

Baby Moon Floki
Smart Contract
Audit Report





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# **AUDITED DETAILS**

# Audited Project

Project name	Token ticker	Blockchain	
Baby Moon Floki	Floki	Binance Smart Chain	

# Addresses

Contract address	0x54e87ed5a096f09d9665fd114002bddfc2084a7f	
Contract deployer address	0x75001CCDa5B6a711546D9BC14Ac805Dd78Ccc24f	

# Project Website

https://www.decubate.com/

# Codebase

https://bscscan.com/address/0x54e87ed5a096f09d9665fd114002bddfc2084a7f#contracts



# **SUMMARY**

Baby Moon Floki is the gem for meme coin investors looking for hype around new puppy Elon. Called by his beloved father, Elon Musk, the potential of this adorable little puppy is limitless. Our lovely baby was finally given the name given to him by Elon Musk himself, and this is "Floki". Floki has always dreamed of becoming the first dog to put his paws on the moon. The Baby Moon Floki community intends to bring it there! Join us!

# Contract Summary

#### **Documentation Quality**

Baby Moon Floki 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 Baby Moon Floki with the discovery of several low issues.

#### **Test Coverage**

Test coverage of the project is 100% (Through Codebase)

# Audit Findings Summary

- SWC-100 SWC-108 | Explicitly define visibility for all state variables on lines 493.
- SWC-101 | It is recommended to use vetted safe math libraries for arithmetic operations consistently on lines 42, 54, 64, 65, 77, 89, 196, 434, 434, 434, 434, 435, 435, 470, 479, 479, 479, 479, 480, 480, 480, 480, 481, 481, 488, 655, 657, 700, 715, 718, 722, 735, 735, 735, 735, 955, 974, 980, 1025, 1027, 1034, 1038, 1040, 1048, 1060, 1073, 1133, 1133, 1133, 1133, 1140, 1140, 1140, 1140 and 657.
- SWC-103 | Pragma statements can be allowed to float when a contract is intended on lines 11.
- 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 484, 656, 657, 657, 720, 721, 814, 815, 834, 835, 956, 956, 957, 958, 1015, 1016, 1020, 1029, 1031, 1031, 1032 and 1032.



# CONCLUSION

We have audited the Baby Moon Floki project released on October 2024 to discover issues and identify potential security vulnerabilities in Baby Moon Floki 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 satisfactory results with low-risk issues.

The issues found in the Baby Moon Floki 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, state variable visibility is not set, public state variable with array type causing reachable exception by default, 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. The current pragma Solidity directive is ""^0.8.4"". Specifying a fixed compiler version is recommended 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. It is best practice to set the visibility of state variables explicitly. The default visibility for "inSwapAndLiquify" is internal. Other possible visibility settings are public and private.



# **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.	ISSUE FOUND	
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.	e PASS	
Floating Pragma	SWC-103	Contracts should be deployed with the same compiler version and flags that they have been tested thoroughly.	ISSUE FOUND	
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.	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.	
Race Conditions	SWC-114	Race Conditions and Transactions Order Dependency should not be possible.	
Authorization through tx.origin		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-121		PASS
Incorrect Constructor Name	SWC-118	Constructors are special functions that are called only once during the contract creation.	PASS
Shadowing State Variable SWC-1		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		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 SWC-130 character		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.	
Unexpected Ether balance  Hash Collisions Variable  SWC-132  SWC-133		Contracts can behave erroneously when they strictly assume a specific Ether balance.	
		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 SWC-136 It is a common mis cannot be read.		It is a common misconception that private type variables cannot be read.	PASS



# **SMART CONTRACT ANALYSIS**

Started	Sunday Oct 03 2021 01:27:58 GMT+0000 (Coordinated Universal Time)		
Finished	Monday Oct 04 2021 06:39:25 GMT+0000 (Coordinated Universal Time)		
Mode	Standard		
Main Source File	BabyMoonFloki.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	COMPILER-REWRITABLE " <uint> - 1" DISCOVERED</uint>	low	acknowledged
	SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
	SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
	SWC-110	PUBLIC STATE VARIABLE WITH ARRAY TYPE CAUSING REACHABLE EXCEPTION BY DEFAULT.	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-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
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SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged



