Bad Bitches Token

Smart Contract Audit Report

SYSFIXED

10 Jan 2023

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AUDITED DETAILS

Audited Project

Project name	Token ticker	Blockchain
Bad Bitches Token	BBT	Binance Smart Chain

Addresses

Contract address	0x54714b13111a8AB291973b5E9EEbD64081629654
Contract deployer address	0x35f059Eba998e14B8F20a368B1d9B7bBbA6bE5B0

Project Website

https://badbitches.pro/

Codebase

https://bscscan.com/address/0x54714b13111a8AB291973b5E9EEbD64081629654#code

SUMMARY

Bad bitches token (bbt) is a blockchain ecosystem, featuring the first poa algorithm. Bbt is a eco-system for virtual reality city, nft marketplace, and online workshop platform. Our advantages are doxx, cg - cmc listed, bscscan, layer 1 blockchain, ip locked for two years, liqidity pool %100 5% buy fee, and 10% sell fee for charity and development. All tokens will remain locked for an average of 2 years.

Contract Summary

Documentation Quality

Bad Bitches Token provides a very good documentation with standard of solidity base code.

- The technical description is provided clearly and structured and also dont have any high risk issue.

Code Quality

The Overall quality of the basecode is standard.

- Standard solidity basecode and rules are already followed by Bad Bitches Token with the discovery of several low issues.

Test Coverage

Test coverage of the project is 100% (Through Codebase)

Audit Findings Summary

- SWC-101 | It is recommended to use vetted safe math libraries for arithmetic operations consistently on lines 14, 24, 32, 33, 41, 49, 664, 664, 664, 665, 665, 665, 697, 697, 697, 762, 762, 762, 788 and 800.
- SWC-103 | Pragma statements can be allowed to float when a contract is intended on lines 10.
- SWC-110 SWC-123 | It is recommended to use of revert(), assert(), and require() in Solidity, and the new REVERT opcode in the EVM on lines 780 and 781.

CONCLUSION

We have audited the NamaProject Coin which has released on January 2023 to discover issues and identify potential security vulnerabilities in NamaProject Project. This process is used to find bugs, technical issues, and security loopholes that find some common issues in the code.

The security audit report provides a satisfactory result with some low-risk issues.

The most common issue found in writing code on contracts that do not pose a big risk, writing on contracts is close to the standard of writing contracts in general. Some of the low issues that were found stated variable visibility are not set, a floating pragma is set, and out of bounds array access. We recommended specifying a fixed compiler version to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code.

AUDIT RESULT

Article	Category	Description	Result
Default Visibility	SWC-100 SWC-108	Functions and state variables visibility should be set explicitly. Visibility levels should be specified consciously.	PASS
Integer Overflow and Underflow	SWC-101	If unchecked math is used, all math operations should be safe from overflows and underflows.	ISSUE FOUND
Outdated Compiler Version	SWC-102	It is recommended to use a recent version of the Solidity compiler.	PASS
Floating Pragma	SWC-103	Contracts should be deployed with the same compiler version and flags that they have been tested thoroughly.	ISSUE FOUND
Unchecked Call Return Value	SWC-104	The return value of a message call should be checked.	PASS
Unprotected Ether Withdrawal	SWC-105	Due to missing or insufficient access controls, malicious parties can withdraw from the contract.	PASS
SELFDESTRUCT Instruction	SWC-106	The contract should not be self-destructible while it has funds belonging to users.	PASS
Reentrancy	SWC-107	Check effect interaction pattern should be followed if the code performs recursive call.	PASS
Uninitialized Storage Pointer	SWC-109	Uninitialized local storage variables can point to unexpected storage locations in the contract.	PASS
Assert Violation	SWC-110 SWC-123	Properly functioning code should never reach a failing assert statement.	ISSUE FOUND
Deprecated Solidity Functions	SWC-111	Deprecated built-in functions should never be used.	PASS
Delegate call to Untrusted Callee	SWC-112	Delegatecalls should only be allowed to trusted addresses.	PASS

