

MASYA

Smart Contract Audit Report



25 Oct 2022



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AUDITED DETAILS

| Audited Project

Project name	Token ticker	Blockchain	
MASYA	MASYA	Ethereum	

Addresses

Contract address	0x26f45C6D6bfdd89d37a8856838c2141348334E0F
Contract deployer address	0x0cefB0Fb76a7d2081c1905057aab2D21e07E4beB

Project Website

https://www.masya.io/

Codebase

https://etherscan.io/address/0x26f45C6D6bfdd89d37a8856838c2141348334E0F#code



SUMMARY

\$MASYA Is A Decentralised, Zero Tax Meme Coin On The Ethereum Network. Dedicated To Vitalik Buterin And Cats Everywhere.

Contract Summary

Documentation Quality

MASYA 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 MASYA 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 386, 405, 427, 460, 462, 483, 484, 509, 511, 607, 621, 636, 637, 650, 662, 677, 691, 705, 719, 735, 758, 781, 807, 1141, 1143, 1144, 1145, 1145, 1150, 1150, 1155, 1155, 1204, 1204, 1208, 1208, 1217, 1217, 1220, 1220, 1225, 1225, 1225, 1228, 1228, 1251, 1251, 1263, 1263, 1363, 1378, 1408, 1427, 1427, 1428, 1428, 1428, 1429, 1429, 1429, 1434, 1434, 1434, 1435, 1435, 1435, 1436, 1436, 1443, 1484, 1484, 1493, 1494, 1498, 1498, 1498, 1514, 1514 and 1583.
- SWC-103 | Pragma statements can be allowed to float when a contract is intended on lines 10.
- 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 1452 and 1453.
- SWC-115 | tx.origin should not be used for authorization, use msg.sender instead on lines 1345 and 1349.
- SWC-120 | It is recommended to use external sources of randomness via oracles on lines 1346 and 1349.



CONCLUSION

We have audited the MASYA project released on October 2022 to discover issues and identify potential security vulnerabilities in MASYA 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 MASYA 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, a floating pragma is set, weak sources of randomness, tx.origin as a part of authorization control 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. Werecommend avoiding "tx.origin" issue, the tx.origin environment variable has been found to influence a control flow decision. Note that using "tx.origin" as a security control might cause a situation where a user inadvertently authorizes a smart contract to perform an action on their behalf. It is recommended to use "msg.sender" instead and also don't use any of those environment variables as sources of randomness and be aware that use of these variables introduces a certain level of trust into miners.



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.	
Outdated Compiler Version	SWC-102	It is recommended to use a recent version of the Solidity compiler.	
Floating Pragma	SWC-103	Contracts should be deployed with the same compiler version and flags that they have been tested thoroughly.	
Unchecked Call Return Value	SWC-104	The return value of a message call should be checked.	
Unprotected Ether Withdrawal	SWC-105	Due to missing or insufficient access controls, malicious parties can withdraw from the contract.	
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.	
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. F	
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.	ISSUE FOUND
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.	
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.	ISSUE FOUND
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.	
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.	
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.	
Hash Collisions Variable	SWC-133	Using abi.encodePacked() with multiple variable length arguments can, in certain situations, lead to a hash collision.	
Hardcoded gas amount	SWC-134	The transfer() and send() functions forward a fixed amount of 2300 gas.	
Unencrypted Private Data	SWC-136	It is a common misconception that private type variables cannot be read.	PASS



SMART CONTRACT ANALYSIS

Started	Monday Oct 24 2022 03:28:03 GMT+0000 (Coordinated Universal Time)		
Finished	Tuesday Oct 25 2022 01:47:46 GMT+0000 (Coordinated Universal Time)		
Mode	Standard		
Main Source File	MASYA.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