LINE 42

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
function add(uint256 a, uint256 b) internal pure returns (uint256) {
   uint256 c = a + b;
   require(c >= a, "SafeMath: addition overflow");
   return c;
}
```



LINE 54

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
53   require(b <= a, errorMessage);
54   uint256 c = a - b;
55
56   return c;
57  }
58</pre>
```



LINE 64

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
63
64  uint256 c = a * b;
65  require(c / a == b, "SafeMath: multiplication overflow");
66
67  return c;
68
```



LINE 65

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
64  uint256 c = a * b;
65  require(c / a == b, "SafeMath: multiplication overflow");
66
67  return c;
68  }
69
```



LINE 77

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
require(b > 0, errorMessage);
require(b > 0, errorMessage);
uint256 c = a / b;
// assert(a == b * c + a % b); // There is no case in which this doesn't hold
return c;
81
```



LINE 89

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
88 require(b != 0, errorMessage);
89 return a % b;
90 }
91 }
92
93
```



**LINE 196** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
195   _owner = address(0);
196   _lockTime = block.timestamp + time;
197   emit OwnershipTransferred(_owner, address(0));
198  }
199
200
```



**LINE 434** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
433     uint256     private     constant MAX = ~uint256(0);
434     uint256     private _tTotal = 1000000000000 * 10**6 * 10**9;
435     uint256     private _rTotal = (MAX - (MAX % _tTotal));
436     uint256     private _tFeeTotal;
437
438
```



**LINE 434** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
433     uint256     private     constant MAX = ~uint256(0);
434     uint256     private _tTotal = 1000000000000 * 10**6 * 10**9;
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```



**LINE 434** 

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437
438
```



**LINE 434** 

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- BabyMoonFloki.sol

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437
438
```



**LINE 435** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
434     uint256     private _tTotal = 100000000000 * 10**6 * 10**9;
435     uint256     private _rTotal = (MAX - (MAX % _tTotal));
436     uint256     private _tFeeTotal;
437
438     string     private _name = "Baby Moon Floki";
439
```



**LINE 435** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
434    uint256    private _tTotal = 100000000000 * 10**6 * 10**9;
435    uint256    private _rTotal = (MAX - (MAX % _tTotal));
436    uint256    private _tFeeTotal;
437
438    string private _name = "Baby Moon Floki";
439
```



**LINE 470** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
469  uint256 public _startTimeForSwap;
470  uint256 public _intervalMinutesForSwap = 1 * 1 minutes;
471
472  uint256 public _buyBackRangeRate = 80;
473
474
```



**LINE 479** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
478
479    uint256    public _maxTxAmount = 6000000000 * 10**6 * 10**9;
480    uint256    private minimumTokensBeforeSwap = 400000000 * 10**6 * 10**9;
481    uint256    public buyBackSellLimit = 1 * 10**13;
482
483
```



**LINE 479** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
478
479    uint256    public _maxTxAmount = 6000000000 * 10**6 * 10**9;
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```



**LINE 479** 

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481    uint256    public buyBackSellLimit = 1 * 10**13;
482
483
```



**LINE 480** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
479     uint256     public _maxTxAmount = 600000000 * 10**6 * 10**9;
480     uint256     private minimumTokensBeforeSwap = 40000000 * 10**6 * 10**9;
481     uint256     public buyBackSellLimit = 1 * 10**13;
482
483     // LookBack into historical sale data
484
```



**LINE 480** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
479     uint256     public _maxTxAmount = 600000000 * 10**6 * 10**9;
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484
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**LINE 480** 

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**LINE 480** 

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481     uint256     public buyBackSellLimit = 1 * 10**13;
482
483     // LookBack into historical sale data
484
```



**LINE 481** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
480  uint256 private minimumTokensBeforeSwap = 40000000 * 10**6 * 10**9;
481  uint256 public buyBackSellLimit = 1 * 10**13;
482
483  // LookBack into historical sale data
484  SellHistories[] public _sellHistories;
485
```



**LINE 481** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
uint256 private minimumTokensBeforeSwap = 40000000 * 10**6 * 10**9;
uint256 public buyBackSellLimit = 1 * 10**13;

