



NOVOS

KYC & AUDIT.

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CERTIFICATE OF COMPLIANCE

Smart Contract Audit by NOVOS



BeanFlip

Audit Passed

01/21/2023

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Audit Summary

This report has been prepared for BeanFlip Token on the BSC network. Novos provides both client-centered and user-centered examination of the smart contracts and their current status when applicable. This report represents the security assessment made to find issues and vulnerabilities on the source code along with the current liquidity and token holder statistics of the protocol.

A comprehensive examination has been performed, utilizing Cross Referencing, Static Analysis, In-House Security Tools, and line-by-line Manual Review.

The auditing process pays special attention to the following considerations:

- Ensuring contract logic meets the specifications and intentions of the client without exposing the user's funds to risk.
- Testing the smart contracts against both common and uncommon attack vectors.
- Inspecting liquidity and holders statistics to inform the current status to both users and client when applicable.
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Verifying contract functions that allow trusted and/or untrusted actors to mint, lock, pause, and transfer assets.
- Thorough line-by-line manual review of the entire codebase by industry experts.



Project Overview

Parameter	Result
Address	0xDc6302C973DC3B56eb2933BA492C06F2DB8C2246
Name	BeanFlip
Token Tracker	\$BEAN
Decimals	18
Supply	1,000,000
Platform	BSC
Compiler	v0.8.17+commit.8df45f5f
Optimization	Yes with 211 runs
Other Settings:	default evmVersion
Language	Solidity
Codebase	https://bscscan.com/token/0xdc6302c973dc3b56eb2933ba492c06f2db8c2246#code
Url	https://beanmachine.finance/

Main Contract Assessed

Name	Contract	Live
BeanFlip	0xDc6302C973DC3B56eb2933BA492C06F2DB8C2246	Yes

Smart Contract Vulnerability Checks

Vulnerability	Automatic Scan	Manual Scan	Result
❖ Unencrypted Private Data On-Chain	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Code With No Effects	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Message call with hardcoded gas amount	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Hash Collisions With Multiple Variable Length Arguments	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Unexpected Ether balance	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Presence of unused variables	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Right-To-Left-Override control character (U+202E)	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Typographical Error	✓ Complete	✓ Complete	✓ Low / No Risk
❖ DoS With Block Gas Limit	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Arbitrary Jump with Function Type Variable	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Insufficient Gas Griefing	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Incorrect Inheritance Order	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Write to Arbitrary Storage Location	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Requirement Violation	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Missing Protection against Signature Replay Attacks	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Weak Sources of Randomness from Chain Attributes	✓ Complete	✓ Complete	✓ Low / No Risk





Smart Contract Vulnerability Checks

Vulnerability	Automatic Scan	Manual Scan	Result
❖ Authorization through tx.origin	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Delegatecall to Untrusted Callee	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Use of Deprecated Solidity Functions	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Assert Violation	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Reentrancy	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Unprotected SELFDESTRUCT Instruction	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Unprotected Ether Withdrawal	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Unchecked Call Return Value	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Outdated Compiler Version	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Integer Overflow and Underflow	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Function Default Visibility	✓ Complete	✓ Complete	✓ Low / No Risk





Contract Ownership

The contract ownership of Twit Coin is not currently renounced. The ownership of the contract grants special powers to the protocol creators, making them the sole addresses that can call sensible ownable functions that may alter the state of the protocol.

01

The current owner is the address
0xC7006F3Ab6B34746F6A795868be747C56D629848
which can be viewed from: [HERE](#)

02

The owner wallet has the power to call the functions displayed on the privileged functions chart below, if the owner wallet is compromised this privileges could be exploited.