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-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-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-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-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-115	USE OF "TX.ORIGIN" AS A PART OF AUTHORIZATION CONTRO	L. low	acknowledged
SWC-115	USE OF "TX.ORIGIN" AS A PART OF AUTHORIZATION CONTRO	L. low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-120	POTENTIAL USE OF "BLOCK.NUMBER" AS SOURCE OF RANDOMNESS.	low	acknowledged
SWC-120	POTENTIAL USE OF "BLOCK.NUMBER" AS SOURCE OF RANDOMNESS.	low	acknowledged



LINE 386

low SEVERITY

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

Source File

- MASYA.sol

```
385 unchecked {
386 _approve(sender, _msgSender(), currentAllowance - amount);
387 }
388
389 return true;
390
```



LINE 405

low SEVERITY

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

Source File

- MASYA.sol

```
404 function increaseAllowance(address spender, uint256 addedValue) public virtual
returns (bool) {
405   _approve(_msgSender(), spender, _allowances[_msgSender()][spender] + addedValue);
406   return true;
407  }
408
409
```



LINE 427

low SEVERITY

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

Source File

- MASYA.sol

```
426 unchecked {
427  _approve(_msgSender(), spender, currentAllowance - subtractedValue);
428  }
429
430  return true;
431
```



LINE 460

low SEVERITY

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

Source File

- MASYA.sol

```
459 unchecked {
460  _balances[sender] = senderBalance - amount;
461  }
462  _balances[recipient] += amount;
463
464
```



LINE 462

low SEVERITY

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

Source File

- MASYA.sol

```
461 }
462 _balances[recipient] += amount;
463
464 emit Transfer(sender, recipient, amount);
465
466
```



LINE 483

low SEVERITY

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

Source File

- MASYA.sol

```
482
483 _totalSupply += amount;
484 _balances[account] += amount;
485 emit Transfer(address(0), account, amount);
486
487
```



LINE 484

low SEVERITY

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

Source File

- MASYA.sol

```
__totalSupply += amount;

484    _balances[account] += amount;

485    emit Transfer(address(0), account, amount);

486

487    _afterTokenTransfer(address(0), account, amount);

488
```



LINE 509

low SEVERITY

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

Source File

- MASYA.sol

```
508 unchecked {
509   _balances[account] = accountBalance - amount;
510  }
511   _totalSupply -= amount;
512
513
```



LINE 511

low SEVERITY

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

Source File

- MASYA.sol

```
510  }
511  _totalSupply -= amount;
512
513  emit Transfer(account, address(0), amount);
514
515
```



LINE 607

low SEVERITY

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

Source File

- MASYA.sol

```
606  unchecked {
607  uint256 c = a + b;
608  if (c < a) return (false, 0);
609  return (true, c);
610  }
611</pre>
```



LINE 621

low SEVERITY

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

Source File

- MASYA.sol

```
620 if (b > a) return (false, 0);
621 return (true, a - b);
622 }
623 }
624
625
```



LINE 636

low SEVERITY

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

Source File

- MASYA.sol

```
635  if (a == 0) return (true, 0);
636  uint256 c = a * b;
637  if (c / a != b) return (false, 0);
638  return (true, c);
639  }
640
```



LINE 637

low SEVERITY

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

Source File

- MASYA.sol

```
636  uint256 c = a * b;

637  if (c / a != b) return (false, 0);

638  return (true, c);

639  }

640  }

641
```



LINE 650

low SEVERITY

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

Source File

- MASYA.sol

```
649  if (b == 0) return (false, 0);
650  return (true, a / b);
651  }
652  }
653
654
```



LINE 662

low SEVERITY

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

Source File

- MASYA.sol

```
661 if (b == 0) return (false, 0);
662 return (true, a % b);
663 }
664 }
665
666
```



LINE 677

low SEVERITY

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

Source File

- MASYA.sol

```
676  function add(uint256 a, uint256 b) internal pure returns (uint256) {
677  return a + b;
678  }
679
680  /**
681
```



LINE 691

low SEVERITY

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

Source File

- MASYA.sol

```
690 function sub(uint256 a, uint256 b) internal pure returns (uint256) {
691 return a - b;
692 }
693
694 /**
695
```



