

RugFreeCoins Audit



Sprint's Token
Smart Contract Security Audit
May 11, 2022

Contents

Audit details	1
Disclaimer	2
Background	3
About the project	4
Target market and the concept	7
Potential to grow with score points	8
Total Points	8
Contract details	g
Contract code function details	11
Contract description table	13
Security issue checking status	28
Owner privileges	29
Audit conclusion	33

Audit details





Contract Address

0x33E4a44E30293717261B4c8c05d85F8DA4ee2319



Client contact

Sprint's Token Team



Blockchain

Binance smart chain



Project website

https://www.sprintn.fit/

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 the Sprint's Token Team to perform an audit of the smart contract.

https://bscscan.com/token/0x33E4a44E30293717261B4c8c05d85F8DA4ee2319

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, and long-term sustainability, and as a guide to improving the security posture of the smart contract by remediating the issues that were identified.

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About the project

Sprint's Finance 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, it is a method of health training, and based on that, users can earn corresponding profits. That is the contemporary trend **Move-To-Earn**. Users can own their favorite NFTs to move outdoors to make profits with Sprint's tokens. Each transaction, purchase, and sale incur a 10% fee.

Features

- The Green Metaverse Token rewards will be distributed in Sprint's tokens among every holder proportional to how many tokens each individual holds in values of 3% when buying and selling.
- The sustainability fee of 5% when buying and selling for marketing is what allows Sprint's Token to hold the aforementioned promise. Tokens will be swapped into BNB and will be sent to a marketing wallet. This way, Sprint's Token will have enough funds to promote the coin and spend for future development and marketing without selling tokens as the traditional way.
- 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.

Roadmap

- Brainstorming Idea Creation
- Marketing Research & Development
- Website Building
- Social Media Platform
- Smart Contract Deployed
- Contract Audit
- Fairlaunch Creation on Pinksale
- Marketing Campaign
- Listing on CoinGecko
- Listing on CoinMarketCap
- Website V.2
- Ecosystem Mechanism Design
- Application UI Design
- Application Development
- NFT Marketplace Development
- Application Official Release

Tokenomics

10% fee when buying and selling

- 3% of trade goes to holders pockets in Sprint's token rewards.
- 5% of trade goes to the marketing wallet in BNB.
- 2% of trade goes to the liquidity pool

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 taking part with staking.
- Anyone who's interested in exercise and gets rewards through moving activities.
- Anyone who's interested in taking part in the future plans of Sprint's Token Ecosystem.
- Anyone who's interested in making financial transactions with any other party using Sprint's as the currency.

Core concept

The Green Metaverse Token rewards system

3% of each transaction when buying and selling gets converted to **Green Metaverse** 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 5% when buying and selling for dev and marketing is what allows Sprint's Token to promote the token and use funds to further the development of the platform. Tokens will be swapped into BNB and will be sent to a marketing wallet. This way, Sprint's Token will have access to the funds without selling tokens as the traditional way, which will enable them to consume funds without hurting the project.

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

Potential to grow with score points

1.	Project efficiency	8/10
2.	Project uniqueness	8/10
3	Information quality	8/10
4	Service quality	8/10
5	System quality	9/10
6	Impact on the community	9/10
7	Impact on the business	9/10
8	Preparing for the future	7/10
9	Smart contract security	10/10
10	Smart contract functionality assessment	10/10
Total	8.6/10	

Contract details

Token contract details for 11th May 2022

Contract name	SPRINT
Contract address	0x33E4a44E30293717261B4c8c05d85F8DA4ee2319
Token supply	1,000,000,000,000
Token ticker	SPRINT
Decimals	18
Token holders	4
Transaction count	6
Dividend tracker	0x1910f32a5947a80a88d83c559f28e0441b2ebef4
Marketing wallet	0x655af86a36b7f5607dcf64606900c1e487165027
Reward Token	0x3019bf2a2ef8040c242c9a4c5c4bd4c81678b2a1
Contract deployer address	0x02b373bb3513C9Ff881db2c1fd789F4355aD9254
Contract's current owner address	0x02b373bb3513c9ff881db2c1fd789f4355ad9254

Tokens are distributed as follows:

- Presale 30%
- Liquidity Pool 15%
- Staking Rewards 30%
- Marketing and Partnership 15%
- Initial Burn 5%
- Airdrop 5%

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	High
		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

The 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 their visibility and mutability.

