

Security Assessment

## **ShibaStonks**

Verified on 04/18/2024



#### **SUMMARY**

Project		CHAIN METHODOLOGY			Υ	
ShibaStonks		Ethe	Ethereum Manual & Automatic Analysis		natic Analysis	
FILES Single			VERY 3/2024	TYPE Standard Audit		
	2	0	0	0	0	2
	Total Findings	Critical	Major	Medium	Minor	Informational
0 Critical						can affect the contract al events that can risk and ct
0 Major					when using the co	can affect the outcome ontract that can serve as hipulating the contract in ner
0 Medium					An opening that c executing the con situation	ould affect the outcome in tract in a specific
0 Minor					An opening but do the functionality of	pesn't have an impact on f the contract
2 Informational  An opening that consists inf will not risk or affect the core			onsists information but ect the contract			
STATUS	<b>√</b> AU[	OIT PASSI	ED			



## TABLE OF CONTENTS ShibaStonks

#### Summary

Project Summary Findings Summary Disclaimer Scope of Work Auditing Approach

#### **Project Information**

Token/Project Details Inheritance Graph Call Graph

#### Findings

Issues
SWC Attacks
CW Assessment
Fixes & Recommendation
Audit Comments



## **DISCLAIMER** ShibaStonks

<u>ContractWolf</u> audits and reports should not be considered as a form of project's "Advertisement" and does not cover any interaction and assessment from "Project Contract" to "External Contracts" such as PancakeSwap, UniSwap, SushiSwap or similar.

**ContractWolf** does not provide any <u>warranty</u> on its released report and should not be used as a <u>decision</u> to invest into audited projects.

**ContractWolf** provides a transparent report to all its "Clients" and to its "Clients Participants" and will not claim any guarantee of bug-free code within its **SMART CONTRACT**.

**ContractWolf**'s presence is to analyze, audit and assess the Client's Smart Contract to find any underlying risk and to eliminate any logic and flow errors within its code.

Each company or project should be liable to its security flaws and functionalities.



## SCOPE OF WORK | ShibaStonks

**ShibaStonks** team has agreed and provided us with the files that need to be tested (*Github*, *BSCscan*, *Etherscan*, *Local files etc*). The scope of audit is the main contract.

The goal of this engagement is to identify if there is a possibility of security flaws in the implementation of smart contract and its systems.

ContractWolf will be focusing on contract issues and functionalities along with the project claims from smart contract to their website, whitepaper, repository which has been provided by **ShibaStonks**.



### AUDITING APPROACH ShibaStonks

Every line of code along with its functionalities will undergo manual review to check for security issues, quality of logic and contract scope of inheritance. The manual review will be done by our team that will document any issues that they discovered.

#### **METHODOLOGY**

The auditing process follows a routine series of steps:

- 1. Code review that includes the following:
- Review of the specifications, sources and instructions provided to ContractWolf to make sure we understand the size, scope and functionality of the smart contract.
- Manual review of code. Our team will have a process of reading the code line-by-line with the intention of identifying potential vulnerabilities, underlying and hidden security flaws.
- 2. Testing and automated analysis that includes:
- Testing the smart contract function with common test cases and scenarios to ensure that it returns the expected results.
- 3. Best practices and ethical review. The team will review the contract with the aim to improve efficiency, effectiveness, clarifications, maintainability, security and control within the smart contract.
- 4. Recommendations to help the project take steps to eliminate or minimize threats and secure the smart contract.



# TOKEN DETAILS | ShibaStonks



ShibaStonks, a next-generation ERC20 token built on the Ethereum blockchain, ushers in a new era of democratized finance.

