Cyberscope

Audit Report
Naughty List

December 2022

SHA256 431dc10608a8b761f93c85950631ee121d233fefc6657d7d21b530e348acbdc3

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Table of Contents

Contract Review

Contract Name	NaughtyList
Compiler Version	v0.8.17+commit.8df45f5f
Optimization	200 runs
Address	0xe84945d0fc45807dc12a49b79dbdd8cbf44f7268
Network	BSC_TESTNET
Testing Deploy	https://testnet.bscscan.com/token/0x9c027047e68ece3053a27e3b7f4af7086a19f554
Symbol	NLT
Decimals	18
Total Supply	21,000,000

Audit Updates

Initial Audit	15 Dec 2022

Source Files

Filename	SHA256
NaughtyList/contracts/Naughty_List.sol	431dc10608a8b761f93c85950631ee121d233fefc6657d7d21b530e348acbdc3

Contract Analysis

● Critical ● Medium ● Minor / Informative ● Pass

Severity	Code	Description	Status
●	ST	Stops Transactions	Passed
●	OCTD	Transfers Contract's Tokens	Passed
●	OTUT	Transfers User's Tokens	Passed
●	ELFM	Exceeds Fees Limit	Passed
●	ULTW	Transfers Liquidity to Team Wallet	Passed
●	MT	Mints Tokens	Passed
●	BT	Burns Tokens	Passed
●	BC	Blacklists Addresses	Passed

Contract Diagnostics

● Critical ● Medium ● Minor / Informative

Severity	Code	Description	Status
●	L02	State Variables could be Declared Constant	unresolved
●	L04	Conformance to Solidity Naming Conventions	unresolved
●	L07	Missing Events Arithmetic	unresolved
●	L09	Dead Code Elimination	unresolved
●	L12	Using Variables before Declaration	unresolved
●	L14	Uninitialized Variables in Local Scope	unresolved

L02 - State Variables could be Declared Constant

Criticality	minor
Location	NaughtyList/contracts/Naughty_List.sol#L172
Status	unresolved

Description

Constant state variables should be declared constant to save gas.

```
BUSD
```

Recommendation

Add the constant attribute to state variables that never change.

L04 - Conformance to Solidity Naming Conventions

Criticality	minor
Location	NaughtyList/contracts/Naughty_List.sol#L128,153,127,33,450,182,164,204,172,532,450,117,147,166,130,129,163,162,165,532,126,114
Status	unresolved

Description

Solidity defines a naming convention that should be followed. Rule exceptions:

- Allow constant variable name/symbol/decimals to be lowercase.
- Allow _ at the beginning of the mixed_case match for private variables and unused parameters.

```
_symbol
_ratios
_name
WETH
_antiSnipe
_taxWallets
maxTransferTaxes
_hasLiqBeenAdded
BUSD
_minReflection
_antiBlock
_allowances
_taxRates
masterTaxDivisor
_tTotal
_decimals
maxSellTaxes
maxBuyTaxes
maxRoundtripTax
_minPeriod
startingSupply
_tOwned
```

Recommendation

Follow the Solidity naming convention.
https://docs.soliditylang.org/en/v0.8.17/style-guide.html#naming-conventions.

L07 - Missing Events Arithmetic

Criticality	minor
Location	NaughtyList/contracts/Naughty_List.sol#L494,520,511,489,537
Status	unresolved

Description

Detected missing events for critical arithmetic parameters. There are functions that have no event emitted, so it is difficult to track off-chain changes.

```
_maxWalletSize = (_tTotal * percent) / divisor
piSwapPercent = priceImpactSwapPercent
swapThreshold = (_tTotal * thresholdPercent) / thresholdDivisor
_maxTxAmount = (_tTotal * percent) / divisor
cashierGas = gas
```

Recommendation

Emit an event for critical parameter changes.

L09 - Dead Code Elimination

Criticality	minor
Location	NaughtyList/contracts/Naughty_List.sol#L578
Status	unresolved

Description

Functions that are not used in the contract, and make the code's size bigger.

`_basicTransfer`

Recommendation

Remove unused functions.

L12 - Using Variables before Declaration

Criticality	minor
Location	NaughtyList/contracts/Naughty_List.sol#L740
Status	unresolved

Description

The contract is using a variable before the declaration. This is usually happening either if it has not been declared yet or the variable has been declared in a different scope.

```
check
```

Recommendation

The variables should be declared before any usage of them.

