in the tech and startup industry for over 10+ years as a designer, developer and head of product. Has since the age of 20 run his own digital agency, having customers on a global scale such as Coca Cola, H&M, Warner Bros, to name a few. He sold his part of that agency and founded several tech startups, some more successful than others. His most recent company was sold in early 2021 and he completed his first large exit. Works full time with Crypto and NFTs. Loves design in all its forms, both digital and real life such as interior design.

Does all the design and UX for the project and is one of the Co-founders.

DEVELOPERS


NFTMAGIC



Paramjeet S.

Full-stack developer from India specialized in smart contracts. Have worked with development on the blockchain for the last 4 years. Can do anything, even create magic. Lives and breathes coding. Outside of work (which is barely ever), he loves Marvel movies.


Paramjeet works together with Jeff and the development team. Pram is responsible for anything and everything related to the contract.



Pavel S.

Has 3 years experience with development on the blockchain. Is our lead backend developer and functions as the teams CTO, focusing on building the platform. Pavel works out a lot (5 days a week) and enjoys focusing on having a healthy and sustainable lifestyle. Recycling and the environment are important to him.

Makes decisions and chooses what is the most important parts to focus on now, and what the focus of the next sprint is.



Danielle K.

Our Data Scientist. Has been working with machine learning and building algorithms for the past 6 years, working both as an employee and freelancer for companies such as Amazon, Facebook and Savvie.


Is a big fan of music, plays in her own jazz-band in her spare time together with 4 of her best friends. Also loves to go on long walks with her Jack Russell, "Spot".

Will be in charge of machine learning development.

MODERATORS


NFTMAGIC

We are always looking for talented and experienced moderators to join our growing team.
If you want to apply just DM @magic_222 in Telegram.



Eric F. (@magic_222)

Is our lovely community lead and head of our admin team. Have been an admin himself for various crypto projects in the last 7-8 months. Works with real estate as her day job currently, primarily with development. Loves to discuss real-estate in general and are always available on Telegram in general but loves it a little extra when the discussion goes towards real-estate. Have invested in crypto for a while.



Gaykie (@gyakie_121)

Has a lot of experience being an admin for crypto projects. Have worked in the last 2 years as an admin for various projects such as Redzilla, Alienverse and others. Loves to swim on her spare time.

Target market and the concept

Target market

- ❖ Anyone who's interested in the Crypto space with long-term investment plans.
- ❖ Anyone who's ready to earn a passive income by holding tokens.
- ❖ Anyone who's interested in trading tokens.
- ❖ Anyone who's interested in collecting NFTs or trading NFTs.
- ❖ Anyone who's interested in using the multichain advance dashboard system.
- ❖ Anyone who's interested in taking part with the Shiba collection gaming NFT community.
- ❖ Anyone who's interested in using the advance recommendations system to analyze and buy NFTs and tokens.
- ❖ Anyone who's interested in taking part with the future plans of the NFT Magic token.
- ❖ Anyone who's interested in making financial transactions with any other party using NFT Magic as the currency.

Core concept

PROBLEM

Over the last year, NFT collections have grown to a multi billion \$ market, yet no platform exists that meets the demand of collectors who want to track their newly minted or purchased NFTs, while simultaneously engaging with their communities.

For example, token holders and NFT collectors still cannot see the value of their entire holdings in one chart. Similarly, projects are manually updating spreadsheets to keep track of basic metrics like market capitalization and unique holders. When projects want to share this data with their holders, they resort to using discord or telegram channels instead of easy to understand API-enabled dashboards. There is currently no good way to access all the relevant statistics that holders need and want. On top of this, holders also have to manually search and find potential new investments themselves, missing out on many relevant projects that they would be interested in if they only found it.

SOLUTION

NFT Magic aims to solve these problems with our one-stop platform that allows users to get an overview of all of their holdings, well-needed statistics and future investment advice based on current and historical holdings.