482
// LookBack into historical sale data
SellHistories[] public _sellHistories;
485
```



**LINE 488** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
487  uint256 public _buyBackTimeInterval = 5 minutes;
488  uint256 public _buyBackMaxTimeForHistories = 24 * 60 minutes;
489
490  IUniswapV2Router02 public uniswapV2Router;
491  address public uniswapV2Pair;
492
```



**LINE 655** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
654 require(_isExcluded[account], "Account is not excluded");
655 for (uint256 i = 0; i < _excluded.length; i++) {
656    if (_excluded[i] == account) {
657     _excluded[i] = _excluded[_excluded.length - 1];
658    _tOwned[account] = 0;
659</pre>
```



**LINE 657** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
656  if (_excluded[i] == account) {
657    _excluded[i] = _excluded[_excluded.length - 1];
658    _tOwned[account] = 0;
659    _isExcluded[account] = false;
660    _excluded.pop();
661
```



**LINE** 700

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
699 if (to == uniswapV2Pair) {
700  if (overMinimumTokenBalance && _startTimeForSwap + _intervalMinutesForSwap <=
block.timestamp) {
701    _startTimeForSwap = block.timestamp;
702    contractTokenBalance = minimumTokensBeforeSwap;
703    swapTokens(contractTokenBalance);
704</pre>
```



**LINE** 715

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
714  uint256 sumBnbAmount = 0;
715  uint256 startTime = block.timestamp - _buyBackTimeInterval;
716  uint256 cnt = 0;
717
718  for (uint i = 0; i < _sellHistories.length; i ++) {
719</pre>
```



**LINE** 718

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
717
718 for (uint i = 0; i < _sellHistories.length; i ++) {
719
720 if (_sellHistories[i].time >= startTime) {
721 sumBnbAmount = sumBnbAmount.add(_sellHistories[i].bnbAmount);
722
```



**LINE 722** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
721 sumBnbAmount = sumBnbAmount.add(_sellHistories[i].bnbAmount);
722 cnt = cnt + 1;
723 }
724 }
725
726
```



**LINE 735** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
734
735  uint256 _bBSLimit = _bBSLimitMin +
uint256(keccak256(abi.encodePacked(block.timestamp, block.difficulty))) % (_bBSLimitMax -
_bBSLimitMin + 1);
736
737  if (balance > _bBSLimit) {
738  buyBackTokens(_bBSLimit);
739
```



**LINE 735** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
734
735 uint256 _bBSLimit = _bBSLimitMin +
uint256(keccak256(abi.encodePacked(block.timestamp, block.difficulty))) % (_bBSLimitMax -
_bBSLimitMin + 1);
736
737 if (balance > _bBSLimit) {
738 buyBackTokens(_bBSLimit);
739
```



**LINE 735** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
734
735  uint256 _bBSLimit = _bBSLimitMin +
uint256(keccak256(abi.encodePacked(block.timestamp, block.difficulty))) % (_bBSLimitMax -
_bBSLimitMin + 1);
736
737  if (balance > _bBSLimit) {
738  buyBackTokens(_bBSLimit);
739
```



**LINE 735** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
734
735  uint256 _bBSLimit = _bBSLimitMin +
  uint256(keccak256(abi.encodePacked(block.timestamp, block.difficulty))) % (_bBSLimitMax -
  _bBSLimitMin + 1);
736
737  if (balance > _bBSLimit) {
738  buyBackTokens(_bBSLimit);
739
```



**LINE 955** 

#### **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
954    uint256 tSupply = _tTotal;
955    for (uint256 i = 0; i < _excluded.length; i++) {
956    if (_rOwned[_excluded[i]] > rSupply || _tOwned[_excluded[i]] > tSupply) return
(_rTotal, _tTotal);
957    rSupply = rSupply.sub(_rOwned[_excluded[i]]);
958    tSupply = tSupply.sub(_tOwned[_excluded[i]]);
959
```



**LINE 974** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol



**LINE 980** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
979 return _amount.mul(_liquidityFee).div(
980    10**2
981 );
982 }
983
984
```



