

# Blockchain Security & Smart Contract Audits



This document may contain confidential information about IT systems and the intellectual property of the Customer as well as information about potential vulnerabilities and methods of their exploitation.

The report containing confidential information can be used internally by the Customer, or it can be disclosed publicly after all vulnerabilities are fixed — upon a decision of the Customer.

## **Document**

Name	Smart Contract Code Review and Security Analysis Report for Cookie Token
Approved by	Daniel   CEO Trust Audits
Туре	BEP20 token
Platform	Binance Chain / Solidity
Methods	Architecture Review, Functional Testing, Computer-Aided Verification, Manual Review
Contract	0x687FD37D1666055f688A0F5A69Bd85a6B846da63
Hash	0x63bd13048a9e0c187a60b78396a9d532a045e8158e1a808a2fc3ea3fc b2f892a
Deployed contract	0x260883dEE037055065c7E561D31AE53837D41c20
Technical	NO
Documentation	
JS tests	NO
Website	https://www.cookietoken.online/
Timeline	27 Maret 2022
Changelog	27 maret



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## Introduction

Trust Audits (Auditor) was contracted by Cookie Token. (Customer) to conduct a Smart Contract Code Review and Security Analysis. This report presents the findings of the security assessment of the Customer's smart contract and its code review conducted between Maret 27<sup>th</sup>, 2022 - Maret 30<sup>th</sup>, 2022.

## Scope

The scope of the project is smart contracts in the repository:

Deployer: 0x260883dee037055065c7e561d31ae53837d41c20

Hash: 0x63bd13048a9e0c187a60b78396a9d532a045e8158e1a808a2fc3ea3

fcb2f892a

Technical Documentation: No

JS tests: No Contracts:

BuybackBabyToken. sol DividendDistributor.

BaseToken. sol Auth. sol

We have scanned this smart contract for commonly known and more specific vulnerabilities. Here are some of the commonly known vulnerabilities that are considered:



Category	Check Item
Code review	<ul><li>Reentrancy</li></ul>
	Ownership Takeover
	<ul> <li>Timestamp Dependence</li> </ul>
	Gas Limit and Loops
	<ul> <li>DoS with (Unexpected) Throw</li> </ul>
	<ul> <li>DoS with Block Gas Limit</li> </ul>
	<ul> <li>Transaction-Ordering Dependence</li> </ul>
	Style guide violation
	<ul> <li>Costly Loop</li> </ul>
	<ul> <li>ERC20 API violation</li> </ul>
	<ul> <li>Unchecked external call</li> </ul>
	<ul> <li>Unchecked math</li> </ul>
	<ul> <li>Unsafe type inference</li> </ul>
	<ul> <li>Implicit visibility level</li> </ul>
	<ul> <li>Deployment Consistency</li> </ul>
	<ul> <li>Repository Consistency</li> </ul>
	<ul> <li>Data Consistency</li> </ul>



Functional review	
i unctional review	<ul> <li>Business Logics Review</li> </ul>
	<ul><li>Functionality Checks</li></ul>
	<ul> <li>Access Control &amp; Authorization</li> </ul>
	<ul> <li>Escrow manipulation</li> </ul>
	<ul> <li>Token Supply manipulation</li> </ul>
	<ul> <li>Assets integrity</li> </ul>
	<ul> <li>User Balances manipulation</li> </ul>
	<ul> <li>Data Consistency manipulation</li> </ul>
	<ul><li>Kill-Switch Mechanism</li></ul>
	<ul> <li>Operation Trails &amp; Event Generation</li> </ul>

# **Executive Summary**

According to the assessment, the Customer's smart contracts are well-secured.



Our team performed an analysis of code functionality, manual audit, and automated checks with Mythril and Slither. All issues found during automated analysis were manually reviewed, and important vulnerabilities are presented in the Audit overview section. All found issues can be found in the Audit overview section.

As a result of the audit, security engineers found 1 low severity issue.



# **Severity Definitions**

Risk Level	Description
Critical	Critical vulnerabilities are usually straightforward to exploit and can lead to assets loss or data manipulations.
	High-level vulnerabilities are difficult to exploit; however, they
	also have a significant impact on smart
High	contract execution, e.g., public access to crucial functions
Medium	Medium-level vulnerabilities are important to fix; however, they can't lead to assets loss or data manipulations.
Low	Low-level vulnerabilities are mostly related to outdated, unused, etc. code snippets that can't have a significant impact on execution



## **Audit overview**

Critical

No critical issues were found.

High

No high severity issues were found.

Medium

No medium severity issues were found.

Low

1. A public function that could be declared external.

public functions that are never called by the contract should be declared external

Contract: SimpleToken.sol

Functions: safeMint, updateMinter, setBaseURI

Recommendation: Use the external attribute for functions never called from the contract.



## Conclusion

Smart contracts within the scope were manually reviewed and analyzed with static analysis tools.

The audit report contains all found security vulnerabilities and other issues in the reviewed code.

As a result of the audit, security engineers found 1 low severity issue.



### **Disclaimers**

#### Trust Audits Disclaimer

The smart contracts given for audit have been analyzed in accordance with the best industry practices at the date of this report, in relation to Blockchain security vulnerabilities and issues in smart contract source code, the details of which are disclosed in this report (Source Code); the Source Code compilation, deployment, and functionality (performing the intended functions).

The audit makes no statements or warranties on the security of the code. It also cannot be considered as a sufficient assessment regarding the utility and safety of the code, bug-free status, or any other statements of the contract. While we have done our best in conducting the analysis and producing this report, it is important to note that you should not rely on this report only — we recommend proceeding with several independent audits and apublic bug bounty program to ensure the security of smart contracts.

#### Technical Disclaimer

Smart contracts are deployed and executed on a blockchain platform. The platform, its programming language, and other software related to the smart contract can have vulnerabilities that can lead to hacks. Thus, the audit can't guarantee the explicit security of the audited smart contracts.