Our platform will have the following main features:



Multi-chain connection



Powerful Dashboard



Recommendations



Snipe

The NFT magic reward system

1% of each transaction when buying and selling is getting taxed and sent in tokens and is split amongst all holders. Holders will be eligible to receive tokens in each transaction and rewards are proportional to how many tokens each individual holds.

Sustainable mechanism

The **sustainability fee of 10% when buying and selling for marketing and dev** is what allows NFT Magic to promote the token and use funds to further the development of the platform. Tokens will be sent to a marketing wallet per transaction.

The liquidity fee of 2% when buying and selling, which is a redistribution mechanism that ensures the trading pool always has sufficient liquidity.



MULTICHAIN

Users will be able to connect their BSC, Ethereum and Solana wallets onto our platform to gather all of their NFTs and tokens, all in one place to show all necessary data that users need in order to gain a good overview.



RECOMMENDATIONS

Our proprietary machine learning algo will be able to recommend to users what NFTs they might be interested in purchasing based on what they own and have owned historically. It will analyze market trends and select projects deemed to have a great ROI. Our machine learning algo will as time goes by know what to recommend so our users never miss opportunities they would be interested in.

This makes it easier for users to navigate the jungle that is the NFT space. With an endless stream of new projects on various different blockchains, finding ones that you believe in is harder than ever. Our tech will help do that for you.



DASHBOARD

An easy-to-read project dashboard is a key component of any crypto token and NFT collection. Increasingly, members want to know more fine-grained metrics about their projects that are not immediately available on marketplace platforms (such as Coinmarketcap, Coingecko, Magiceden, Opensea and similar). Likewise, projects want an easy way to communicate key progress and data points to their holders, without having to post it in discord or telegram where it gets lost easily.

When a user connects their wallet(s) to our dashboard, they will be able to see:

- ★ Individual and collective current value (Floor price & Average sale price) of their NFTs.
- ★ Individual and collective buy-in value of their NFTs
- ★ Charting tool for the value of their individual and collective NFTs
- ★ Statistics for all the holdings including market capitalization, daily volume and all other key points that projects want to share with their holders.

This gives users a clear overview of how much their NFTs are worth, if its gone up/down in price compared to when they bought it, what the trend is looking like for their NFTs and all necessary data needed in order to make informed decisions.



SNIPE

We will analyze all the popular and trending NFT collections across the chains supported and fetch ranking data from the most popular ranking tools. We then match an NFT with its current ranking, and compare it to other available items to determine if it has a good price. If the price is calculated to be attractive based on traits and ranking, we will show which NFTs is a bargain to snipe (buy). We have currently built this feature in a spreadsheet for our own use, and it has worked wonders.

See demo to the right.

Potential to grow with score points

1.	Project efficiency	10/10
2.	Project uniqueness	10/10
3	Information quality	10/10
4	Service quality	9/10
5	System quality	9/10
6	Impact on the community	10/10
7	Impact on the business	8/10
8	Preparing for the future	10/10
Total Points		9.5/10