DoS (Denial of Service)	SWC-113 SWC-128	Execution of the code should never be blocked by a specific contract state unless required.	PASS
Race Conditions	SWC-114	Race Conditions and Transactions Order Dependency should not be possible.	PASS
Authorization through tx.origin	SWC-115	tx.origin should not be used for authorization.	PASS
Block values as a proxy for time	SWC-116	Block numbers should not be used for time calculations.	PASS
Signature Unique ID	SWC-117 SWC-121 SWC-122	Signed messages should always have a unique id. A transaction hash should not be used as a unique id.	PASS
Incorrect Constructor Name	SWC-118	Constructors are special functions that are called only once during the contract creation.	PASS
Shadowing State Variable	SWC-119	State variables should not be shadowed.	PASS
Weak Sources of Randomness	SWC-120	Random values should never be generated from Chain Attributes or be predictable.	PASS
Write to Arbitrary Storage Location	SWC-124	The contract is responsible for ensuring that only authorized user or contract accounts may write to sensitive storage locations.	PASS
Incorrect Inheritance Order	SWC-125	When inheriting multiple contracts, especially if they have identical functions, a developer should carefully specify inheritance in the correct order. The rule of thumb is to inherit contracts from more /general/ to more /specific/.	PASS
Insufficient Gas Griefing	SWC-126	Insufficient gas griefing attacks can be performed on contracts which accept data and use it in a sub-call on another contract.	PASS
Arbitrary Jump Function	SWC-127	As Solidity doesnt support pointer arithmetics, it is impossible to change such variable to an arbitrary value.	PASS

SMART CONTRACT ANALYSIS

Started	Monday Jan 09 2023 01:45:16 GMT+0000 (Coordinated Universal Time)
Finished	Tuesday Jan 10 2023 08:58:36 GMT+0000 (Coordinated Universal Time)
Mode	Standard
Main Source File	BadbitchesToken.sol

Detected Issues

ID	Title	Severity	Status
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "%" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "**" DISCOVERED	low	acknowledged
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SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 14

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BadbitchesToken.sol

Locations

```
13   function add(uint256 a, uint256 b) internal pure returns (uint256) {
14   uint256 c = a + b;
15   require(c >= a, "SafeMath: addition overflow");
16
17   return c;
18
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 24

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BadbitchesToken.sol

Locations

```
23   require(b <= a, errorMessage);
24   uint256 c = a - b;
25
26   return c;
27   }
28
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 32

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BadbitchesToken.sol

Locations

```
31   }
32   uint256 c = a * b;
33   require(c / a == b, "SafeMath: multiplication overflow");
34   return c;
35   }
36
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 33

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BadbitchesToken.sol

Locations

```
32   uint256 c = a * b;
33   require(c / a == b, "SafeMath: multiplication overflow");
34   return c;
35   }
36   function div(uint256 a, uint256 b) internal pure returns (uint256) {
37
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 41

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BadbitchesToken.sol

Locations

```
40   require(b > 0, errorMessage);
41   uint256 c = a / b;
42   return c;
43   }
44   function mod(uint256 a, uint256 b) internal pure returns (uint256) {
45
```

SWC-101 | ARITHMETIC OPERATION "%" DISCOVERED

LINE 49

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BadbitchesToken.sol

Locations

```
48   require(b != 0, errorMessage);
49   return a % b;
50   }
51   }
52
53
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 664

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BadbitchesToken.sol

Locations

```
663
664   uint256 public maxBuyTxAmount     =  10**10 * 10**18;
665   uint256 public swapTokensAtAmount =  10**10 * 10**18;
666
667   address public devWallet      = 0x35f059Eba998e14B8F20a368B1d9B7bBbA6bE5B0;
668
```

SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 664

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BadbitchesToken.sol

Locations

```
663
664   uint256 public maxBuyTxAmount     =  10**10 * 10**18;
665   uint256 public swapTokensAtAmount =  10**10 * 10**18;
666
667   address public devWallet      = 0x35f059Eba998e14B8F20a368B1d9B7bBbA6bE5B0;
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SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 664

low SEVERITY

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- BadbitchesToken.sol

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666
667   address public devWallet      = 0x35f059Eba998e14B8F20a368B1d9B7bBbA6bE5B0;
668
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 665

