



# My Shiba Academia Smart Contract Security Audit

<u>TechRate</u> October, 2021

## **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. 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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The analysis of the security is purely based on the smart contracts alone. No applications or operations were reviewed for security. No product code has been reviewed.

## **Background**

TechRate was commissioned by My Shiba Academia to perform an audit of smart contracts:

- https://etherscan.io/address/0x93a20a5f1709659005e1610d1a022d5f1e2d0df7 #code
- https://bscscan.com/address/0x93a20a5f1709659005e1610d1a022d5f1e2d0df 7#code

#### The purpose of the audit was to achieve the following:

- Ensure that the smart contract functions as intended.
- Identify potential security issues with the smart contract.

The information in this report should be used to understand the risk exposure of the smart contract, and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

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# **Issues Checking Status**

Iss	sue description	Checking status
1. Co	ompiler errors.	Passed
	nce conditions and Reentrancy. Cross-function race anditions.	Passed
3. Po	ssible delays in data delivery.	Passed
4. Or	acle calls.	Passed
5. Fro	ont running.	Passed
6. Tir	mestamp dependence.	Passed
7. Int	teger Overflow and Underflow.	Passed
8. <b>D</b> o	S with Revert.	Passed
9. <b>D</b> o	S with block gas limit.	Low issues
10. <b>M</b> e	ethods execution permissions.	Passed
11. Ec	conomy model of the contract.	Passed
12. Th	e impact of the exchange rate on the logic.	Passed
13. <b>P</b> ri	ivate user data leaks.	Passed
14. <b>M</b> a	alicious Event log.	Passed
15. Sc	oping and Declarations.	Passed
16. Un	ninitialized storage pointers.	Passed
17. Ar	ithmetic accuracy.	Passed
18. De	esign Logic.	Passed
19. Cr	oss-function race conditions.	Passed
	fe Open Zeppelin contracts implementation and age.	Passed
21. Fa	Ilback function security.	Passed

## **Security Issues**

High Severity Issues

No high severity issues found.

Medium Severity Issues

No medium severity issues found.

- Low Severity Issues
  - 1. Out of gas

#### Issue:

- The function includeInReward() uses the loop to find and remove addresses from the \_excluded list. Function will be aborted with OUT\_OF\_GAS exception if there will be a long excluded addresses list.
- The function \_getCurrentSupply also uses the loop for evaluating total supply. It also could be aborted with OUT\_OF\_GAS exception if there will be a long excluded addresses list.

#### Recommendation:

Check that the excluded array length is not too big.

#### **Notes:**

- Ethereum contract's maxTxAmount equals total supply.
- Ethereum contract's marketing fee is taken only in the \_transferStandard() function.

# Owner privileges (In the period when the owner is not renounced)

- 0x93a20a5f1709659005e1610d1a022d5f1e2d0df7(BSC):
  - Owner can change the tax and liquidity fee.
  - Owner can change the maximum transaction amount.
  - Owner can exclude from the fee.
  - Owner can change marketingDivisor.
  - Owner can change buyback divisor.
  - Owner can change minimum number of tokens to add to liquidity.
  - Owner can change buyBackUpperLimit.
  - Owner can change marketing address.
  - Owner can enable and disable buyBack.
  - Owner can enable before and after presale modes.
  - Owner can change liquidity, marketing and buyback percents.
  - Owner can lock and unlock. By the way, using these functions the owner could retake privileges even after the ownership was renounced.
- 0x93a20a5f1709659005e1610D1a022d5f1e2D0DF7(Ethereum):
  - Owner can change the tax, marketing and liquidity fee.
  - Owner can change the maximum transaction amount.
  - Owner can exclude from the fee and from maxTx.
  - Owner can enable before and after presale modes.
  - Owner can change marketing address.
  - Owner can change liquidity and buyback percents.
  - Owner can change minimum number of tokens to add to liquidity.
  - Owner can enable and disable buyBack.
  - Owner can change buyBackUpperLimit.
  - Owner can change buyback divisor.
  - Owner can lock and unlock. By the way, using these functions the owner could leave as owner even after the ownership was renounced.

### Conclusion

Smart contracts contain low severity issues! Liquidity pair contract's security is not checked due to out of scope. The further transfers and operations with the funds raise are not related to this particular contract.

Liquidity locking details NOT provided by the team.

#### TechRate note:

Please check the disclaimer above and note, the audit makes no statements or warranties on business model, investment attractiveness or code sustainability. The report is provided for the only contract mentioned in the report and does not include any other potential contracts deployed by Owner.