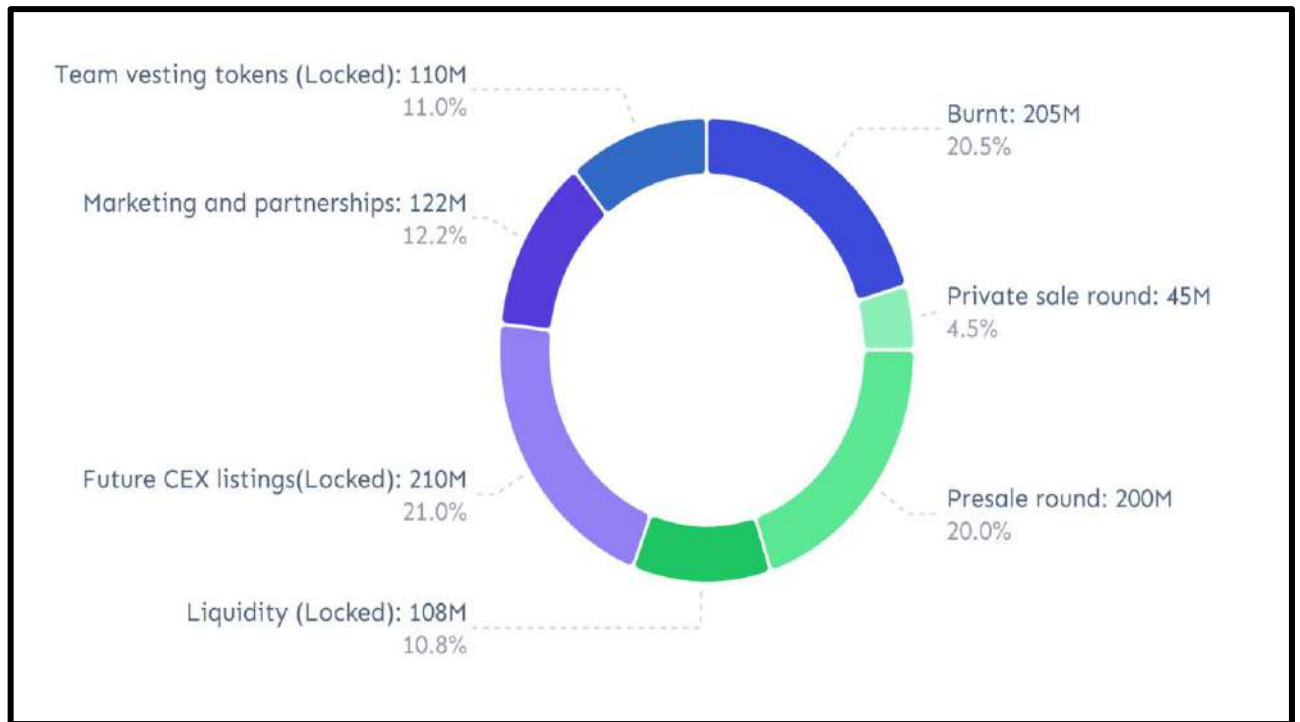
Contract details

Token contract details for 16th January 2022

Contract name	NFT Magic
Contract address	0x932f1e2992a95Be2d0E576fE0292e96415920592
Token supply	1,000,000,000
Token ticker	MAGIC
Decimals	9
Token holders	5
Transaction count	11
Marketing wallet	0x92c465c033b23b5ca3d8a3da944945e225fff2ee
Dividend tracker	0xf0e71d7ae7aaba7438ebd804cbfa3914cc4aa42a
Contract deployer address	0x911F0df56b011b7b37B97B2B41c7b886644B7BC6
Contract's current owner address	0x911f0df56b011b7b37b97b2b41c7b886644b7bc6

Token distribution

Tokens are distributed as follows:




























































Contract code function details

No	Category	Item	Result
1	Coding conventions	BRC20 Token standards	pass
		compile errors	pass
		Compiler version security	pass
		visibility specifiers	pass
		Gas consumption	pass
		SafeMath features	pass
		Fallback usage	pass
		tx.origin usage	pass
		deprecated items	pass
		Redundant code	pass
		Overriding variables	pass
2	Function call audit	Authorization of function call	pass
		Low level function (call/delegate call) security	pass
		Returned value security	pass
		Selfdestruct function security	pass
3	Business security	Access control of owners	pass
		Business logics	pass
		Business implementations	pass
4	Integer overflow/underflow		pass
5	Reentrancy		pass
6	Exceptional reachable state		pass
7	Transaction ordering dependence		pass
8	Block properties dependence		pass
9	Pseudo random number generator (PRNG)		pass
10	DoS (Denial of Service)		pass
11	Token vesting implementation		pass
12	Fake deposit		pass
13	Event security		pass






















Contract description table














































Below table represents the summary of the contracts and methods in the token contract. We scanned the whole contract and listed down all the Interfaces, functions and implementations with its visibility and mutability.


































