Survival DAO

Smart Contract Audit Report

SYSFIXED

19 Jan 2023

TABLE OF CONTENTS

AUDITED DETAILS

Audited Project

Project name	Token ticker	Blockchain
Survival DAO	Survive	Binance Smart Chain

Addresses

Contract address	0x698bCFcBDd8a53628b46E0eBC7F0A13bdad6396A
Contract deployer address	0x1aB55f8244C5716be9d4D38D2F7dd29e7CCaFB54

Project Website

https://survivaldao.net/

Codebase

https://bscscan.com/address/0x698bCFcBDd8a53628b46E0eBC7F0A13bdad6396A#code

SUMMARY

Are you ready for the next P2E style game? Survival DAO puts you, the holders, at an advantage. SDAO Treasury rewards it's holders and give the DAO the choices of what rewards while introducing a series of SURVIVAL games. Every Survival game and challenge works in a way where all SDAO holders earn! Each mini game objective is to win the SURVIVAL prize pool. DAO ready, challenges ready, partnerships ready. Don't be late! HOLD * EARN * PLAY * SURVIVE!

Contract Summary

Documentation Quality

Survival DAO 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 Survival DAO 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 132, 142, 150, 169, 171, 183, 184, 198, 200, 498, 498, 499, 553, 553, 560, 560, 566, 566, 572, 572, 636, 644, 645, 646, 647, 663, 666, 666, 671, 671, 676, 676, 698, 698, 700 and 722.
- 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 653, 654, 738 and 739.

CONCLUSION

We have audited the Survival DAO project released on January 2023 to discover issues and identify potential security vulnerabilities in Survival DAO Project. This process is used to find technical issues and security loopholes which might be found in the smart contract.

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

The issues found in the Survival DAO smart contract code do not pose a considerable risk. The writing of the contract is close to the standard of writing contracts in general. The low-risk issues found are some arithmetic operation issues and out of bounds array access which the index access expression can cause an exception in case of the use of an invalid array index value.

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.	PASS
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

Typographical Error	SWC-129	A typographical error can occur for example when the intent of a defined operation is to sum a number to a variable.	PASS
Override control character	SWC-130	Malicious actors can use the Right-To-Left-Override unicode character to force RTL text rendering and confuse users as to the real intent of a contract.	PASS
Unused variables	SWC-131 SWC-135	Unused variables are allowed in Solidity and they do not pose a direct security issue.	PASS
Unexpected Ether balance	SWC-132	Contracts can behave erroneously when they strictly assume a specific Ether balance.	PASS
Hash Collisions Variable	SWC-133	Using abi.encodePacked() with multiple variable length arguments can, in certain situations, lead to a hash collision.	PASS
Hardcoded gas amount	SWC-134	The transfer() and send() functions forward a fixed amount of 2300 gas.	PASS
Unencrypted Private Data	SWC-136	It is a common misconception that private type variables cannot be read.	PASS

SMART CONTRACT ANALYSIS

Started	Wednesday Jan 18 2023 05:56:01 GMT+0000 (Coordinated Universal Time)
Finished	Thursday Jan 19 2023 23:31:45 GMT+0000 (Coordinated Universal Time)
Mode	Standard
Main Source File	SurvivalDAO.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
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

SYSFIXED

SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
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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
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
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	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 132

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
131   unchecked {
132   _approve(sender, _msgSender(), currentAllowance - amount);
133   }
134   }
135
136
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 142

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
141   function increaseAllowance(address spender, uint256 addedValue) public virtual
returns (bool) {
142   _approve(_msgSender(), spender, _allowances[_msgSender()][spender] + addedValue);
143   return true;
144   }
145
146
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 150

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
149   unchecked {
150   _approve(_msgSender(), spender, currentAllowance - subtractedValue);
151   }
152
153   return true;
154
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 169

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
168   unchecked {
169   _balances[sender] = senderBalance - amount;
170   }
171   _balances[recipient] += amount;
172
173
```

SWC-101 | ARITHMETIC OPERATION "+=" DISCOVERED

LINE 171

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
170   }
171   _balances[recipient] += amount;
172
173   emit Transfer(sender, recipient, amount);
174
175
```

SWC-101 | ARITHMETIC OPERATION "+=" DISCOVERED

LINE 183

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
182
183   _totalSupply += amount;
184   _balances[account] += amount;
185   emit Transfer(address(0), account, amount);
186
187
```

SWC-101 | ARITHMETIC OPERATION "+=" DISCOVERED

LINE 184

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
183   _totalSupply += amount;
184   _balances[account] += amount;
185   emit Transfer(address(0), account, amount);
186
187   _afterTokenTransfer(address(0), account, amount);
188
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 198

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
197   unchecked {
198   _balances[account] = accountBalance - amount;
199   }
200   _totalSupply -= amount;
201
202
```