**LINE 1025** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
1024  uint256 i = 0;
1025  uint256 maxStartTimeForHistories = block.timestamp - _buyBackMaxTimeForHistories;
1026
1027  for (uint256 j = 0; j < _sellHistories.length; j ++) {
1028
1029</pre>
```



**LINE 1027** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
1026
1027  for (uint256 j = 0; j < _sellHistories.length; j ++) {
1028
1029  if (_sellHistories[j].time >= maxStartTimeForHistories) {
1030
1031
```



**LINE 1034** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol



**LINE 1038** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
1037
1038    uint256    removedCnt = _sellHistories.length - i;
1039
1040    for (uint256 j = 0; j < removedCnt; j ++) {
1041
1042</pre>
```



**LINE 1040** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
1039
1040  for (uint256 j = 0; j < removedCnt; j ++) {
1041
1042  _sellHistories.pop();
1043  }
1044</pre>
```



**LINE 1048** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
1047 function SetBuyBackMaxTimeForHistories(uint256 newMinutes) external onlyOwner {
1048   _buyBackMaxTimeForHistories = newMinutes * 1 minutes;
1049   }
1050
1051 function SetBuyBackDivisor(uint256 newDivisor) external onlyOwner {
1052
```



**LINE 1060** 

#### **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol



**LINE 1073** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
function SetSwapMinutes(uint256 newMinutes) external onlyOwner {
    1073    _intervalMinutesForSwap = newMinutes * 1 minutes;
    1074    }
    1075
    1076    function setTaxFeePercent(uint256 taxFee) external onlyOwner() {
    1077
```



**LINE 1133** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
1132    _liquidityFee = 0;
1133    _maxTxAmount = 1000000000 * 10**6 * 10**9;
1134  }
1135
1136    function afterPreSale() external onlyOwner {
1137
```



**LINE 1133** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
1132    _liquidityFee = 0;
1133    _maxTxAmount = 1000000000 * 10**6 * 10**9;
1134  }
1135
1136    function afterPreSale() external onlyOwner {
1137
```



**LINE 1133** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
1132    _liquidityFee = 0;
1133    _maxTxAmount = 1000000000 * 10**6 * 10**9;
1134  }
1135
1136    function afterPreSale() external onlyOwner {
1137
```



**LINE 1133** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
1132    _liquidityFee = 0;
1133    _maxTxAmount = 1000000000 * 10**6 * 10**9;
1134  }
1135
1136    function afterPreSale() external onlyOwner {
1137
```



**LINE 1140** 

#### **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
1139    _liquidityFee = 10;
1140    _maxTxAmount = 3000000 * 10**6 * 10**9;
1141  }
1142
1143    function transferToAddressETH(address payable recipient, uint256 amount) private {
1144
```



**LINE 1140** 

#### **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
1139    _liquidityFee = 10;
1140    _maxTxAmount = 3000000 * 10**6 * 10**9;
1141  }
1142
1143    function transferToAddressETH(address payable recipient, uint256 amount) private {
1144
```



**LINE 1140** 

#### **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
1139   _liquidityFee = 10;
1140   _maxTxAmount = 3000000 * 10**6 * 10**9;
1141  }
1142
1143   function transferToAddressETH(address payable recipient, uint256 amount) private {
1144
```



**LINE 1140** 

#### **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
1139   _liquidityFee = 10;
1140   _maxTxAmount = 3000000 * 10**6 * 10**9;
1141  }
1142
1143   function transferToAddressETH(address payable recipient, uint256 amount) private {
1144
```



# SWC-101 | COMPILER-REWRITABLE "<UINT> - 1" DISCOVERED

**LINE 657** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
656  if (_excluded[i] == account) {
657    _excluded[i] = _excluded[_excluded.length - 1];
658    _tOwned[account] = 0;
659    _isExcluded[account] = false;
660    _excluded.pop();
661
```



# SWC-103 | A FLOATING PRAGMA IS SET.

LINE 11

#### **low SEVERITY**

The current pragma Solidity directive is ""^0.8.4"". 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

- BabyMoonFloki.sol

```
10
11 pragma solidity ^0.8.4;
12
13 abstract contract Context {
14 function _msgSender() internal view virtual returns (address payable) {
15
```



# SWC-108 | STATE VARIABLE VISIBILITY IS NOT SET.

**LINE 493** 

#### **low SEVERITY**

It is best practice to set the visibility of state variables explicitly. The default visibility for "inSwapAndLiquify" is internal. Other possible visibility settings are public and private.

# Source File

- BabyMoonFloki.sol