LINE 705

low SEVERITY

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

Source File

- MASYA.sol

```
704 function mul(uint256 a, uint256 b) internal pure returns (uint256) {
705  return a * b;
706  }
707
708  /**
709
```



LINE 719

low SEVERITY

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

Source File

- MASYA.sol

```
718 function div(uint256 a, uint256 b) internal pure returns (uint256) {
719 return a / b;
720 }
721
722 /**
723
```



LINE 735

low SEVERITY

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

Source File

- MASYA.sol

```
734 function mod(uint256 a, uint256 b) internal pure returns (uint256) {
735    return a % b;
736  }
737
738  /**
739
```



LINE 758

low SEVERITY

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

Source File

- MASYA.sol

```
757 require(b <= a, errorMessage);
758 return a - b;
759 }
760 }
761
762
```



LINE 781

low SEVERITY

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

Source File

- MASYA.sol

```
780 require(b > 0, errorMessage);
781 return a / b;
782 }
783 }
784
785
```



LINE 807

low SEVERITY

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

Source File

- MASYA.sol

```
806  require(b > 0, errorMessage);
807  return a % b;
808  }
809  }
810  }
811
```



LINE 1141

low SEVERITY

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

Source File

- MASYA.sol

```
1140
1141    uint256 totalSupply = 1_000_000_000_000 * 1e18;
1142
1143    maxTransactionAmount = 20_000_000_000 * 1e18;
1144    maxWallet = 20_000_000_000 * 1e18;
1145
```



LINE 1143

low SEVERITY

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

Source File

- MASYA.sol

```
1142
1143  maxTransactionAmount = 20_000_000_000 * 1e18;
1144  maxWallet = 20_000_000_000 * 1e18;
1145  swapTokensAtAmount = (totalSupply * 5) / 10000;
1146
1147
```



LINE 1144

low SEVERITY

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

Source File

- MASYA.sol

```
1143    maxTransactionAmount = 20_000_000_000_000 * 1e18;
1144    maxWallet = 20_000_000_000 * 1e18;
1145    swapTokensAtAmount = (totalSupply * 5) / 10000;
1146
1147    buyMarketingFee = _buyMarketingFee;
1148
```



LINE 1145

low SEVERITY

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

Source File

- MASYA.sol

```
1144 maxWallet = 20_000_000_000_000 * 1e18;
1145 swapTokensAtAmount = (totalSupply * 5) / 10000;
1146
1147 buyMarketingFee = _buyMarketingFee;
1148 buyLiquidityFee = _buyLiquidityFee;
1149
```



LINE 1145

low SEVERITY

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

Source File

- MASYA.sol

```
1144 maxWallet = 20_000_000_000_000 * 1e18;
1145 swapTokensAtAmount = (totalSupply * 5) / 10000;
1146
1147 buyMarketingFee = _buyMarketingFee;
1148 buyLiquidityFee = _buyLiquidityFee;
1149
```



LINE 1150

low SEVERITY

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

Source File

- MASYA.sol

```
1149 buyDevFee = _buyDevFee;
1150 buyTotalFees = buyMarketingFee + buyLiquidityFee + buyDevFee;
1151
1152 sellMarketingFee = _sellMarketingFee;
1153 sellLiquidityFee = _sellLiquidityFee;
1154
```



LINE 1150

low SEVERITY

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

Source File

- MASYA.sol

```
1149 buyDevFee = _buyDevFee;
1150 buyTotalFees = buyMarketingFee + buyLiquidityFee + buyDevFee;
1151
1152 sellMarketingFee = _sellMarketingFee;
1153 sellLiquidityFee = _sellLiquidityFee;
1154
```