L14 - Uninitialized Variables in Local Scope

Criticality	minor
Location	NaughtyList/contracts/Naughty_List.sol#L740,739
Status	unresolved

Description

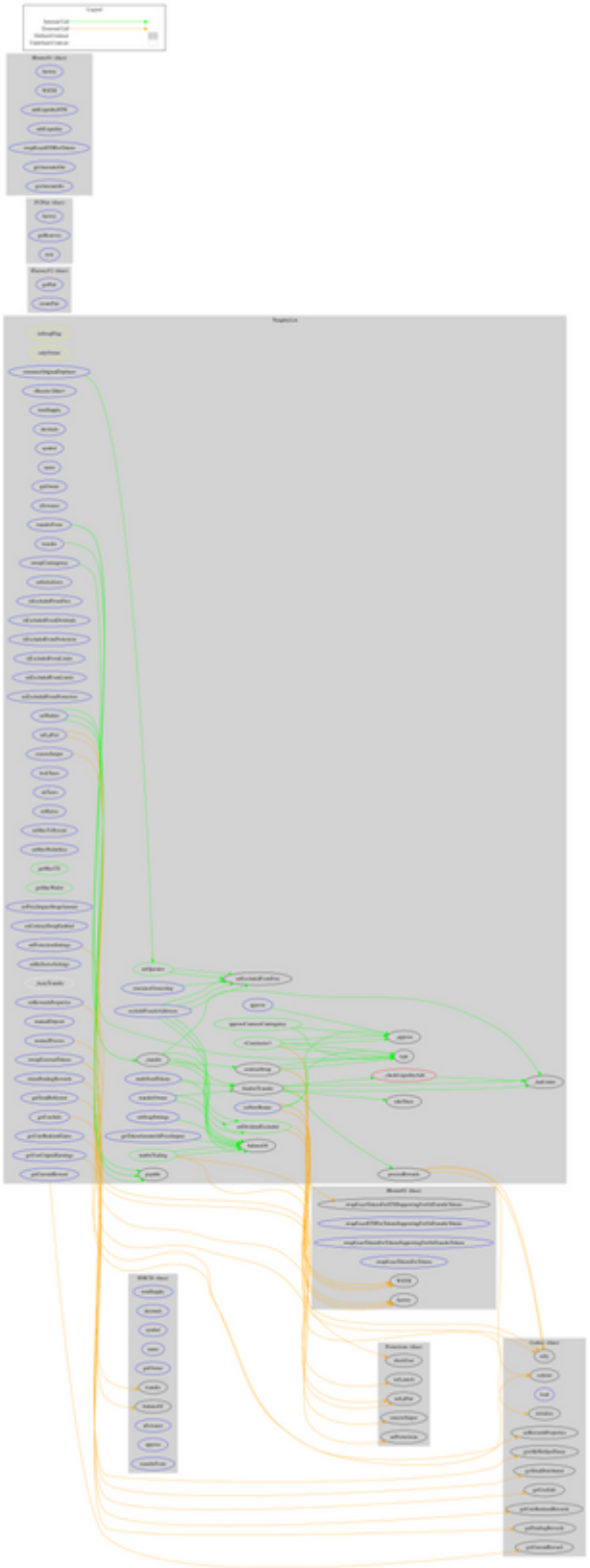
The are variables that are defined in the local scope and are not initialized.

```
check
checked
```

Recommendation

All the local scoped variables should be initialized.

Contract Flow



Domain Info

Domain Name	naughtylist.finance
Registry Domain ID	4efea9c7f85c42e5b1bd31472c598181-DONUTS
Creation Date	2022-11-29T17:13:25Z
Updated Date	2022-12-04T17:13:34Z
Registry Expiry Date	2023-11-29T17:13:25Z
Registrar WHOIS Server	whois.godaddy.com/
Registrar URL	http://www.godaddy.com/domains/search.aspx?ci=8990
Registrar	GoDaddy.com, LLC
Registrar IANA ID	146

The domain was created 16 days before the creation of the audit. It will expire in 12 months.

There is no public billing information, the creator is protected by the privacy settings.

Summary

Naughty List is an interesting project that has a friendly and growing community. The Smart Contract analysis reported no compiler error or critical issues. The contract Owner can access some admin functions that can not be used in a malicious way to disturb the users' transactions. There is also a limit of max 20% buy, sell and transfer fees.

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Cyberscope is one of the leading smart contract audit firms in the crypto space and has built a high-profile network of clients and partners.

The Cyberscope team

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