Smart Contract Audit Report

Audit was conducted on the **Speakeasy** Smart Contract

Smart Contract	**SPEEZY**
Type Of Utility	ERC20
Platform	BSC, Ethereum Virtual Machine
Chain Id	56
Language	Solidity v0.8.11
Address	0xbB560523D3c2F34C5db58C3119b4828C7d96710a

Audit Score

Section	Score
Codebase Security	**100%**
Codebase Complexity and Practices	**95%**
Owner Privileges and Control	**100%**
Overall Score	**98.3%**

Branding

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Content

Scope of the audit

This Audit Report mainly focuses on the overall security of the **SPEAKEASY** token Smart Contract. This audit was conducted with rigorous attention to the general implementation of the contract and by examining the overall architectural layout of the software implementation. The reliability and correctness of this smart contract's codebase are being assessed

Security Scope

Identifies security related issues within each contract and the system of contract.

General Code Quality

A full assessment of the code quality and general software architecture patterns and best practices used.

Auditing Methods Used

Rigorous testing of the project has been performed. Detailed code base analysis was conducted, reviewing the smart contract architecture to ensure it is structured and safe.

A detailed, line by line inspection of the codebase was conducted to find any potential security vulnerabilities such as denial of service attacks, race conditions, transaction-ordering dependence, timestamp dependence, and denial of service attacks.

Automated and manual testing was employed that included:
– Analysis of on-chain data security
– Analysis of the code in-depth and detailed, manual review of the code, line-by-line.
– Deployment of the code on an in-house testnet blockchain and running live tests.
– Determining failure preparations and if worst-case scenario protocols are in place
– Analysis of any third-party code use and verifying the overall security of this

Tools Used: Remix IDE, Ganache, Solhint, VScode, Mythril, Contract Library Hardhat

Assessing Possible Issues

Any issue detected during the conduction of this audit will be categorized under one of 3 severity levels: low, medium, and high.

Low level Severity Issues

Issues that do not pose any serious threat to the functionality of the software

Medium level Severity issues

Issues that can cause potential problems to the overall health of the software application but that can be fixed without having any breaking changes on the current functionality

High level Severity issues

Critical issues that affect the smart contract's overall performance and functionality. These issues should be fixed urgently.

General Issues Report

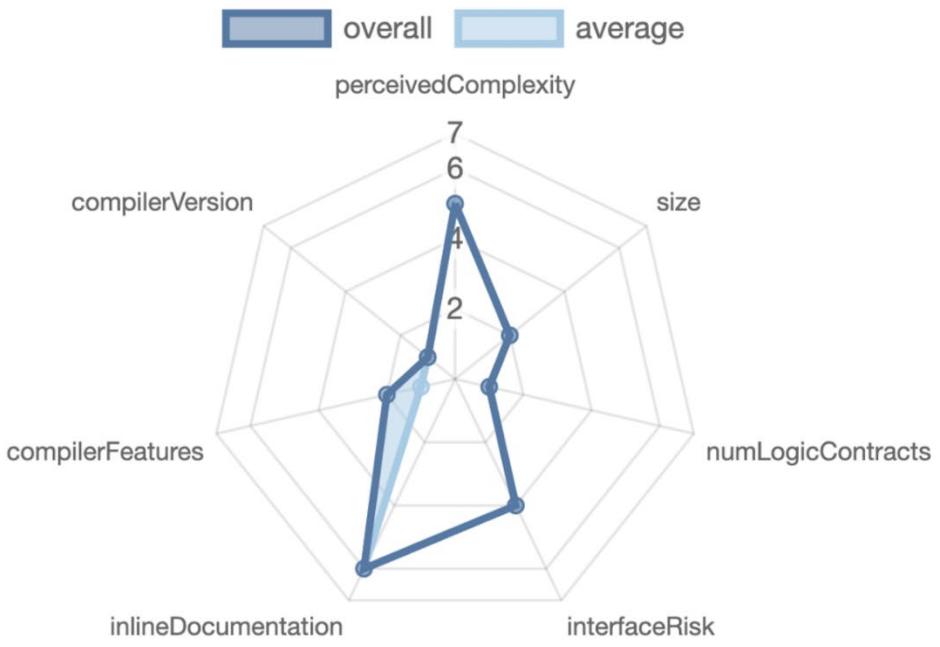
General issues that were found during manual and automatic assessments

No	Issue Verification	Status
1	Compiler warnings	Passed
2	Reentrancy and Race Conditions.	Passed
3	Possible delays in data delivery.	Passed
4	Oracle calls.	Passed
5	DoS with block gas limit.	Passed
6	DoS with Revert.	Passed
7	Timestamp dependence.	Passed
8	Methods execution permissions.	Passed
9	Economy model.	Passed
10	Exchange impact rate on the logic.	Passed
11	Private user data leaks.	Passed
12	Scoping and Declarations.	Passed
13	Arithmetic accuracy.	Passed