```
492
493 bool inSwapAndLiquify;
494 bool public swapAndLiquifyEnabled = false;
495 bool public buyBackEnabled = true;
496
497
```



# SWC-110 | PUBLIC STATE VARIABLE WITH ARRAY TYPE CAUSING REACHABLE EXCEPTION BY DEFAULT.

**LINE 484** 

#### **low SEVERITY**

The public state variable "\_sellHistories" in "BabyMoonFloki" contract has type "struct BabyMoonFloki.SellHistories[]" and can cause an exception in case of use of invalid array index value.

# Source File

- BabyMoonFloki.sol

```
// LookBack into historical sale data

484    SellHistories[] public _sellHistories;

485    bool public _isAutoBuyBack = true;

486    uint256 public _buyBackDivisor = 10;

487    uint256 public _buyBackTimeInterval = 5 minutes;

488
```



# SWC-110 | OUT OF BOUNDS ARRAY ACCESS

**LINE 656** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol



# SWC-110 | OUT OF BOUNDS ARRAY ACCESS

**LINE 657** 

# **low SEVERITY**

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

# Source File

- BabyMoonFloki.sol

```
656  if (_excluded[i] == account) {
657    _excluded[i] = _excluded[_excluded.length - 1];
658    _tOwned[account] = 0;
659    _isExcluded[account] = false;
660    _excluded.pop();
661
```



**LINE 657** 

#### **low SEVERITY**

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

#### Source File

- BabyMoonFloki.sol

```
656  if (_excluded[i] == account) {
657    _excluded[i] = _excluded[_excluded.length - 1];
658    _tOwned[account] = 0;
659    _isExcluded[account] = false;
660    _excluded.pop();
661
```



**LINE 720** 

#### **low SEVERITY**

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

#### Source File

- BabyMoonFloki.sol

```
719
720 if (_sellHistories[i].time >= startTime) {
721    sumBnbAmount = sumBnbAmount.add(_sellHistories[i].bnbAmount);
722    cnt = cnt + 1;
723  }
724
```



**LINE 721** 

#### **low SEVERITY**

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

#### Source File

- BabyMoonFloki.sol

```
if (_sellHistories[i].time >= startTime) {
    sumBnbAmount = sumBnbAmount.add(_sellHistories[i].bnbAmount);
    cnt = cnt + 1;
    }
    }
    }
    }
    724  }
    725
```



**LINE 814** 

#### **low SEVERITY**

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

#### Source File

- BabyMoonFloki.sol

```
address[] memory path = new address[](2);
path[0] = address(this);
path[1] = uniswapV2Router.WETH();

816
approve(address(this), address(uniswapV2Router), tokenAmount);
818
```



**LINE 815** 

#### **low SEVERITY**

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

#### Source File

- BabyMoonFloki.sol

```
814 path[0] = address(this);
815 path[1] = uniswapV2Router.WETH();
816
817 _approve(address(this), address(uniswapV2Router), tokenAmount);
818
819
```



**LINE 834** 

### **low SEVERITY**

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

#### Source File

- BabyMoonFloki.sol

```
address[] memory path = new address[](2);
path[0] = uniswapV2Router.WETH();
path[1] = address(this);

836
837  // Make the swap
838
```



**LINE 835** 

#### **low SEVERITY**

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

#### Source File

- BabyMoonFloki.sol

```
path[0] = uniswapV2Router.WETH();
path[1] = address(this);

836
837  // Make the swap
838  uniswapV2Router.swapExactETHForTokensSupportingFeeOnTransferTokens{value: amount}(
839
```



**LINE 956** 

#### **low SEVERITY**

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

#### Source File

- BabyMoonFloki.sol

```
955 for (uint256 i = 0; i < _excluded.length; i++) {
956   if (_rOwned[_excluded[i]] > rSupply || _tOwned[_excluded[i]] > tSupply) return
(_rTotal, _tTotal);
957   rSupply = rSupply.sub(_rOwned[_excluded[i]]);
958   tSupply = tSupply.sub(_tOwned[_excluded[i]]);
959   }
960
```



**LINE 956** 

#### **low SEVERITY**

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

#### Source File

- BabyMoonFloki.sol

