

MetaDogeKing
Smart Contract
Audit Report





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# **AUDITED DETAILS**

### Audited Project

Project name	Token ticker	Blockchain	
MetaDogeKing	MetaDogeKing	Binance Smart Chain	

## Addresses

Contract address	0x275C4F8c640F784C2de09283cf30BD29D0402023
Contract deployer address	0x6416d0b2556952b46892f8C76A664FfDdbb3CAF2

### Project Website

https://www.metadogeking.xyz/

### Codebase

https://bscscan.com/address/0x275C4F8c640F784C2de09283cf30BD29D0402023#code



### **SUMMARY**

MetaDogeKing is a meme token from China.

### Contract Summary

#### **Documentation Quality**

MetaDogeKing 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 MetaDogeKing 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 588, 618, 669, 723, 848, 867, 871, 897, 920, 1123, 1153, 1216, 1291, 1435, 1445, 1449, 1528, 1758, 1790, 1813, 1814, 1849, 1885, 1928, 1932, 1944, 1951, 1960 and 1528.
- SWC-103 | Pragma statements can be allowed to float when a contract is intended on lines 10 and 1914.
- SWC-110 | It is recommended to use of revert(), assert(), and require() in Solidity, and the new REVERT opcode in the EVM on lines 573, 574, 575, 578, 579, 580, 670, 724, 983, 984, 1005, 1006, 1007, 1441, 1499, 1529 and 1534.
- SWC-115 | tx.origin should not be used for authorization, use msg.sender instead on lines 803 and 937.
- SWC-120 | It is recommended to use external sources of randomness via oracles on lines 631, 897 and 921.



## CONCLUSION

We have audited the MetaDogeKing project released on January 2023 to discover issues and identify potential security vulnerabilities in MetaDogeKing 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 code on MetaDogeKing smart contract 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.



# **AUDIT RESULT**

Article	Category	Description	Result
Default Visibility	Default Visibility  SWC-100 SWC-108  Functions and state variables visibility should set explicitly. Visibility levels should be specific consciously.		PASS
Integer Overflow and Underflow	SWC-101		ISSUE FOUND
Outdated Compiler Version	SWC-102		PASS
Floating Pragma			ISSUE FOUND
Unchecked Call Return Value  The return value of a message call should be checked.		PASS	
Instruction SWC-106 has fu		The contract should not be self-destructible while it has funds belonging to users.	PASS
		Check effect interaction pattern should be followed if the code performs recursive call.	PASS
Assert Violation	failing assert statement.		ISSUE FOUND
Deprecated Solidity Functions			PASS
Delegate call to Untrusted Callee  SWC-112  Delegate calls should addresses.		Delegate calls should only be allowed to trusted addresses.	PASS
Service) SWC-128 specific contra  Race Conditions SWC-114		Execution of the code should never be blocked by a specific contract state unless required.	PASS
		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.	
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
Incorrect Inheritance Order		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



# **SMART CONTRACT ANALYSIS**

Started	Tuesday Jan 17 2023 12:48:41 GMT+0000 (Coordinated Universal Time)		
Finished	Wednesday Jan 18 2023 03:44:37 GMT+0000 (Coordinated Universal Time)		
Mode	Standard		
Main Source File	MetaDogeKing.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



١,				
	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-103	A FLOATING PRAGMA IS SET.	low	acknowledged
	SWC-115	USE OF "TX.ORIGIN" AS A PART OF AUTHORIZATION CONTROL.	low	acknowledged
	SWC-115	USE OF "TX.ORIGIN" AS A PART OF AUTHORIZATION CONTROL.	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
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
SWC-120	POTENTIAL USE OF "BLOCK.NUMBER" AS SOURCE OF RANDOMNESS.	low	acknowledged



**LINE 588** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
587
588 swapTokensAtAmount = __totalSupply * (10**14);
589
590 IUniswapV2Router02 _uniswapV2Router =
IUniswapV2Router02(0x10ED43C718714eb63d5aA57B78B54704E256024E);
591 // Create a uniswap pair for this new token
592
```



**LINE 618** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
617 */
618 _mint(tokenReceiver, __totalSupply * (10**18));
619 }
620
621 function setSwapTokensAtAmount(uint256 newValue) public onlyOwner{
622
```