SWC-101 | ARITHMETIC OPERATION "-=" DISCOVERED

LINE 200

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
199   }
200   _totalSupply -= amount;
201
202   emit Transfer(account, address(0), amount);
203
204
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 498

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
497
498   _mint(owner(), 1e8 * (10 ** 18));
499   swapTokensAtAmount = totalSupply() / 5000;
500   }
501
502
```

SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 498

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
497
498   _mint(owner(), 1e8 * (10 ** 18));
499   swapTokensAtAmount = totalSupply() / 5000;
500   }
501
502
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 499

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
498   _mint(owner(), 1e8 * (10 ** 18));
499   swapTokensAtAmount = totalSupply() / 5000;
500   }
501
502   receive() external payable {
503
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 553

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
552   require(
553   _treasuryFeeOnBuy + _operationsFeeOnBuy +  _rewardFeeOnBuy <= 15,
554   "Fees must be less than 16%"
555   );
556   treasuryFeeOnBuy = _treasuryFeeOnBuy;
557
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 553

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
552   require(
553   _treasuryFeeOnBuy + _operationsFeeOnBuy +  _rewardFeeOnBuy <= 15,
554   "Fees must be less than 16%"
555   );
556   treasuryFeeOnBuy = _treasuryFeeOnBuy;
557
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 560

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
559
560   _totalFeesOnBuy   = treasuryFeeOnBuy + operationsFeeOnBuy + rewardFeeOnBuy;
561   emit UpdateBuyFees(_treasuryFeeOnBuy, _operationsFeeOnBuy, _rewardFeeOnBuy);
562   }
563
564
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 560

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
559
560   _totalFeesOnBuy   = treasuryFeeOnBuy + operationsFeeOnBuy + rewardFeeOnBuy;
561   emit UpdateBuyFees(_treasuryFeeOnBuy, _operationsFeeOnBuy, _rewardFeeOnBuy);
562   }
563
564
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 566

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
565   require(
566   _treasuryFeeOnSell + _operationsFeeOnSell + _rewardFeeOnSell <= 15,
567   "Fees must be less than 16%"
568   );
569   treasuryFeeOnSell = _treasuryFeeOnSell;
570
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 566

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
565   require(
566   _treasuryFeeOnSell + _operationsFeeOnSell + _rewardFeeOnSell <= 15,
567   "Fees must be less than 16%"
568   );
569   treasuryFeeOnSell = _treasuryFeeOnSell;
570
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 572

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
571   rewardFeeOnSell = _rewardFeeOnSell;
572   _totalFeesOnSell   = treasuryFeeOnSell + operationsFeeOnSell + rewardFeeOnSell;
573   emit UpdateSellFees(_treasuryFeeOnSell, _operationsFeeOnSell, _rewardFeeOnSell);
574   }
575
576
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 572

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
571   rewardFeeOnSell = _rewardFeeOnSell;
572   _totalFeesOnSell   = treasuryFeeOnSell + operationsFeeOnSell + rewardFeeOnSell;
573   emit UpdateSellFees(_treasuryFeeOnSell, _operationsFeeOnSell, _rewardFeeOnSell);
574   }
575
576
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 636

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
635   automatedMarketMakerPairs[to] &&
636   _totalFeesOnBuy + _totalFeesOnSell > 0
637   ) {
638   swapping = true;
639
640
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 644

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
643
644   uint256 totalFee = _totalFeesOnBuy + _totalFeesOnSell;
645   uint256 treasuryShare = treasuryFeeOnBuy + treasuryFeeOnSell;
646   uint256 operationsShare = operationsFeeOnBuy + operationsFeeOnSell;
647   uint256 rewardShare = rewardFeeOnBuy + rewardFeeOnSell;
648
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 645

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
644   uint256 totalFee = _totalFeesOnBuy + _totalFeesOnSell;
645   uint256 treasuryShare = treasuryFeeOnBuy + treasuryFeeOnSell;
646   uint256 operationsShare = operationsFeeOnBuy + operationsFeeOnSell;
647   uint256 rewardShare = rewardFeeOnBuy + rewardFeeOnSell;
648
649
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 646

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
645   uint256 treasuryShare = treasuryFeeOnBuy + treasuryFeeOnSell;
646   uint256 operationsShare = operationsFeeOnBuy + operationsFeeOnSell;
647   uint256 rewardShare = rewardFeeOnBuy + rewardFeeOnSell;
648
649   if(contractTokenBalance > 0 && totalFee > 0) {
650
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 647

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
646   uint256 operationsShare = operationsFeeOnBuy + operationsFeeOnSell;
647   uint256 rewardShare = rewardFeeOnBuy + rewardFeeOnSell;
648
649   if(contractTokenBalance > 0 && totalFee > 0) {
650   uint256 initialBalance = address(this).balance;
651
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 663

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
662
663   uint256 newBalance = address(this).balance - initialBalance;
664
665   if(treasuryShare > 0) {
666   uint256 treasuryAmount = newBalance * treasuryShare / totalFee;
667
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 666

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
665   if(treasuryShare > 0) {
666   uint256 treasuryAmount = newBalance * treasuryShare / totalFee;
667   swapETHForTokens(treasuryAmount, treasuryToken, address(this));
668   }
669
670
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 666

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
665   if(treasuryShare > 0) {
666   uint256 treasuryAmount = newBalance * treasuryShare / totalFee;
667   swapETHForTokens(treasuryAmount, treasuryToken, address(this));
668   }
669
670
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 671

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
670   if(operationsShare > 0) {
671   uint256 operationsAmount = newBalance * operationsShare / totalFee;
672   payable(operationWallet).transfer(operationsAmount);
673   }
674
675
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 671

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
670   if(operationsShare > 0) {
671   uint256 operationsAmount = newBalance * operationsShare / totalFee;
672   payable(operationWallet).transfer(operationsAmount);
673   }
674
675
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 676

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
675   if(rewardShare > 0) {
676   uint256 rewardAmount = newBalance * rewardShare / totalFee;
677   swapETHForTokens(rewardAmount, rewardToken, rewardWallet);
678   }
679   }
680
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 676

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
675   if(rewardShare > 0) {
676   uint256 rewardAmount = newBalance * rewardShare / totalFee;
677   swapETHForTokens(rewardAmount, rewardToken, rewardWallet);
678   }
679   }
680
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 698

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
697   }
698   uint256 fees = amount * _totalFees / 100;
699
700   amount = amount - fees;
701
702
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 698

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
697   }
698   uint256 fees = amount * _totalFees / 100;
699
700   amount = amount - fees;
701
702
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 700

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
699
700   amount = amount - fees;
701
702   if(fees > 0) {
703   super._transfer(from, address(this), fees);
704
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 722

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
721   require(
722   newAmount > totalSupply() / 1_000_000,
723   "New Amount must more than 0.0001% of total supply"
724   );
725   swapTokensAtAmount = newAmount;
726
```

SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 653

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
652   address[] memory path = new address[](2);
653   path[0] = address(this);
654   path[1] = uniswapV2Router.WETH();
655
656   uniswapV2Router.swapExactTokensForETHSupportingFeeOnTransferTokens(
657
```

SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 654

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
653   path[0] = address(this);
654   path[1] = uniswapV2Router.WETH();
655
656   uniswapV2Router.swapExactTokensForETHSupportingFeeOnTransferTokens(
657   contractTokenBalance,
658
```

SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 738

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
737   address[] memory path = new address[](2);
738   path[0] = uniswapV2Router.WETH();
739   path[1] = _token;
740
741   uniswapV2Router.swapExactETHForTokensSupportingFeeOnTransferTokens{value: amount}(
742
```

SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 739

low SEVERITY

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

Source File

- SurvivalDAO.sol

Locations

```
738   path[0] = uniswapV2Router.WETH();
739   path[1] = _token;
740
741   uniswapV2Router.swapExactETHForTokensSupportingFeeOnTransferTokens{value: amount}(
742   0,
743
```

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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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Sysfixed is a blockchain security certification organization established in 2021 with the objective to provide smart contract security services and verify their correctness in blockchain-based protocols. Sysfixed automatically scans for security vulnerabilities in Ethereum and other EVM-based blockchain smart contracts. Sysfixed a comprehensive range of analysis techniques—including static analysis, dynamic analysis, and symbolic execution—can accurately detect security vulnerabilities to provide an in-depth analysis report. With a vibrant ecosystem of world-class integration partners that amplify developer productivity, Sysfixed can be utilized in all phases of your project's lifecycle. Our team of security experts is dedicated to the research and improvement of our tools and techniques used to fortify your code.