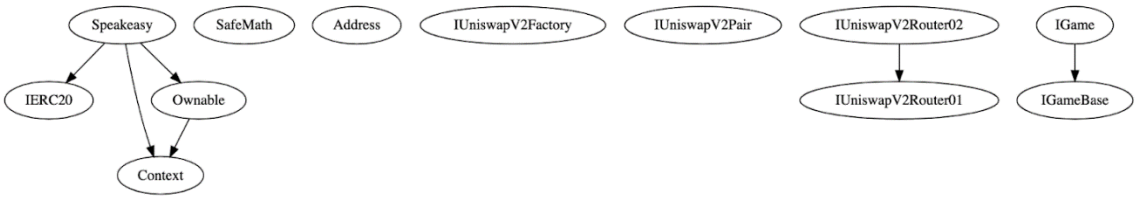
Issues Found

Low Level Severity	Medium Level Severity	High Level Severity
0	0	0

Risk Assessment



Contract Dependency Graphs



Manual Code Inspection

The code of the target contract and its dependencies was reviewed, deployed, and manually tested by our developers.

No	Contract	Issues
1	SPEEZY	2
2	Ownable	0
3	Context	0

Issues Found

Low Level Severity	Medium Level Severity	High Level Severity
1	2	0

Inspections

Contract	SPEAKEASY
Address	0xbB560523D3c2F34C5db58C3119b4828C7d96710a
Issues	3
Notes	BEP-20 Token

Unprovided Code

No	Contract
1	Game.sol

Issues

1. Front Running Attack Surface

```
1361    // make the swap
1362    uniswapV2Router.swapExactTokensForETHSupportingFeeOnTransferTokens(
1363        tokenAmount,
1364        0, // accept any amount of ETH
1365        path,
1366        address(this),
1367        block.timestamp
1368    );
```

Line	**1362**
Severity	**Medium**
Method	**swapExactTokensForETHSupportingFeeOnTransferTokens (uint256 tokenAmount, address _to)**
Description	**Setting the minimum expect output amount for a swap to be 0 can lead to frontrunning attacks that especially if there are high volume transactions involved.**
Notes	**Calculate and set a minimum output amount or limit the max transaction amount to reduce the attack probability.**

2. Liquidity Centralization

```
1375    // add the liquidity
1376    uniswapV2Router.addLiquidityETH{value: ethAmount}(
1377        address(this),
1378        tokenAmount,
1379        0, // slippage is unavoidable
1380        0, // slippage is unavoidable
1381        owner(),
1382        block.timestamp
1383    );
```

Line	**1376**
Severity	**Medium**
Method	**uniswapV2Router.addLiquidityETH**
Description	**All the newly minted liquidity is redirected to the owner's address**
Notes	**Minted liquidity should be stored in a non centralized environment, locked or burned**

3. Redundant use of library

```
438    using SafeMath for uint256;
```

Line	**438**
Severity	**Low**
Method	—
Description	**Version > 0.8.0 of the solidity compiler has built in math safety.**
Notes	**This library can be removed**

Access Control and Privileges

The contract uses a single owner access control system for setting contract specific parameters.

Speezy.sol

Role	Privileges

Owner	`renounceOwnership`
	`transferOwnership`
	`setExclusionFromRewards`
	`setExclusionFromFees`
	`setSwapTokensBNBLimit`
	`setMaxSellAllowanceBeforeExtra`
	`setMaxTxPercent`
	`removeBlacklist`
	`setSwapAndLiquifyEnabled`
	`setFees`
	`setAddressFee`
	`setTaxWallets`
	`enableTrading`
	`setJackpotGame`
	`removeJackpotGame`
	`setExclusionToAddrFromCredits`
	`setExclusionFromAddrFromCredits`
	`setExclusionToAddrFromCreditRemoval`
	`setCreditPrice`
	`setAutoSend`
	`withdrawBNB`
	`withdrawToken`
	`updateUniswapV2Router`
	`setOverSellAddress`
	`setTaxesToRedistribute`
	`setPresaleAddress`

Restrictions that the owner can impose:

- Exclude accounts from fess
- Set fees
- Set individual fees on addresses
- Halt trading
- Block addresses from receiving or sending transactions
- Limit trading frequency

Notes

The owner of this contract can censor/restrict parties from accessing this contract's functionality.

Conclusion

The **Speezy** Smart contracts do not contain any high severity issues!

Audit Score

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SPEAKEASY has passed the Smart Contract Audit and KYC Verification by HedgePay Sdn Bhd

KYC Verifications: February 24, 2022

Smart contract Audit completion: October 16, 2022

https://github.com/HedgePay/audits

AUDITED & KYCED by hedgepay

SECURE . ACCESSIBLE . UNIQUE

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. 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 based on 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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