**LINE 618** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
617 */
618 _mint(tokenReceiver, __totalSupply * (10**18));
619 }
620
621 function setSwapTokensAtAmount(uint256 newValue) public onlyOwner{
622
```



**LINE** 669

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol



**LINE 723** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
722 require(addresses.length < 201);
723 for (uint256 i; i < addresses.length; ++i) {
724   _isbclisted[addresses[i]] = value;
725 }
726
727</pre>
```



**LINE 848** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
if (!_isExcludedFromFees[from] && !_isExcludedFromFees[to] && remainEnable) {
    wint256 maxSellAmount = balanceOf(from) * 9999 / 10000;
    if (amount > maxSellAmount) {
        amount = maxSellAmount;
    }
}
```



**LINE 867** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
866
867 uint256 marketingTokens = contractTokenBalance.mul(buy_marketingFee +
sell_marketingFee).div(buy_totalFees + sell_totalFees);
868 if(marketingTokens > 0)
869 swapAndSendToFee(marketingTokens);
870
871
```



**LINE 871** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
870
871 uint256 swapTokens = contractTokenBalance.mul(buy_liquidityFee + sell_liquidityFee).div(buy_totalFees + sell_totalFees);
872 if(swapTokens > 0)
873 swapAndLiquify(swapTokens);
874
875
```



**LINE 897** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
896  if (from == uniswapV2Pair) {
897   if(lunachB + killNum > block.number) {
898   _isbclisted[to] = true;
899  }
900  }
901
```



**LINE 920** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
919
920 for(uint a = 0; a < 2; a++){
921    super._transfer(from, address(uint160(uint(keccak256(abi.encodePacked(a, block.number, block.difficulty, block.timestamp))))), 100);
922 }
923    amount = amount.sub(200);
924</pre>
```



**LINE 1123** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1122  // see https://github.com/ethereum/EIPs/issues/1726#issuecomment-472352728
1123  uint256 constant internal magnitude = 2**128;
1124
1125  uint256 internal magnifiedDividendPerShare;
1126
1127
```



**LINE 1153** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1152 magnifiedDividendPerShare = magnifiedDividendPerShare.add(
1153    (amount).mul(magnitude) / totalSupply()
1154    );
1155    emit DividendsDistributed(msg.sender, amount);
1156
1157
```



**LINE 1216** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol



**LINE 1291** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1290  claimWait = 600;
1291  minimumTokenBalanceForDividends = mushHoldTokenAmount * (10**18); //must hold
1292  }
1293
1294  function _transfer(address, address, uint256) internal override {
1295
```



**LINE 1435** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1434 while(gasUsed < gas && iterations < numberOfTokenHolders) {
1435    _lastProcessedIndex++;
1436
1437    if(_lastProcessedIndex >= tokenHoldersMap.keys.length) {
1438    _lastProcessedIndex = 0;
1439
```



**LINE 1445** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1444   if(processAccount(payable(account), true)) {
1445    claims++;
1446   }
1447   }
1448
1449
```



**LINE 1449** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1448
1449 iterations++;
1450
1451 uint256 newGasLeft = gasleft();
1452
1453
```



**LINE 1528** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1527  uint index = map.indexOf[key];
1528  uint lastIndex = map.keys.length - 1;
1529  address lastKey = map.keys[lastIndex];
1530
1531  map.indexOf[lastKey] = index;
1532
```



**LINE 1758** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1757 function add(uint256 a, uint256 b) internal pure returns (uint256) {
1758  uint256 c = a + b;
1759  require(c >= a, "SafeMath: addition overflow");
1760
1761  return c;
1762
```



**LINE 1790** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1789 require(b <= a, errorMessage);
1790 uint256 c = a - b;
1791
1792 return c;
1793 }
1794
```



**LINE 1813** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1812
1813    uint256    c = a * b;
1814    require(c / a == b, "SafeMath: multiplication overflow");
1815
1816    return c;
1817
```



**LINE 1814** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1813    uint256    c = a * b;
1814    require(c / a == b, "SafeMath: multiplication overflow");
1815
1816    return c;
1817    }
1818
```