03

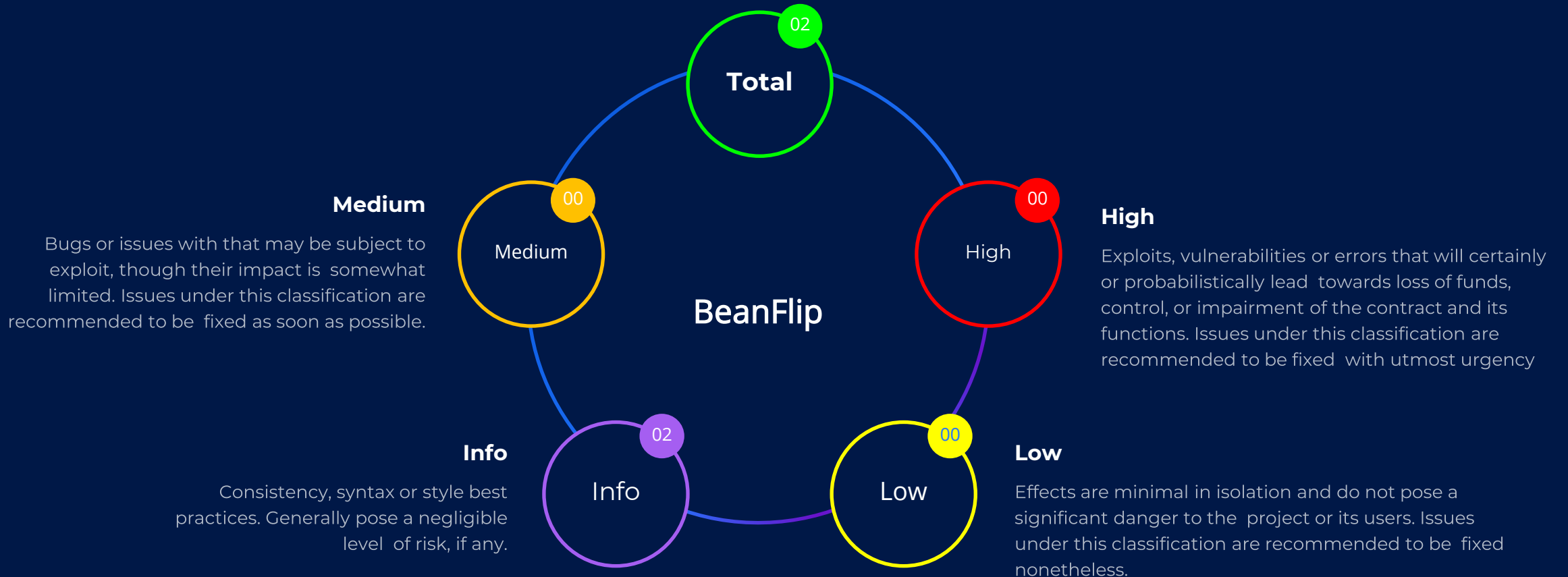
We recommend the team to renounce ownership at the right timing if possible, or gradually migrate to a timelock with governing functionalities in respect of transparency and safety considerations.

Technical Findings Summary

Classification of Issues

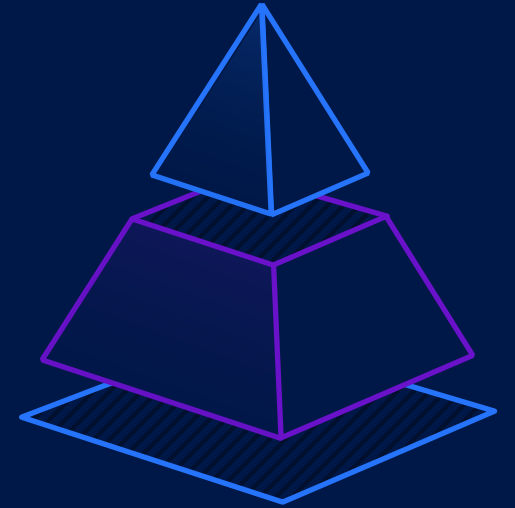
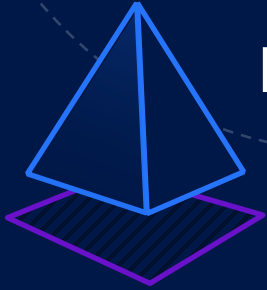
Total

What you should pay attention to



Findings

Public function that could be declared external



ID	Severity	Contract	Function
01	Informational	BeanFlip	Functions: size, getKeyAtIndex, getIndexOfKey

Description

Gas Optimization. Public function that could be declared external

Recommendation

Public functions that are never called by the contract should be declared external to save gas.



Findings

Missing events arithmetic



ID	Severity	Contract	Function
02	Informational	BeanFlip	Missing events for setWalletBalance, setMaxBuyTransaction, setMaxSellTransaction, setSwapTokensAtAmount, setSellTransactionMultiplier

Description

Functions that change critical arithmetic parameters should emit an event.

Recommendation

Emit corresponding events for critical parameter changes.

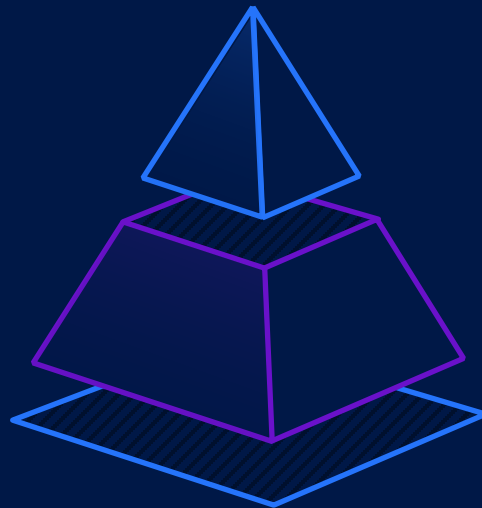


Privileged Functions (onlyOwner & Others)