Token Name	Symbol	Decimal	Total Supply	Chain
ShibaStonks	SST	18	129,792,000,000	Ethereum

#### SOURCE

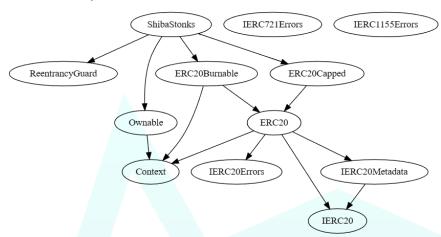
Source

Sent Via local-files



## INHERITANCE GRAPH ShibaStonks

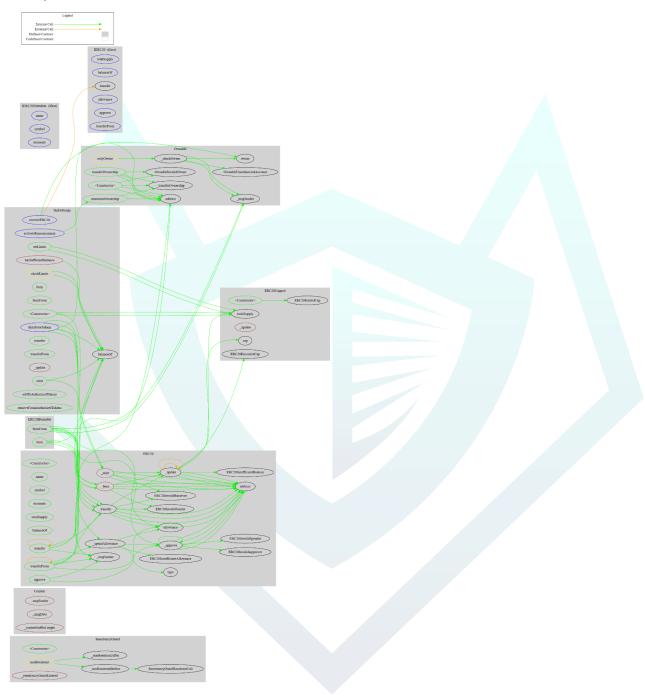
Inheritance Graph of Contract Functions





## CALL GRAPH ShibaStonks

Call Graph of Contract Functions





# FINDINGS ShibaStonks

2	0	0	0	0	2
Total Findings	Critical	Major	Medium	Minor	Informational

This report has been prepared to state the issues and vulnerabilities for ShibaStonks through this audit. The goal of this report findings is to identify specifically and fix any underlying issues and errors

ID	Title	File & Line #	Severity	Status
SWC-103	Floating Pragma is set	ShibaStonks.sol	Informational	<ul><li>Pending</li></ul>
CW-011	Unused Function	ShibaStonks.sol	Informational	<ul><li>Pending</li></ul>



## SWC ATTACKS ShibaStonks

Smart Contract Weakness Classification and Test Cases

ID	Description	Status
SWC-100	Function Default Visibility	<ul> <li>Passed</li> </ul>
SWC-101	Integer Overflow and Underflow	<ul> <li>Passed</li> </ul>
SWC-102	Outdated Compiler Version	<ul> <li>Passed</li> </ul>
SWC-103	Floating Pragma	<ul> <li>Not Passed</li> </ul>
SWC-104	Unchecked Call Return Value	<ul> <li>Passed</li> </ul>
SWC-105	Unprotected Ether Withdrawal	<ul> <li>Passed</li> </ul>
SWC-106	Unprotected SELF DESTRUCT Instruction	<ul> <li>Passed</li> </ul>
SWC-107	Reentrancy	<ul> <li>Passed</li> </ul>
SWC-108	State Variable Default Visibility	<ul> <li>Passed</li> </ul>
SWC-109	Uninitialized Storage Pointer	<ul><li>Passed</li></ul>
SWC-110	Assert Violation	<ul> <li>Passed</li> </ul>
SWC-111	Use of Deprecated Solidity Functions	<ul> <li>Passed</li> </ul>
SWC-112	Delegatecall to Untrusted Callee	<ul> <li>Passed</li> </ul>
SWC-113	DoS with Failed Call	<ul> <li>Passed</li> </ul>
SWC-114	Transaction Order Dependence	<ul> <li>Passed</li> </ul>
SWC-115	Authorization through tx.origin	<ul> <li>Passed</li> </ul>
SWC-116	Block values as a proxy for time	<ul> <li>Passed</li> </ul>
SWC-117	Signature Malleability	<ul> <li>Passed</li> </ul>
SWC-118	Incorrect Constructor Name	<ul> <li>Passed</li> </ul>
SWC-119	Shadowing State Variables	<ul> <li>Passed</li> </ul>
SWC-120	Weak Sources of Randomness from Chain Attributes	<ul> <li>Passed</li> </ul>
SWC-121	Missing Protection against Signature Replay Attacks	<ul> <li>Passed</li> </ul>
SWC-122	Lack of Proper Signature Verification	<ul> <li>Passed</li> </ul>