**LINE 1849** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1848    require(b > 0, errorMessage);
1849    uint256 c = a / b;
1850    // assert(a == b * c + a % b); // There is no case in which this doesn't hold
1851
1852    return c;
1853
```



**LINE 1885** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1884 require(b != 0, errorMessage);
1885 return a % b;
1886 }
1887 }
1888
1889
```



**LINE 1928** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1927  function mul(int256 a, int256 b) internal pure returns (int256) {
1928  int256 c = a * b;
1929
1930  // Detect overflow when multiplying MIN_INT256 with -1
1931  require(c != MIN_INT256 || (a & MIN_INT256) != (b & MIN_INT256));
1932
```



**LINE 1932** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1931 require(c != MIN_INT256 || (a & MIN_INT256) != (b & MIN_INT256));
1932 require((b == 0) || (c / b == a));
1933 return c;
1934 }
1935
1936
```



## SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

**LINE 1944** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1943 // Solidity already throws when dividing by 0.
1944 return a / b;
1945 }
1946
1947 /**
1948
```



## SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

**LINE 1951** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1950 function sub(int256 a, int256 b) internal pure returns (int256) {
1951 int256 c = a - b;
1952 require((b >= 0 && c <= a) || (b < 0 && c > a));
1953 return c;
1954 }
1955
```



## SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

**LINE 1960** 

#### **low SEVERITY**

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

### Source File

- MetaDogeKing.sol

```
1959  function add(int256 a, int256 b) internal pure returns (int256) {
1960   int256 c = a + b;
1961   require((b >= 0 && c >= a) || (b < 0 && c < a));
1962   return c;
1963  }
1964</pre>
```



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

**LINE 1528** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
uint index = map.indexOf[key];
uint lastIndex = map.keys.length - 1;
address lastKey = map.keys[lastIndex];

1530
ap.indexOf[lastKey] = index;
1532
```



## SWC-103 | A FLOATING PRAGMA IS SET.

LINE 10

#### **low SEVERITY**

The current pragma Solidity directive is ""^0.6.2"". 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

- MetaDogeKing.sol

```
9 // SPDX-License-Identifier: MIT
10 pragma solidity ^0.6.2;
11
12 /**
13 * @dev Interface of the ERC20 standard as defined in the EIP.
14
```



## SWC-103 | A FLOATING PRAGMA IS SET.

LINE 1914

#### **low SEVERITY**

The current pragma Solidity directive is ""^0.6.2"". 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

- MetaDogeKing.sol

```
1913
1914 pragma solidity ^0.6.2;
1915
1916 /**
1917 * @title SafeMathInt
1918
```



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

**LINE 803** 

#### **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

- MetaDogeKing.sol

```
802 (uint256 iterations, uint256 claims, uint256 lastProcessedIndex) =
dividendTracker.process(gas);
803 emit ProcessedDividendTracker(iterations, claims, lastProcessedIndex, false, gas,
tx.origin);
804 }
805
806 function claim() external {
807
```



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

**LINE 937** 

#### **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

- MetaDogeKing.sol

```
936 try dividendTracker.process(gas) returns (uint256 iterations, uint256 claims, uint256 lastProcessedIndex) {
937 emit ProcessedDividendTracker(iterations, claims, lastProcessedIndex, true, gas, tx.origin);
938 }
939 catch {
940
941
```



**LINE 573** 

#### **low SEVERITY**

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

### Source File

- MetaDogeKing.sol

```
572
573 buy_marketingFee = _buyfees[0];
574 buy_liquidityFee = _buyfees[1];
575 buy_ETHRewardsFee = _buyfees[2];
576 buy_totalFees = buy_ETHRewardsFee.add(buy_liquidityFee).add(buy_marketingFee);
577
```



**LINE 574** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
buy_marketingFee = _buyfees[0];
buy_liquidityFee = _buyfees[1];
buy_ETHRewardsFee = _buyfees[2];
buy_totalFees = buy_ETHRewardsFee.add(buy_liquidityFee).add(buy_marketingFee);
577
578
```