Contract	Туре	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, IERC20 Metadata	
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 🖺	

	Context	Implementation	Ownable
NO	Public		L
NO.	Public [owner	L
onlyOwne	Public	renounceOwnership	L
onlyOwne	Public [transferOwnership	L
	Private 🖺	_setOwner	L
		Library	SafeMath
	Internal 🖺	tryAdd	L
	Internal 🖺	trySub	L
	Internal 🖺	tryMul	L
	Internal 🖺	tryDiv	L
	Internal 🖺	tryMod	L
	Internal 🖺	add	L
	Internal 🖺	sub	L
	Internal 🖺	mul	L
	Internal 🖺	div	L
	Internal 🖺	mod	L
	Internal 🖺	sub	L
	Internal 🖺	div	L
	Internal 🖺	mod	L

Clones	Library			
L	clone	Internal 🖺		
L	cloneDeterministic	Internal 🖺		
L	predictDeterministicAddress	Internal 🖺		
L	predictDeterministicAddress	Internal 🖺		
IUniswapV2 Factory	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
IUniswapV2 Router01	Interface			
L	factory	External [NO
L	WETH	External [NO
L	addLiquidity	External [NO.
L	addLiquidityETH	External [ED	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	uъ	NO
L	swapTokensForExactETH	External		NO
L	swapExactTokensForETH	External		NO
L	swapETHForExactTokens	External [<u>u</u> D	NO
L	quote	External		NO
L	getAmountOut	External		NO
L	getAmountIn	External		NO
L	getAmountsOut	External		NO
L	getAmountsIn	External		NO
IUniswapV2 Router02	Interface	IUniswapV2 Router01		
L	removeLiquidityETHSupportingFee OnTransferTokens	External		NO
L	removeLiquidityETHWithPermitSup portingFeeOnTransferTokens	External .		NO
L	swapExactTokensForTokensSuppor tingFeeOnTransferTokens	External [NO

L	swapExactETHForTokensSupportin gFeeOnTransferTokens	External	SD	NO
L	swapExactTokensForETHSupportin gFeeOnTransferTokens	External .		NO.
				<u>'</u>
IERC20 Upgradeable	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 Upgradeable	Interface	IERC20 Upgradeable		
L	name	External [NO.
L	symbol	External		NO.
L	decimals	External		NO
Initializable	Implementation			
		1		
Context Upgradeable	Implementation	Initializable		
L	Context_init	Internal 🦰		initializer
L	Context_init_unchained	Internal 🦺		initializer
L	_msgSender	Internal 🦺		

L	_msgData	Internal 🦺	
ERC20 Upgradeable	Implementation	Initializable, Context Upgradeable, IERC20 Upgradeable, IERC20 Metadata Upgradeable	
L	ERC20_init	Internal 🖺	initializer
L	ERC20_init_unchained	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	decreaseAllowance	Public	NO
L	_transfer	Internal 🖺	
L	_mint	Internal 🖺	

L	_burn	Internal 🦰	
L			
L	_approve	Internal 🖺	
L	_beforeTokenTransfer	Internal 🖺	
L	_afterTokenTransfer	Internal 🦺	
Ownable Upgradeable	Implementation	Initializable, Context Upgradeable	
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
DividendPaying TokenInterface	Interface		
L	dividendOf	External [NO
L	withdrawDividend	External [NO

DividendPaying TokenOptional Interface	Interface		
L	withdrawableDividendOf	External [NO
L	withdrawnDividendOf	External [NO.
L	accumulativeDividendOf	External [NO.
DividendPaying Token	Implementation	ERC20 Upgradeable, Ownable Upgradeable, Dividend PayingToken Interface, Dividend PayingToken Optional Interface	
L	DividendPayingToken_init	Internal 🖺	initializer
L	distributeCAKEDividends	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 🦲	
BABYTOKEN DividendTracker	Implementation	Ownable Upgradeable, Dividend PayingToken	
L	initialize	External [initializer
Ĺ	_transfer	Internal 🖺	
L	withdrawDividend	Public [NO.
L	excludeFromDividends	External [onlyOwner
L	isExcludedFromDividends	Public [NO.
L	updateClaimWait	External [onlyOwner
L	updateMinimumTokenBalanceForDi vidends	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