Function Name	Parameters	Visibility
✓ renounceOwnership	<ul style="list-style-type: none">▪ none	<ul style="list-style-type: none">▪ external
✓ transferOwnership	<ul style="list-style-type: none">▪ address newOwner	<ul style="list-style-type: none">▪ public
✓ prepareForPartnerOrExchangeListing	<ul style="list-style-type: none">▪ address_partnerOrExchangeAddress	<ul style="list-style-type: none">▪ external
✓ setWalletBalance	<ul style="list-style-type: none">▪ uint256 _maxWalletBalance	<ul style="list-style-type: none">▪ external
✓ setMaxBuyTransaction	<ul style="list-style-type: none">▪ uint256 _maxTxn	<ul style="list-style-type: none">▪ external
✓ setMaxSellTransaction	<ul style="list-style-type: none">▪ uint256 _maxTxn	<ul style="list-style-type: none">▪ external
✓ updateBusdDividendToken	<ul style="list-style-type: none">▪ address _newContract	<ul style="list-style-type: none">▪ external
✓ updateMarketingWallet	<ul style="list-style-type: none">▪ address _newWallet	<ul style="list-style-type: none">▪ external
✓ setSwapTokensAtAmount	<ul style="list-style-type: none">▪ uint256 _swapAmount	<ul style="list-style-type: none">▪ external
✓ setSellTransactionMultiplier	<ul style="list-style-type: none">▪ uint256 _multiplier	<ul style="list-style-type: none">▪ external
✓ setTradingIsEnabled	<ul style="list-style-type: none">▪ none	<ul style="list-style-type: none">▪ external
✓ setBusdDividendEnabled	<ul style="list-style-type: none">▪ bool _enabled	<ul style="list-style-type: none">▪ external
✓ setMarketingEnabled	<ul style="list-style-type: none">▪ bool _enabled	<ul style="list-style-type: none">▪ external
✓ setSwapAndLiquifyEnabled	<ul style="list-style-type: none">▪ bool _enabled	<ul style="list-style-type: none">▪ external
✓ updatebusdDividendTracker	<ul style="list-style-type: none">▪ address newAddress	<ul style="list-style-type: none">▪ external
✓ updateUniswapV2Router	<ul style="list-style-type: none">▪ address newAddress	<ul style="list-style-type: none">▪ external

Privileged Functions (onlyOwner & Others)

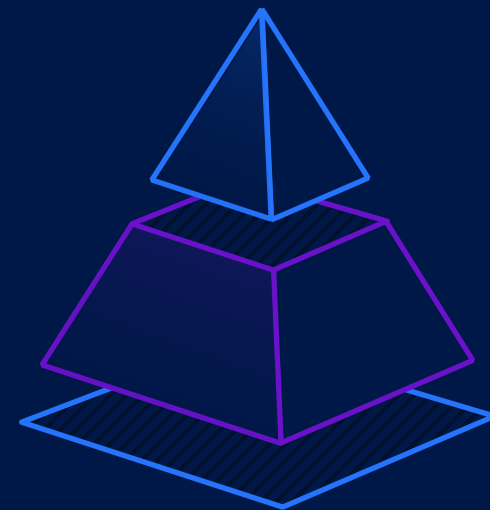
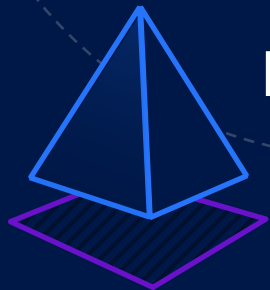
Function Name	Parameters	Visibility
✓ <code>excludeFromFees</code>	▪ <code>address account, bool excluded</code>	▪ public
✓ <code>excludeFromDividend</code>	▪ <code>address account</code>	▪ public
✓ <code>setAutomatedMarketMakerPair</code>	▪ <code>address pair, bool value</code>	▪ external
✓ <code>updateGasForProcessing</code>	▪ <code>uint256 newValue</code>	▪ external
✓ <code>updateMinimumBalanceForDividends</code>	▪ <code>uint256 newMinimumBalance</code>	▪ external
✓ <code>updateClaimWait</code>	▪ <code>uint256 claimWait</code>	▪ external
✓ <code>processDividendTracker</code>	▪ <code>uint256 gas</code>	▪ external





Statistics

Liquidity Info



Parameter	Result
Pair Address	0xbb5f05e6D21932f240110B9E368104eA528DEa8D
BeanFlip Reserves	175,010.040310420408840325 BEAN
Reserves, WBNB	14.05537155140061989 WBNB
Liquidity Value	\$4,271.34



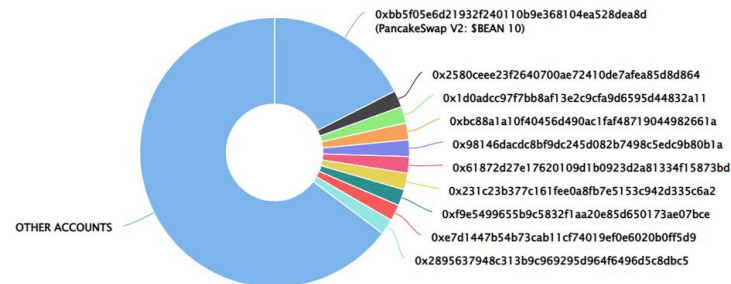
Statistics

Token (BeanFlip) Holders Info

Parameter	Result
BeanFlip Percentage Burnt	0 %
BeanFlip Amount Burnt	0 BEAN
Top 10 Percentage Own	31,3098 %

BeanFlip Top 10 Token Holders

Source: BscScan.com



(A total of 352,538.43 tokens held by the top 10 accounts from the total supply of 1,000,000.00 token)



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