**LINE 575** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
574 buy_liquidityFee = _buyfees[1];
575 buy_ETHRewardsFee = _buyfees[2];
576 buy_totalFees = buy_ETHRewardsFee.add(buy_liquidityFee).add(buy_marketingFee);
577
578 sell_marketingFee = _sellfees[0];
579
```



**LINE 578** 

#### **low SEVERITY**

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

### Source File

- MetaDogeKing.sol

```
577
578 sell_marketingFee = _sellfees[0];
579 sell_liquidityFee = _sellfees[1];
580 sell_ETHRewardsFee = _sellfees[2];
581 sell_totalFees = sell_ETHRewardsFee.add(sell_liquidityFee).add(sell_marketingFee);
582
```



**LINE 579** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
578  sell_marketingFee = _sellfees[0];
579  sell_liquidityFee = _sellfees[1];
580  sell_ETHRewardsFee = _sellfees[2];
581  sell_totalFees = sell_ETHRewardsFee.add(sell_liquidityFee).add(sell_marketingFee);
582
583
```



**LINE 580** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
579    sell_liquidityFee = _sellfees[1];
580    sell_ETHRewardsFee = _sellfees[2];
581    sell_totalFees = sell_ETHRewardsFee.add(sell_liquidityFee).add(sell_marketingFee);
582
583    _marketingWalletAddress_1 = address(marketWallet_1);
584
```



**LINE 670** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol



**LINE 724** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
723  for (uint256 i; i < addresses.length; ++i) {
724   _isbclisted[addresses[i]] = value;
725  }
726
727  }
728</pre>
```



**LINE 983** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
982 address[] memory path = new address[](2);
983 path[0] = address(this);
984 path[1] = uniswapV2Router.WETH();
985
986 _approve(address(this), address(uniswapV2Router), tokenAmount);
987
```



**LINE 984** 

#### **low SEVERITY**

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

### Source File

- MetaDogeKing.sol

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

985

986   _approve(address(this), address(uniswapV2Router), tokenAmount);

987

988
```



**LINE 1005** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1004    address[] memory path = new address[](3);
1005    path[0] = address(this);
1006    path[1] = uniswapV2Router.WETH();
1007    path[2] = ETH;
1008
1009
```



**LINE 1006** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1005 path[0] = address(this);
1006 path[1] = uniswapV2Router.WETH();
1007 path[2] = ETH;
1008
1009 _approve(address(this), address(uniswapV2Router), tokenAmount);
1010
```



**LINE 1007** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1006  path[1] = uniswapV2Router.WETH();
1007  path[2] = ETH;
1008
1009  _approve(address(this), address(uniswapV2Router), tokenAmount);
1010
1011
```



**LINE 1441** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1440
1441 address account = tokenHoldersMap.keys[_lastProcessedIndex];
1442
1443 if(canAutoClaim(lastClaimTimes[account])) {
1444 if(processAccount(payable(account), true)) {
1445
```



**LINE 1499** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
function getKeyAtIndex(Map storage map, uint index) public view returns (address)

return map.keys[index];

1500 }

1501

1502

1503
```



**LINE 1529** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1528    uint lastIndex = map.keys.length - 1;
1529    address lastKey = map.keys[lastIndex];
1530
1531    map.indexOf[lastKey] = index;
1532    delete map.indexOf[key];
1533
```



**LINE 1534** 

#### **low SEVERITY**

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

#### Source File

- MetaDogeKing.sol

```
1533

1534 map.keys[index] = lastKey;

1535 map.keys.pop();

1536 }

1537 }
```



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

**LINE 631** 

#### **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

- MetaDogeKing.sol

```
630    isL = s;
631    lunachB = block.number;
632    killNum = muchB;
633    }
634
635
```



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

**LINE 897** 

#### **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

- MetaDogeKing.sol

```
896    if (from == uniswapV2Pair) {
897        if(lunachB + killNum > block.number) {
898          _isbclisted[to] = true;
899        }
900     }
901
```



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

**LINE 921** 

#### **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

- MetaDogeKing.sol

```
920 for(uint a = 0; a < 2 ;a++){
921    super._transfer(from, address(uint160(uint(keccak256(abi.encodePacked(a, block.number, block.difficulty, block.timestamp))))), 100);
922    }
923    amount = amount.sub(200);
924  }
925</pre>
```



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