LINE 1155

low SEVERITY

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

Source File

- MASYA.sol

```
1154    sellDevFee = _sellDevFee;
1155    sellTotalFees = sellMarketingFee + sellLiquidityFee + sellDevFee;
1156
1157    marketingWallet = address(0x7900d1Ce354015770822c245cEA7b4CCDCd73631); // set as marketing wallet
1158    devWallet = address(0x0cefB0Fb76a7d2081c1905057aab2D21e07E4beB); // set as dev wallet
1159
```



LINE 1155

low SEVERITY

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

Source File

- MASYA.sol

```
1154    sellDevFee = _sellDevFee;
1155    sellTotalFees = sellMarketingFee + sellLiquidityFee + sellDevFee;
1156
1157    marketingWallet = address(0x7900d1Ce354015770822c245cEA7b4CCDCd73631); // set as marketing wallet
1158    devWallet = address(0x0cefB0Fb76a7d2081c1905057aab2D21e07E4beB); // set as dev wallet
1159
```



LINE 1204

low SEVERITY

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

Source File

- MASYA.sol

```
1203    require(
1204    newAmount >= (totalSupply() * 1) / 100000,
1205    "Swap amount cannot be lower than 0.001% total supply."
1206    );
1207    require(
1208
```



LINE 1204

low SEVERITY

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

Source File

- MASYA.sol

```
1203    require(
1204    newAmount >= (totalSupply() * 1) / 100000,
1205    "Swap amount cannot be lower than 0.001% total supply."
1206    );
1207    require(
1208
```



LINE 1208

low SEVERITY

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

Source File

- MASYA.sol

```
1207 require(
1208 newAmount <= (totalSupply() * 5) / 1000,
1209 "Swap amount cannot be higher than 0.5% total supply."
1210 );
1211 swapTokensAtAmount = newAmount;
1212</pre>
```



LINE 1208

low SEVERITY

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

Source File

- MASYA.sol

```
1207 require(
1208 newAmount <= (totalSupply() * 5) / 1000,
1209 "Swap amount cannot be higher than 0.5% total supply."
1210 );
1211 swapTokensAtAmount = newAmount;
1212</pre>
```



LINE 1217

low SEVERITY

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

Source File

- MASYA.sol

```
1216 require(
1217 newNum >= ((totalSupply() * 1) / 1000) / 1e18,
1218 "Cannot set maxTransactionAmount lower than 0.1%"
1219 );
1220 maxTransactionAmount = newNum * (10**18);
1221
```



LINE 1217

low SEVERITY

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

Source File

- MASYA.sol

```
1216 require(
1217 newNum >= ((totalSupply() * 1) / 1000) / 1e18,
1218 "Cannot set maxTransactionAmount lower than 0.1%"
1219 );
1220 maxTransactionAmount = newNum * (10**18);
1221
```



LINE 1217

low SEVERITY

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

Source File

- MASYA.sol

```
1216  require(
1217  newNum >= ((totalSupply() * 1) / 1000) / 1e18,
1218  "Cannot set maxTransactionAmount lower than 0.1%"
1219  );
1220  maxTransactionAmount = newNum * (10**18);
1221
```



LINE 1220

low SEVERITY

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

Source File

- MASYA.sol

```
1219 );
1220 maxTransactionAmount = newNum * (10**18);
1221 }
1222
1223 function updateMaxWalletAmount(uint256 newNum) external onlyOwner {
1224
```



LINE 1220

low SEVERITY

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

Source File

- MASYA.sol

```
1219 );
1220 maxTransactionAmount = newNum * (10**18);
1221 }
1222
1223 function updateMaxWalletAmount(uint256 newNum) external onlyOwner {
1224
```



LINE 1225

low SEVERITY

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

Source File

- MASYA.sol

```
1224    require(
1225    newNum >= ((totalSupply() * 5) / 1000) / 1e18,
1226    "Cannot set maxWallet lower than 0.5%"
1227    );
1228    maxWallet = newNum * (10**18);
1229
```