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BadbitchesToken.sol

Locations

```
664   uint256 public maxBuyTxAmount     =  10**10 * 10**18;
665   uint256 public swapTokensAtAmount =  10**10 * 10**18;
666
667   address public devWallet      = 0x35f059Eba998e14B8F20a368B1d9B7bBbA6bE5B0;
668   address public teamWallet     = 0xC89C23c07A9Ef028f8c995D8A36CD09ECE732388;
669
```

SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 665

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666
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668   address public teamWallet     = 0xC89C23c07A9Ef028f8c995D8A36CD09ECE732388;
669
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 697

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BadbitchesToken.sol

Locations

```
696   _isBlacklisted[address(0)] = true;
697   _mint(owner(),  10**12 * 10**18);
698   }
699
700   receive() external payable {
701
```

SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 697

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BadbitchesToken.sol

Locations

```
696   _isBlacklisted[address(0)] = true;
697   _mint(owner(),  10**12 * 10**18);
698   }
699
700   receive() external payable {
701
```

SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 697

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BadbitchesToken.sol

Locations

```
696   _isBlacklisted[address(0)] = true;
697   _mint(owner(),  10**12 * 10**18);
698   }
699
700   receive() external payable {
701
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 762

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BadbitchesToken.sol

Locations

```
761
762   uint256 fees = amount.mul(liquidityFee + devFee + protocolFee + burnFee).div(1000);
763   amount = amount.sub(fees);
764   super._transfer(from, address(this), fees);
765   }
766
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 762

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BadbitchesToken.sol

Locations

```
761
762   uint256 fees = amount.mul(liquidityFee + devFee + protocolFee + burnFee).div(1000);
763   amount = amount.sub(fees);
764   super._transfer(from, address(this), fees);
765   }
766
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 762

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BadbitchesToken.sol

Locations

```
761
762   uint256 fees = amount.mul(liquidityFee + devFee + protocolFee + burnFee).div(1000);
763   amount = amount.sub(fees);
764   super._transfer(from, address(this), fees);
765   }
766
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 788

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BadbitchesToken.sol

Locations

```
787   address(this),
788   block.timestamp + 200
789   );
790   }
791
792
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 800

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BadbitchesToken.sol

Locations

```
799   owner(),
800   block.timestamp + 200
801   );
802   }
803
804
```

SWC-103 | A FLOATING PRAGMA IS SET.

LINE 10

low SEVERITY

The current pragma Solidity directive is ""^0.8.7"". It is recommended to specify a fixed compiler version to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code.

Source File

- BadbitchesToken.sol

Locations

```
9
10   pragma solidity ^0.8.7;
11
12   library SafeMath {
13   function add(uint256 a, uint256 b) internal pure returns (uint256) {
14
```

SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 780

low SEVERITY

The index access expression can cause an exception in case of use of invalid array index value.

Source File

- BadbitchesToken.sol

Locations

```
779   address[] memory path = new address[](2);
780   path[0] = address(this);
781   path[1] = uniswapV2Router.WETH();
782   _approve(address(this), address(uniswapV2Router), tokenAmount);
783   uniswapV2Router.swapExactTokensForETHSupportingFeeOnTransferTokens(
784
```

SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 781

low SEVERITY

The index access expression can cause an exception in case of use of invalid array index value.

Source File

- BadbitchesToken.sol

Locations

```
780   path[0] = address(this);
781   path[1] = uniswapV2Router.WETH();
782   _approve(address(this), address(uniswapV2Router), tokenAmount);
783   uniswapV2Router.swapExactTokensForETHSupportingFeeOnTransferTokens(
784   tokenAmount,
785
```

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This is a limited report on our findings based on our analysis, in accordance with good industry practice as of 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 below disclaimer below – please make sure to read it in full.

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