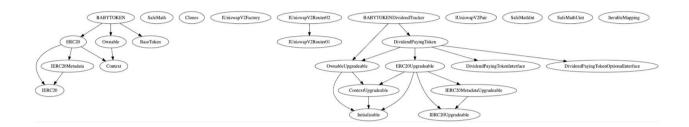
BaseToken	Implementation			
BABYTOKEN	Implementation	ERC20, Ownable, BaseToken		
L		Public [<u>u</u>	ERC20
L		External .	ŒĐ	NO
L	setSwapTokensAtAmount	External [onlyOwner
L	updateDividendTracker	Public		onlyOwner
L	updateUniswapV2Router	Public		onlyOwner
L	excludeFromFees	Public		onlyOwner
L	excludeMultipleAccountsFromFees	Public		onlyOwner
L	setMarketingWallet	External		onlyOwner
Ĺ	setTokenRewardsFee	External		onlyOwner
L	setLiquiditFee	External		onlyOwner
L	setMarketingFee	External		onlyOwner
L	setAutomatedMarketMakerPair	Public [onlyOwner
L	_setAutomatedMarketMakerPair	Private P		
L	updateGasForProcessing	Public		onlyOwner
L	updateClaimWait	External .		onlyOwner
L	getClaimWait	External		NO
L	updateMinimumTokenBalanceForDi vidends	External		onlyOwner

L	getMinimumTokenBalanceForDivide nds	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 P		
L	swapTokensForEth	Private P		
L	swapTokensForCake	Private P		
L	addLiquidity	Private 🖺		
L	swapAndSendDividends	Private 🖺		
			I	

Legend

Symbol	Meaning
	Function can modify state
S D	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

❖ Centralization risk

No Centralization issues found

Owner privileges

The owner can change token swap point

```
ftrace|funcSig
function setSwapTokensAtAmount(uint256 amount1) external onlyOwner {
   swapTokensAtAmount = amount1;
}
```

The owner can update the dividend tracker

The owner can update the router address

The owner can include/exclude wallets from fees

The owner can change the marketing wallet

```
ftrace|funcSig
function setMarketingWallet(address payable wallet1) external onlyOwner {
    _marketingWalletAddress = wallet1;
}
```

❖ The owner can change all fees, total fees maximum up to 25%

```
ftrace|funcSig
function setTokenRewardsFee(uint256 value1) external onlyOwner {
    tokenRewardsFee = value1;
    totalFees = tokenRewardsFee.add(liquidityFee).add(marketingFee);
    require(totalFees <= 25, "Total fee is over 25%");
}

ftrace|funcSig
function setLiquiditFee(uint256 value1) external onlyOwner {
    liquidityFee = value1;
    totalFees = tokenRewardsFee.add(liquidityFee).add(marketingFee);
    require(totalFees <= 25, "Total fee is over 25%");
}

ftrace|funcSig
function setMarketingFee(uint256 value1) external onlyOwner {
    marketingFee = value1;
    totalFees = tokenRewardsFee.add(liquidityFee).add(marketingFee);
    require(totalFees <= 25, "Total fee is over 25%");
}</pre>
```

The owner can change maximum gas for process dividend tracker

The owner can change dividend receive claim wait

```
ftrace|funcSig
function updateClaimWait(uint256 claimWait↑) external onlyOwner {
    dividendTracker.updateClaimWait(claimWait↑);
}
```

❖ The owner can change minimum token amount to have receive dividends

```
ftrace|funcSig
function updateMinimumTokenBalanceForDividends(uint256 amount ↑)
    external
    onlyOwner
{
    dividendTracker.updateMinimumTokenBalanceForDividends(amount ↑);
}
```

Audit conclusion

RugFreeCoins team has performed in-depth testings, line by line manual code review, and automated audit of the smart contract. The smart contract was analyzed mainly for common smart contract vulnerabilities, exploits, manipulations, and hacks. According to the smart contract audit.

Smart contract functional Status: PASSED

Number of risk issues: NONE

Solidity code functional issue level: PASSED

Number of owner privileges: 9

Centralization risk correlated to the active owner: LOW

Smart contract active ownership: YES