LINE 1225

low SEVERITY

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

Source File

- MASYA.sol

```
1224    require(
1225    newNum >= ((totalSupply() * 5) / 1000) / 1e18,
1226    "Cannot set maxWallet lower than 0.5%"
1227    );
1228    maxWallet = newNum * (10**18);
1229
```



LINE 1225

low SEVERITY

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

Source File

- MASYA.sol

```
1224 require(
1225 newNum >= ((totalSupply() * 5) / 1000) / 1e18,
1226 "Cannot set maxWallet lower than 0.5%"
1227 );
1228 maxWallet = newNum * (10**18);
1229
```



LINE 1228

low SEVERITY

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

Source File

- MASYA.sol

```
1227 );
1228 maxWallet = newNum * (10**18);
1229 }
1230
1231 function excludeFromMaxTransaction(address updAds, bool isEx)
1232
```



LINE 1228

low SEVERITY

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

Source File

- MASYA.sol

```
1227 );
1228 maxWallet = newNum * (10**18);
1229 }
1230
1231 function excludeFromMaxTransaction(address updAds, bool isEx)
1232
```



LINE 1251

low SEVERITY

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

Source File

- MASYA.sol

```
buyDevFee = _devFee;
l251 buyTotalFees = buyMarketingFee + buyLiquidityFee + buyDevFee;
l252 require(buyTotalFees <= 11, "Must keep fees at 11% or less");
l253 }
l254
l255</pre>
```



LINE 1251

low SEVERITY

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

Source File

- MASYA.sol

```
buyDevFee = _devFee;
l251 buyTotalFees = buyMarketingFee + buyLiquidityFee + buyDevFee;
l252 require(buyTotalFees <= 11, "Must keep fees at 11% or less");
l253 }
l254
l255</pre>
```



LINE 1263

low SEVERITY

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

Source File

- MASYA.sol

```
1262  sellDevFee = _devFee;
1263  sellTotalFees = sellMarketingFee + sellLiquidityFee + sellDevFee;
1264  require(sellTotalFees <= 11, "Must keep fees at 11% or less");
1265  }
1266
1267</pre>
```



LINE 1263

low SEVERITY

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

Source File

- MASYA.sol

```
1262  sellDevFee = _devFee;
1263  sellTotalFees = sellMarketingFee + sellLiquidityFee + sellDevFee;
1264  require(sellTotalFees <= 11, "Must keep fees at 11% or less");
1265  }
1266
1267</pre>
```



LINE 1363

low SEVERITY

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

Source File

- MASYA.sol

```
1362 require(
1363 amount + balanceOf(to) <= maxWallet,
1364 "Max wallet exceeded"
1365 );
1366 }
1367</pre>
```



LINE 1378

low SEVERITY

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

Source File

- MASYA.sol

```
1377    require(
1378    amount + balanceOf(to) <= maxWallet,
1379    "Max wallet exceeded"
1380    );
1381  }
1382</pre>
```



LINE 1408

low SEVERITY

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

Source File

- MASYA.sol

```
1407    lpBurnEnabled &&
1408    block.timestamp >= lastLpBurnTime + lpBurnFrequency &&
1409    !_isExcludedFromFees[from]
1410    ) {
1411    autoBurnLiquidityPairTokens();
1412
```



LINE 1427

low SEVERITY

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

Source File

- MASYA.sol

```
1426  fees = amount.mul(sellTotalFees).div(100);
1427  tokensForLiquidity += (fees * sellLiquidityFee) / sellTotalFees;
1428  tokensForDev += (fees * sellDevFee) / sellTotalFees;
1429  tokensForMarketing += (fees * sellMarketingFee) / sellTotalFees;
1430  }
1431
```



LINE 1427

low SEVERITY

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

Source File

- MASYA.sol

```
fees = amount.mul(sellTotalFees).div(100);
tokensForLiquidity += (fees * sellLiquidityFee) / sellTotalFees;
tokensForDev += (fees * sellDevFee) / sellTotalFees;
tokensForMarketing += (fees * sellMarketingFee) / sellTotalFees;
}
1430 }
1431
```