Contract	Type	Bases		
L	Function Name	Visibility	Mutability	Modifiers
IERC20	Interface			
L	totalSupply	External 		NO 
L	balanceOf	External 		NO 
L	transfer	External 		NO 
L	allowance	External 		NO 
L	approve	External 		NO 
L	transferFrom	External 		NO 
IERC20Metadata	Interface	IERC20		
L	name	External 		NO 
L	symbol	External 		NO 
L	decimals	External 		NO 
Context	Implementation			


























L	_msgSender	Internal 		
L	_msgData	Internal 		
ERC20	Implementation	Context, IERC20, IERC20Metadata		
L		Public 		NO 
L	name	Public 		NO 
L	symbol	Public 		NO 
L	decimals	Public 		NO 
L	totalSupply	Public 		NO 
L	balanceOf	Public 		NO 
L	transfer	Public 		NO 
L	allowance	Public 		NO 
L	approve	Public 		NO 
L	transferFrom	Public 		NO 
L	increaseAllowance	Public 		NO 
L	decreaseAllowance	Public 		NO 
L	_transfer	Internal 		
L	_mint	Internal 		






































L	_burn	Internal 🔒	⛔	
L	_approve	Internal 🔒	⛔	
L	_beforeTokenTransfer	Internal 🔒	⛔	
L	_afterTokenTransfer	Internal 🔒	⛔	
Ownable	Implementation	Context		
L		Public 🔓	⛔	NO🚫
L	owner	Public 🔓		NO🚫
L	renounceOwnership	Public 🔓	⛔	onlyOwner
L	transferOwnership	Public 🔓	⛔	onlyOwner
L	_setOwner	Private 🔒	⛔	
SafeMath	Library			
L	tryAdd	Internal 🔒		
L	trySub	Internal 🔒		
L	tryMul	Internal 🔒		
L	tryDiv	Internal 🔒		
L	tryMod	Internal 🔒		
L	add	Internal 🔒		

L	sub	Internal 		
L	mul	Internal 		
L	div	Internal 		
L	mod	Internal 		
L	sub	Internal 		
L	div	Internal 		
L	mod	Internal 		
Clones	Library			
L	clone	Internal 		
L	cloneDeterministic	Internal 		
L	predictDeterministicAddress	Internal 		
L	predictDeterministicAddress	Internal 		
IUniswapV2Factory	Interface			
L	feeTo	External 		NO 
L	feeToSetter	External 		NO 
L	getPair	External 		NO 
L	allPairs	External 		NO 








L	allPairsLength	External 		NO 
L	createPair	External 		NO 
L	setFeeTo	External 		NO 
L	setFeeToSetter	External 		NO 
IUniswapV2Router01	Interface			
L	factory	External 		NO 
L	WETH	External 		NO 
L	addLiquidity	External 		NO 
L	addLiquidityETH	External 		NO 
L	removeLiquidity	External 		NO 
L	removeLiquidityETH	External 		NO 
L	removeLiquidityWithPermit	External 		NO 
L	removeLiquidityETHWithPermit	External 		NO 
L	swapExactTokensForTokens	External 		NO 
L	swapTokensForExactTokens	External 		NO 
L	swapExactETHForTokens	External 		NO 
L	swapTokensForExactETH	External 		NO 