ID	Description	Status
SWC-123	Requirement Violation	<ul> <li>Passed</li> </ul>
SWC-124	Write to Arbitrary Storage Location	<ul> <li>Passed</li> </ul>
SWC-125	Incorrect Inheritance Order	<ul> <li>Passed</li> </ul>
SWC-126	Insufficient Gas Griefing	<ul> <li>Passed</li> </ul>
SWC-127	Arbitrary Jump with Function Type Variable	<ul> <li>Passed</li> </ul>
SWC-128	DoS With Block Gas Limit	<ul> <li>Passed</li> </ul>
SWC-129	Typographical Error	<ul> <li>Passed</li> </ul>
SWC-130	Right-To-Left-Override control character(U+202E)	<ul> <li>Passed</li> </ul>
SWC-131	Presence of unused variables	<ul> <li>Passed</li> </ul>
SWC-132	Unexpected Ether balance	<ul> <li>Passed</li> </ul>
SWC-133	Hash Collisions With Multiple Variable Arguments	<ul> <li>Passed</li> </ul>
SWC-134	Message call with hardcoded gas amount	<ul> <li>Passed</li> </ul>
SWC-135	Code With No Effects	<ul> <li>Passed</li> </ul>
SWC-136	Unencrypted Private Data On-Chain	<ul> <li>Passed</li> </ul>



## CW ASSESSMENT ShibaStonks

ContractWolf Vulnerability and Security Tests

ID	Name	Description	Status
CW-001	Multiple Version	Presence of multiple compiler version across all contracts	V
CW-002	Incorrect Access Control	Additional checks for critical logic and flow	<b>V</b>
CW-003	Payable Contract	A function to withdraw ether should exist otherwise the ether will be trapped	<b>V</b>
CW-004	Custom Modifier	major recheck for custom modifier logic	<b>V</b>
CW-005	Divide Before Multiply	Performing multiplication before division is generally better to avoid loss of precision	<b>V</b>
CW-006	Multiple Calls	Functions with multiple internal calls	<b>V</b>
CW-007	Deprecated Keywords	Use of deprecated functions/operators such as block.blockhash() for blockhash(), msg.gas for gasleft(), throw for revert(), sha3() for keccak256(), callcode() for delegatecall(), suicide() for selfdestruct(), constant for view or var for actual type name should be avoided to prevent unintended errors with newer compiler versions	<b>V</b>
CW-008	Unused Contract	Presence of an unused, unimported or uncalled contract	<b>V</b>
CW-009	Assembly Usage	Use of EVM assembly is error-prone and should be avoided or double-checked for correctness	<b>V</b>
CW-010	Similar Variable Names	Variables with similar names could be confused for each other and therefore should be avoided	V
CW-011	Commented Code	Removal of commented/unused code lines	×
CW-012	SafeMath Override	SafeMath is no longer needed starting with Solidity v0.8+. The compiler now has built-in overflow checking.	<b>V</b>



#### FIXES & RECOMMENDATION

**SWC-103** A Floating Pragma is Set

Code

pragma solidity ^0.8.17;

The compiler version should be a fixed one to avoid undiscovered compiler bugs. Fixed version sample below

pragma solidity 0.8.17;



## **cw-011** Unused Function

```
function hasSufficientBalance(
    address sender,
    uint256 amount
) internal view returns (bool) {
    return balanceOf(sender) >= amount;
}
```

Consider removing unused functions can help save gas and improve the codebase readability and cleanliness



## AUDIT COMMENTS ShibaStonks

Smart Contract audit comment for a non-technical perspective

- Owner can mint tokens to a wallet up to max wallet amount
- Owner can distribute tokens to specified wallets (team, marketing, treasury and dex liquidity)
- Owner can update max wallet amount and transaction amount between up to 100% of total supply
- Contract has no fees
- Owner can renounce and transfer ownership
- Owner can add/remove addresses on tokens that the owner can collect from
- Owner can collect tokens from contract
- Owner cannot block users
- Owner can burn
- Owner cannot pause contract



# CONTRACTWOLF

**Blockchain Security - Smart Contract Audits**