LINE 1427

low SEVERITY

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

Source File

- MASYA.sol

```
fees = amount.mul(sellTotalFees).div(100);
tokensForLiquidity += (fees * sellLiquidityFee) / sellTotalFees;
tokensForDev += (fees * sellDevFee) / sellTotalFees;
tokensForMarketing += (fees * sellMarketingFee) / sellTotalFees;
}
1430 }
1431
```



LINE 1428

low SEVERITY

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

Source File

- MASYA.sol

```
tokensForLiquidity += (fees * sellLiquidityFee) / sellTotalFees;
tokensForDev += (fees * sellDevFee) / sellTotalFees;
tokensForMarketing += (fees * sellMarketingFee) / sellTotalFees;

1430 }
1431 // on buy
1432
```



LINE 1428

low SEVERITY

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

Source File

- MASYA.sol

```
tokensForLiquidity += (fees * sellLiquidityFee) / sellTotalFees;
tokensForDev += (fees * sellDevFee) / sellTotalFees;
tokensForMarketing += (fees * sellMarketingFee) / sellTotalFees;

1430 }
1431 // on buy
1432
```



LINE 1428

low SEVERITY

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

Source File

- MASYA.sol

```
1427 tokensForLiquidity += (fees * sellLiquidityFee) / sellTotalFees;
1428 tokensForDev += (fees * sellDevFee) / sellTotalFees;
1429 tokensForMarketing += (fees * sellMarketingFee) / sellTotalFees;
1430 }
1431 // on buy
1432
```



LINE 1429

low SEVERITY

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

Source File

- MASYA.sol

```
1428  tokensForDev += (fees * sellDevFee) / sellTotalFees;
1429  tokensForMarketing += (fees * sellMarketingFee) / sellTotalFees;
1430  }
1431  // on buy
1432  else if (automatedMarketMakerPairs[from] && buyTotalFees > 0) {
1433
```



LINE 1429

low SEVERITY

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

Source File

- MASYA.sol

```
1428  tokensForDev += (fees * sellDevFee) / sellTotalFees;
1429  tokensForMarketing += (fees * sellMarketingFee) / sellTotalFees;
1430  }
1431  // on buy
1432  else if (automatedMarketMakerPairs[from] && buyTotalFees > 0) {
1433
```



LINE 1429

low SEVERITY

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

Source File

- MASYA.sol

```
1428  tokensForDev += (fees * sellDevFee) / sellTotalFees;
1429  tokensForMarketing += (fees * sellMarketingFee) / sellTotalFees;
1430  }
1431  // on buy
1432  else if (automatedMarketMakerPairs[from] && buyTotalFees > 0) {
1433
```



LINE 1434

low SEVERITY

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

Source File

- MASYA.sol



LINE 1434

low SEVERITY

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

Source File

- MASYA.sol



LINE 1434

low SEVERITY

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

Source File

- MASYA.sol



LINE 1435

low SEVERITY

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

Source File

- MASYA.sol

```
tokensForLiquidity += (fees * buyLiquidityFee) / buyTotalFees;
tokensForDev += (fees * buyDevFee) / buyTotalFees;
tokensForMarketing += (fees * buyMarketingFee) / buyTotalFees;
}

1437 }

1438
1439
```



LINE 1435

low SEVERITY

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

Source File

- MASYA.sol

```
1434 tokensForLiquidity += (fees * buyLiquidityFee) / buyTotalFees;
1435 tokensForDev += (fees * buyDevFee) / buyTotalFees;
1436 tokensForMarketing += (fees * buyMarketingFee) / buyTotalFees;
1437 }
1438
1439
```



LINE 1435

low SEVERITY

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

Source File

- MASYA.sol

```
1434 tokensForLiquidity += (fees * buyLiquidityFee) / buyTotalFees;
1435 tokensForDev += (fees * buyDevFee) / buyTotalFees;
1436 tokensForMarketing += (fees * buyMarketingFee) / buyTotalFees;
1437 }
1438
1439
```