L	swapExactTokens ForETH	External 		NO 
L	swapETHForExact Tokens	External 		NO 
L	quote	External 		NO 
L	getAmountOut	External 		NO 
L	getAmountIn	External 		NO 
L	getAmountsOut	External 		NO 
L	getAmountsIn	External 		NO 
IUniswapV2Router02	Interface	IUniswapV2Router01		
L	removeLiquidityET HSupportingFeeO nTransferTokens	External 		NO 
L	removeLiquidityET HWithPermitSupp ortingFeeOnTransf erTokens	External 		NO 
L	swapExactTokens ForTokensSupport ingFeeOnTransfer Tokens	External 		NO 
L	swapExactETHFor TokensSupporting FeeOnTransferTo kens	External 		NO 
L	swapExactTokens ForETHSupporting FeeOnTransferTo kens	External 		NO 
IERC20Upgradeable	Interface			
L	totalSupply	External 		NO 



























L	balanceOf	External 		NO 
L	transfer	External 		NO 
L	allowance	External 		NO 
L	approve	External 		NO 
L	transferFrom	External 		NO 
IERC20MetadataUpgr adeable	Interface	IERC20Upgradeable		
L	name	External 		NO 
L	symbol	External 		NO 
L	decimals	External 		NO 
Initializable	Implementation			
ContextUpgradeable	Implementation	Initializable		
L	__Context_init	Internal 		initializer
L	__Context_init_un chained	Internal 		initializer
L	_msgSender	Internal 		
L	_msgData	Internal 		

ERC20Upgradeable	Implementation	Initializable, ContextUpgradeable, IERC20Upgradeable, IERC20MetadataUpgr adeable		
L	__ERC20_init	Internal 		initializer
L	__ERC20_init_unc hained	Internal 		initializer
L	name	Public 		NO 
L	symbol	Public 		NO 
L	decimals	Public 		NO 
L	totalSupply	Public 		NO 
L	balanceOf	Public 		NO 
L	transfer	Public 		NO 
L	allowance	Public 		NO 
L	approve	Public 		NO 
L	transferFrom	Public 		NO 
L	increaseAllowance	Public 		NO 
L	decreaseAllowanc e	Public 		NO 
L	_transfer	Internal 		
L	_mint	Internal 		
L	_burn	Internal 		
































L	_approve	Internal 🔒	🔒	
L	_beforeTokenTransfer	Internal 🔒	🔒	
L	_afterTokenTransfer	Internal 🔒	🔒	
OwnableUpgradeable	Implementation	Initializable, ContextUpgradeable		
L	__Ownable_init	Internal 🔒	🔒	initializer
L	__Ownable_init_unchained	Internal 🔒	🔒	initializer
L	owner	Public 🔓		NO🔓
L	renounceOwnership	Public 🔓	🔒	onlyOwner
L	transferOwnership	Public 🔓	🔒	onlyOwner
L	_setOwner	Private 🔒	🔒	
IUniswapV2Pair	Interface			
L	name	External 🔓		NO🔓
L	symbol	External 🔓		NO🔓
L	decimals	External 🔓		NO🔓
L	totalSupply	External 🔓		NO🔓
L	balanceOf	External 🔓		NO🔓
L	allowance	External 🔓		NO🔓












L	approve	External ¶		NO¶
L	transfer	External ¶		NO¶
L	transferFrom	External ¶		NO¶
L	DOMAIN_SEPARATOR	External ¶		NO¶
L	PERMIT_TYPEHASH	External ¶		NO¶
L	nonces	External ¶		NO¶
L	permit	External ¶		NO¶
L	MINIMUM_LIQUIDITY	External ¶		NO¶
L	factory	External ¶		NO¶
L	token0	External ¶		NO¶
L	token1	External ¶		NO¶
L	getReserves	External ¶		NO¶
L	price0CumulativeLast	External ¶		NO¶
L	price1CumulativeLast	External ¶		NO¶
L	kLast	External ¶		NO¶
L	mint	External ¶		NO¶
L	burn	External ¶		NO¶
L	swap	External ¶		NO¶