```
955 for (uint256 i = 0; i < _excluded.length; i++) {
956   if (_rOwned[_excluded[i]] > rSupply || _tOwned[_excluded[i]] > tSupply) return
(_rTotal, _tTotal);
957   rSupply = rSupply.sub(_rOwned[_excluded[i]]);
958   tSupply = tSupply.sub(_tOwned[_excluded[i]]);
959   }
960
```



**LINE 957** 

#### **low SEVERITY**

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

#### Source File

- BabyMoonFloki.sol

```
956  if (_rOwned[_excluded[i]] > rSupply || _tOwned[_excluded[i]] > tSupply) return
(_rTotal, _tTotal);
957   rSupply = rSupply.sub(_rOwned[_excluded[i]]);
958   tSupply = tSupply.sub(_tOwned[_excluded[i]]);
959  }
960   if (rSupply < _rTotal.div(_tTotal)) return (_rTotal, _tTotal);
961</pre>
```



**LINE 958** 

#### **low SEVERITY**

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

#### Source File

- BabyMoonFloki.sol

```
957  rSupply = rSupply.sub(_rOwned[_excluded[i]]);
958  tSupply = tSupply.sub(_tOwned[_excluded[i]]);
959  }
960  if (rSupply < _rTotal.div(_tTotal)) return (_rTotal, _tTotal);
961  return (rSupply, tSupply);
962</pre>
```



**LINE 1015** 

#### **low SEVERITY**

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

#### Source File

- BabyMoonFloki.sol

```
1014
1015  path[0] = address(this);
1016  path[1] = uniswapV2Router.WETH();
1017
1018  uint[] memory amounts = uniswapV2Router.getAmountsOut(tokenAmount, path);
1019
```



**LINE 1016** 

### **low SEVERITY**

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

#### Source File

- BabyMoonFloki.sol

```
1015  path[0] = address(this);
1016  path[1] = uniswapV2Router.WETH();
1017
1018  uint[] memory amounts = uniswapV2Router.getAmountsOut(tokenAmount, path);
1019
1020
```



**LINE 1020** 

### **low SEVERITY**

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

#### Source File

- BabyMoonFloki.sol

```
1019
1020 return amounts[1];
1021 }
1022
1023 function _removeOldSellHistories() private {
1024
```



**LINE 1029** 

#### **low SEVERITY**

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

#### Source File

- BabyMoonFloki.sol

```
1028
1029 if (_sellHistories[j].time >= maxStartTimeForHistories) {
1030
1031   _sellHistories[i].time = _sellHistories[j].time;
1032   _sellHistories[i].bnbAmount = _sellHistories[j].bnbAmount;
1033
```



**LINE 1031** 

### **low SEVERITY**

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

#### Source File

- BabyMoonFloki.sol

```
1030
1031    _sellHistories[i].time = _sellHistories[j].time;
1032    _sellHistories[i].bnbAmount = _sellHistories[j].bnbAmount;
1033
1034    i = i + 1;
1035
```



**LINE 1031** 

### **low SEVERITY**

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

#### Source File

- BabyMoonFloki.sol

```
1030
1031    _sellHistories[i].time = _sellHistories[j].time;
1032    _sellHistories[i].bnbAmount = _sellHistories[j].bnbAmount;
1033
1034    i = i + 1;
1035
```



**LINE 1032** 

#### **low SEVERITY**

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

#### Source File

- BabyMoonFloki.sol

```
1031    _sellHistories[i].time = _sellHistories[j].time;
1032    _sellHistories[i].bnbAmount = _sellHistories[j].bnbAmount;
1033
1034    i = i + 1;
1035  }
1036
```



**LINE 1032** 

#### **low SEVERITY**

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

#### Source File

- BabyMoonFloki.sol

```
1031    _sellHistories[i].time = _sellHistories[j].time;
1032    _sellHistories[i].bnbAmount = _sellHistories[j].bnbAmount;
1033
1034    i = i + 1;
1035  }
1036
```



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