LINE 1436

low SEVERITY

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

Source File

- MASYA.sol

```
1435  tokensForDev += (fees * buyDevFee) / buyTotalFees;
1436  tokensForMarketing += (fees * buyMarketingFee) / buyTotalFees;
1437  }
1438
1439  if (fees > 0) {
1440
```



LINE 1436

low SEVERITY

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

Source File

- MASYA.sol

```
1435  tokensForDev += (fees * buyDevFee) / buyTotalFees;
1436  tokensForMarketing += (fees * buyMarketingFee) / buyTotalFees;
1437  }
1438
1439  if (fees > 0) {
1440
```



LINE 1436

low SEVERITY

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

Source File

- MASYA.sol

```
1435  tokensForDev += (fees * buyDevFee) / buyTotalFees;
1436  tokensForMarketing += (fees * buyMarketingFee) / buyTotalFees;
1437  }
1438
1439  if (fees > 0) {
1440
```



LINE 1443

low SEVERITY

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

Source File

- MASYA.sol

```
1442
1443    amount -= fees;
1444  }
1445
1446    super._transfer(from, to, amount);
1447
```



LINE 1484

low SEVERITY

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

Source File

- MASYA.sol

```
1483  uint256 contractBalance = balanceOf(address(this));
1484  uint256 totalTokensToSwap = tokensForLiquidity +
1485  tokensForMarketing +
1486  tokensForDev;
1487  bool success;
1488
```



LINE 1484

low SEVERITY

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

Source File

- MASYA.sol

```
1483  uint256 contractBalance = balanceOf(address(this));
1484  uint256 totalTokensToSwap = tokensForLiquidity +
1485  tokensForMarketing +
1486  tokensForDev;
1487  bool success;
1488
```



LINE 1493

low SEVERITY

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

Source File

- MASYA.sol

```
1492
1493 if (contractBalance > swapTokensAtAmount * 20) {
1494   contractBalance = swapTokensAtAmount * 20;
1495 }
1496
1497
```



LINE 1494

low SEVERITY

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

Source File

- MASYA.sol

```
if (contractBalance > swapTokensAtAmount * 20) {
1494   contractBalance = swapTokensAtAmount * 20;
1495  }
1496
1497  // Halve the amount of liquidity tokens
1498
```



LINE 1498

low SEVERITY

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

Source File

- MASYA.sol

```
1497  // Halve the amount of liquidity tokens
1498  uint256 liquidityTokens = (contractBalance * tokensForLiquidity) /
1499  totalTokensToSwap /
1500  2;
1501  uint256 amountToSwapForETH = contractBalance.sub(liquidityTokens);
1502
```



LINE 1498

low SEVERITY

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

Source File

- MASYA.sol

```
1497  // Halve the amount of liquidity tokens
1498  uint256 liquidityTokens = (contractBalance * tokensForLiquidity) /
1499  totalTokensToSwap /
1500  2;
1501  uint256 amountToSwapForETH = contractBalance.sub(liquidityTokens);
1502
```



LINE 1498

low SEVERITY

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

Source File

- MASYA.sol

```
1497  // Halve the amount of liquidity tokens
1498  uint256 liquidityTokens = (contractBalance * tokensForLiquidity) /
1499  totalTokensToSwap /
1500  2;
1501  uint256 amountToSwapForETH = contractBalance.sub(liquidityTokens);
1502
```



LINE 1514

low SEVERITY

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

Source File

- MASYA.sol

```
1513
1514 uint256 ethForLiquidity = ethBalance - ethForMarketing - ethForDev;
1515
1516 tokensForLiquidity = 0;
1517 tokensForMarketing = 0;
1518
```



LINE 1514

low SEVERITY

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

Source File

- MASYA.sol

```
1513
1514 uint256 ethForLiquidity = ethBalance - ethForMarketing - ethForDev;
1515
1516 tokensForLiquidity = 0;
1517 tokensForMarketing = 0;
1518
```



LINE 1583

low SEVERITY

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

Source File

- MASYA.sol

```
1582 require(
1583 block.timestamp > lastManualLpBurnTime + manualBurnFrequency,
1584 "Must wait for cooldown to finish"
1585 );
1586 require(percent <= 1000, "May not nuke more than 10% of tokens in LP");
1587</pre>
```



SWC-103 | A FLOATING PRAGMA IS SET.