L	skim	External ⓘ		NO ⓘ
L	sync	External ⓘ		NO ⓘ
L	initialize	External ⓘ		NO ⓘ
SafeMathInt	Library			
L	mul	Internal 		
L	div	Internal 		
L	sub	Internal 		
L	add	Internal 		
L	abs	Internal 		
L	toUint256Safe	Internal 		
SafeMathUint	Library			
L	toInt256Safe	Internal 		
IterableMapping	Library			
L	get	Public ⓘ		NO ⓘ
L	getIndexOfKey	Public ⓘ		NO ⓘ
L	getKeyAtIndex	Public ⓘ		NO ⓘ

L	size	Public 		NO 
L	set	Public 		NO 
L	remove	Public 		NO 
DividendPayingToken Interface	Interface			
L	dividendOf	External 		NO 
L	withdrawDividend	External 		NO 
DividendPayingToken OptionalInterface	Interface			
L	withdrawableDivid endOf	External 		NO 
L	withdrawnDividend Of	External 		NO 
L	accumulativeDivid endOf	External 		NO 
DividendPayingToken	Implementation	ERC20Upgradeable, OwnableUpgradeable , DividendPayingTokenInterface, DividendPayingTokenOptionalInterface		
L	__DividendPaying Token_init	Internal 		initializer
L	distributeCAKEDiv idends	Public 		onlyOwner
L	withdrawDividend	Public 		NO 



L	_withdrawDividendOfUser	Internal 🔒	⛔	
L	dividendOf	Public 🔓		NO 🔓
L	withdrawableDividendOf	Public 🔓		NO 🔓
L	withdrawnDividendOf	Public 🔓		NO 🔓
L	accumulativeDividendOf	Public 🔓		NO 🔓
L	_transfer	Internal 🔒	⛔	
L	_mint	Internal 🔒	⛔	
L	_burn	Internal 🔒	⛔	
L	_setBalance	Internal 🔒	⛔	
BABYTOKENDividendTracker	Implementation	OwnableUpgradeable , DividendPayingToken		
L	initialize	External 🔓	⛔	initializer
L	_transfer	Internal 🔒		
L	withdrawDividend	Public 🔓		NO 🔓
L	excludeFromDividends	External 🔓	⛔	onlyOwner
L	isExcludedFromDividends	Public 🔓		NO 🔓
L	updateClaimWait	External 🔓	⛔	onlyOwner

L	updateMinimumTokenBalanceForDividends	External 		onlyOwner
L	getLastProcessedIndex	External 		NO 
L	getNumberOfTokenHolders	External 		NO 
L	getAccount	Public 		NO 
L	getAccountAtIndex	Public 		NO 
L	canAutoClaim	Private 		
L	setBalance	External 		onlyOwner
L	process	Public 		NO 
L	processAccount	Public 		onlyOwner
BaseToken	Implementation			
BABYTOKEN	Implementation	ERC20, Ownable, BaseToken		
L		Public 		ERC20
L		External 		NO 
L	setSwapTokensAtAmount	External 		onlyOwner
L	updateDividendTracker	Public 		onlyOwner
L	updateUniswapV2Router	Public 		onlyOwner
L	excludeFromFees	Public 		onlyOwner