LINE 10

low SEVERITY

The current pragma Solidity directive is ""=0.8.10>=0.8.10>=0.8.0<0.9.0"". It is recommended to specify a fixed compiler version to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code.

Source File

- MASYA.sol

```
9  // SPDX-License-Identifier: MIT
10  pragma solidity =0.8.10 >=0.8.10 >=0.8.0 <0.9.0;
11  pragma experimental ABIEncoderV2;
12
13  ///// lib/openzeppelin-contracts/contracts/utils/Context.sol
14</pre>
```



SWC-115 | USE OF "TX.ORIGIN" AS A PART OF AUTHORIZATION CONTROL.

LINE 1345

low SEVERITY

The tx.origin environment variable has been found to influence a control flow decision. Note that using "tx.origin" as a security control might cause a situation where a user inadvertently authorizes a smart contract to perform an action on their behalf. It is recommended to use "msg.sender" instead.

Source File

- MASYA.sol

```
1344 require(
1345 _holderLastTransferTimestamp[tx.origin] <
1346 block.number,
1347 "_transfer:: Transfer Delay enabled. Only one purchase per block allowed."
1348 );
1349
```



SWC-115 | USE OF "TX.ORIGIN" AS A PART OF AUTHORIZATION CONTROL.

LINE 1349

low SEVERITY

Using "tx.origin" as a security control can lead to authorization bypass vulnerabilities. Consider using "msg.sender" unless you really know what you are doing.

Source File

- MASYA.sol

```
1348 );
1349  _holderLastTransferTimestamp[tx.origin] = block.number;
1350 }
1351 }
1352
1353
```



SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 1452

low SEVERITY

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

Source File

- MASYA.sol

```
1451 address[] memory path = new address[](2);
1452 path[0] = address(this);
1453 path[1] = uniswapV2Router.WETH();
1454
1455 _approve(address(this), address(uniswapV2Router), tokenAmount);
1456
```



SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 1453

low SEVERITY

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

Source File

- MASYA.sol

```
1452 path[0] = address(this);
1453 path[1] = uniswapV2Router.WETH();
1454
1455 _approve(address(this), address(uniswapV2Router), tokenAmount);
1456
1457
```



SWC-120 | POTENTIAL USE OF "BLOCK.NUMBER" AS SOURCE OF RANDOMNESS.

LINE 1346

low SEVERITY

The environment variable "block.number" looks like it might be used as a source of randomness. Note that the values of variables like coinbase, gaslimit, block number and timestamp are predictable and can be manipulated by a malicious miner. Also keep in mind that attackers know hashes of earlier blocks. Don't use any of those environment variables as sources of randomness and be aware that use of these variables introduces a certain level of trust into miners.

Source File

- MASYA.sol



SWC-120 | POTENTIAL USE OF "BLOCK.NUMBER" AS SOURCE OF RANDOMNESS.

LINE 1349

low SEVERITY

The environment variable "block.number" looks like it might be used as a source of randomness. Note that the values of variables like coinbase, gaslimit, block number and timestamp are predictable and can be manipulated by a malicious miner. Also keep in mind that attackers know hashes of earlier blocks. Don't use any of those environment variables as sources of randomness and be aware that use of these variables introduces a certain level of trust into miners.

Source File

- MASYA.sol

```
1348 );
1349  _holderLastTransferTimestamp[tx.origin] = block.number;
1350 }
1351 }
1352
1353
```



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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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