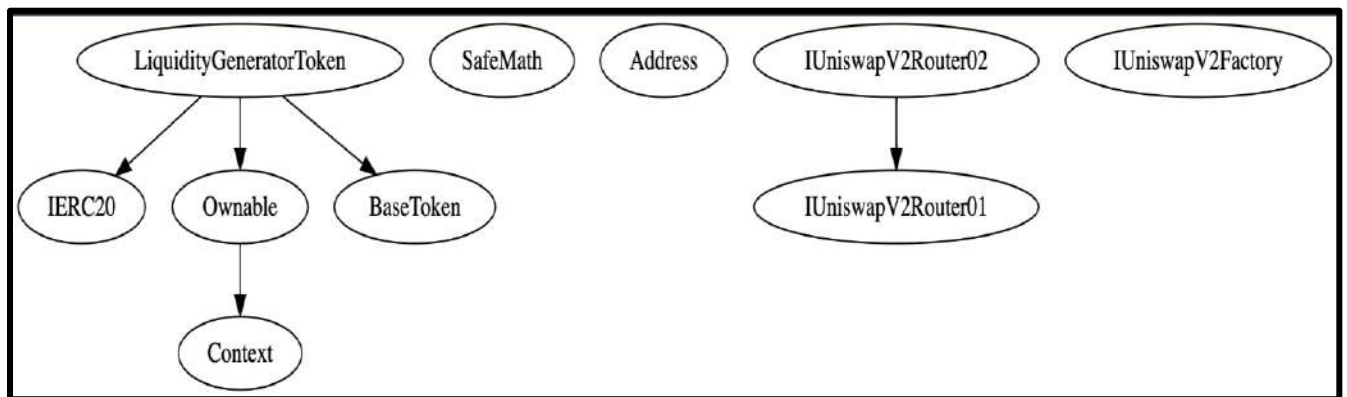
L	excludeMultipleAccountsFromFees	Public ⚠		onlyOwner
L	setMarketingWallet	External ⚠		onlyOwner
L	setTokenRewardsFee	External ⚠		onlyOwner
L	setLiquiditFee	External ⚠		onlyOwner
L	setMarketingFee	External ⚠		onlyOwner
L	setAutomatedMarketMakerPair	Public ⚠		onlyOwner
L	_setAutomatedMarketMakerPair	Private 🔒		
L	updateGasForProcessing	Public ⚠		onlyOwner
L	updateClaimWait	External ⚠		onlyOwner
L	getClaimWait	External ⚠		NO⚠
L	updateMinimumTokenBalanceForDividends	External ⚠		onlyOwner
L	getMinimumTokenBalanceForDividends	External ⚠		NO⚠
L	getTotalDividendsDistributed	External ⚠		NO⚠
L	isExcludedFromFees	Public ⚠		NO⚠
L	withdrawableDividendOf	Public ⚠		NO⚠
L	dividendTokenBalanceOf	Public ⚠		NO⚠
L	excludeFromDividends	External ⚠		onlyOwner

L	isExcludedFromDividends	Public 		NO 
L	getAccountDividendsInfo	External 		NO 
L	getAccountDividendsInfoAtIndex	External 		NO 
L	processDividendTracker	External 		NO 
L	claim	External 		NO 
L	getLastProcessedIndex	External 		NO 
L	getNumberOfDividendTokenHolders	External 		NO 
L	_transfer	Internal 		
L	swapAndSendToFee	Private 		
L	swapAndLiquify	Private 		
L	swapTokensForEth	Private 		
L	swapTokensForCake	Private 		
L	addLiquidity	Private 		
L	swapAndSendDividends	Private 		

Legend

Symbol	Meaning
	Function can modify state
	Function is payable

Inheritance Hierarchy



Security issue checking status

- ❖ **High severity issues**
No high severity issues found.
- ❖ **Medium severity issues**
No medium severity issues found.
- ❖ **Low severity issues**
No low severity issues found.

Owner privileges

- ❖ The owner can change the token swap point.

```
ftrace | funcSig
function setSwapTokensAtAmount(uint256 amount↑) external onlyOwner {
    swapTokensAtAmount = amount↑;
}
```

- ❖ The owner can change dividend tracker.

```
ftrace | funcSig
function updateDividendTracker(address newAddress↑) public onlyOwner {
    require(
        newAddress↑ != address(dividendTracker),
        "BABYTOKEN: The dividend tracker already has that address"
    );

    BABYTOKENDividendTracker newDividendTracker = BABYTOKENDividendTracker(
        payable(newAddress↑)
    );

    require(
        newDividendTracker.owner() == address(this),
        "BABYTOKEN: The new dividend tracker must be owned by the BABYTOKEN token contract"
    );

    newDividendTracker.excludeFromDividends(address(newDividendTracker));
    newDividendTracker.excludeFromDividends(address(this));
    newDividendTracker.excludeFromDividends(owner());
    newDividendTracker.excludeFromDividends(address(uniswapV2Router));

    emit UpdateDividendTracker(newAddress↑, address(dividendTracker));

    dividendTracker = newDividendTracker;
}
```

- ❖ The owner can change the marketing wallet.

```
ftrace | funcSig
function setMarketingWallet(address payable wallet↑) external onlyOwner {
    marketingWalletAddress = wallet↑;
}
```

- ❖ The owner can change the router address.

```
ftrace | funcSig
function updateUniswapV2Router(address newAddress↑) public onlyOwner {
    require(
        newAddress↑ != address(uniswapV2Router),
        "BABYTOKEN: The router already has that address"
    );
    emit UpdateUniswapV2Router(newAddress↑, address(uniswapV2Router));
    uniswapV2Router = IUniswapV2Router02(newAddress↑);
    address _uniswapV2Pair = IUniswapV2Factory(uniswapV2Router.factory())
        .createPair(address(this), uniswapV2Router.WETH());
    uniswapV2Pair = _uniswapV2Pair;
}
```

- ❖ The owner can exclude wallets from fees.

```
ftrace | funcSig
function excludeFromFees(address account↑, bool excluded↑) public onlyOwner {
    require(
        _isExcludedFromFees[account↑] != excluded↑,
        "BABYTOKEN: Account is already the value of 'excluded'"
    );
    _isExcludedFromFees[account↑] = excluded↑;
    emit ExcludeFromFees(account↑, excluded↑);
}

ftrace | funcSig
function excludeMultipleAccountsFromFees(
    address[] calldata accounts↑,
    bool excluded↑
) public onlyOwner {
    for (uint256 i = 0; i < accounts↑.length; i++) {
        _isExcludedFromFees[accounts↑[i]] = excluded↑;
    }
    emit ExcludeMultipleAccountsFromFees(accounts↑, excluded↑);
}
```

- ❖ The owner can change all fees (total fee maximum up to 25%).

```
ftrace | funcSig
function setTokenRewardsFee(uint256 value↑) external onlyOwner {
    tokenRewardsFee = value↑;
    totalFees = tokenRewardsFee.add(liquidityFee).add(marketingFee);
    require(totalFees <= 25, "Total fee is over 25%");
}
```

```
ftrace | funcSig
function setLiquidityFee(uint256 value↑) external onlyOwner {
    liquidityFee = value↑;
    totalFees = tokenRewardsFee.add(liquidityFee).add(marketingFee);
    require(totalFees <= 25, "Total fee is over 25%");
}
```

ftrace | funcSig

```
ftrace | funcSig
function setMarketingFee(uint256 value↑) external onlyOwner {
    marketingFee = value↑;
    totalFees = tokenRewardsFee.add(liquidityFee).add(marketingFee);
    require(totalFees <= 25, "Total fee is over 25%");
}
```

- ❖ The owner can change the max gas limit for reward distributions.

```
ftrace | funcSig
function updateGasForProcessing(uint256 newValue↑) public onlyOwner {
    require(
        newValue↑ >= 200000 && newValue↑ <= 500000,
        "BABYTOKEN: gasForProcessing must be between 200,000 and 500,000"
    );
    require(
        newValue↑ != gasForProcessing,
        "BABYTOKEN: Cannot update gasForProcessing to same value"
    );
    emit GasForProcessingUpdated(newValue↑, gasForProcessing);
    gasForProcessing = newValue↑;
}
```

- ❖ The owner can exclude wallets from rewards.

```
ftrace | funcSig  
function excludeFromDividends(address account↑) external onlyOwner {  
    dividendTracker.excludeFromDividends(account↑);  
}
```

Audit conclusion

While conducting the audit of the NFT Magic smart contract, it was observed that there is nothing alarming with the code.