

Smart Contract
Audit Report



05 Mar 2022



TABLE OF CONTENTS

| Audited Details

- Audited Project
- Blockchain
- Addresses
- Project Website
- Codebase

Summary

- Contract Summary
- Audit Findings Summary
- Vulnerabilities Summary

Conclusion

| Audit Results

Smart Contract Analysis

- Detected Vulnerabilities

Disclaimer

About Us



AUDITED DETAILS

| Audited Project

| Project name | Token ticker | Blockchain | |
|--------------|--------------|---------------------|--|
| Kiba Inu | KIBA | Binance Smart Chain | |

Addresses

| Contract address | 0xc3afde95b6eb9ba8553cdaea6645d45fb3a7faf5 |
|---------------------------|--|
| Contract deployer address | 0x2c5B9dd42d0510C43f1d6d672bD56A7DE0716c91 |

Project Website

https://kibainu.com/#/swap

Codebase

https://bscscan.com/address/0xc3afde95b6eb9ba8553cdaea6645d45fb3a7faf5#contracts



SUMMARY

Kiba Inu is a meme coin that has evolved into a meme and utility coin with the introduction of KibaSwap.

Contract Summary

Documentation Quality

Kiba Inu 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 Kiba Inu 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 916.
- SWC-101 | It is recommended to use vetted safe math libraries for arithmetic operations consistently on lines 469, 501, 524, 525, 560, 596, 662, 666, 678, 685, 694, 970, 970, 972, 972, 974, 974, 979, 979, 984, 984, 1051, 1052, 1052, 1052, 1058, 1058, 1059, 1059, 1063, 1063, 1063, 1064, 1064, 1080, 1080, 1090, 1090, 1168, 1176, 1182, 1194, 1197, 1197, 1224, 1242, 1242, 1242, 1243, 1243, 1243, 1244, 1244, 1244, 1249, 1249, 1249, 1250, 1250, 1250, 1251, 1251, 1251, 1258, 1303, 1303, 1308, 1309, 1313, 1313, 1313, 1326, 1326 and 1375.
- 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 1268 and 1269.
- SWC-115 | tx.origin should not be used for authorization, use msg.sender instead on lines 1160 and 1161.
- SWC-120 | It is recommended to use external sources of randomness via oracles on lines 1021, 1160, 1161 and 1182.



CONCLUSION

We have audited the Kiba Inu project released on March 2022 to discover issues and identify potential security vulnerabilities in Kiba Inu 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 Kiba Inu smart contract code issues 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 use of "tx.origin" as a part of authorization control, state variable visibility is not set, out of bounds array access, the potential use of "block.number" as a source of randomness, 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. It is best practice to set the visibility of state variables explicitly. The default visibility for "launchedAt" is internal. Other possible visibility settings are public and private. 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. Be aware that using these variables introduces a certain level of trust into miners, and tx.origin should not be used for authorization. Use msg.sender instead.



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. | PASS |
| Floating Pragma | SWC-103 | Contracts should be deployed with the same compiler version and flags that they have been tested thoroughly. | PASS |
| Unchecked Call Return Value | SWC-104 | The return value of a message call should be checked. | PASS |
| Unprotected Ether Withdrawal | SWC-105 | Due to missing or insufficient access controls, malicious parties can withdraw from the contract. | PASS |
| SELFDESTRUCT Instruction | SWC-106 | The contract should not be self-destructible while it has funds belonging to users. | PASS |
| Reentrancy | SWC-107 | Check effect interaction pattern should be followed if the code performs recursive call. | PASS |
| Uninitialized Storage Pointer | SWC-109 | Uninitialized local storage variables can point to unexpected storage locations in the contract. | PASS |
| Assert Violation | SWC-110 SWC-123 | Properly functioning code should never reach a failing assert statement. | ISSUE FOUND |
| Deprecated Solidity Functions | SWC-111 | Deprecated built-in functions should never be used. | PASS |
| Delegate call to Untrusted Callee | SWC-112 | Delegatecalls should only be allowed to trusted addresses. | PASS |



| DoS (Denial of Service) | SWC-113 SWC-128 | Execution of the code should never be blocked by a specific contract state unless required. | PASS |
|--|-------------------------------|---|----------------|
| Race Conditions | SWC-114 | Race Conditions and Transactions Order Dependency should not be possible. | PASS |
| Authorization through tx.origin | SWC-115 | tx.origin should not be used for authorization. | 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. | PASS |
| Incorrect Constructor Name | SWC-118 | Constructors are special functions that are called only once during the contract creation. | PASS |
| Shadowing State Variable | SWC-119 | State variables should not be shadowed. | PASS |
| Weak Sources of Randomness | SWC-120 | Random values should never be generated from Chain Attributes or be predictable. | 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 | | Malicious actors can use the Right-To-Left-Override unicode character to force RTL text rendering and confuse users as to the real intent of a contract. | PASS |
| Unused variables | SWC-131 SWC-135 | Unused variables are allowed in Solidity and they do not pose a direct security issue. | PASS |
| Unexpected Ether balance | SWC-132 Contracts can behave erroneously when they strictly assume a specific Ether balance. | | PASS |
| Hash Collisions Variable | SWC-133 | Using abi.encodePacked() with multiple variable length arguments can, in certain situations, lead to a hash collision. | PASS |
| Hardcoded gas amount | SWC-134 | The transfer() and send() functions forward a fixed amount of 2300 gas. | PASS |
| Unencrypted Private Data | SWC-136 | It is a common misconception that private type variables cannot be read. | PASS |



SMART CONTRACT ANALYSIS

| Started | Friday Mar 04 2022 18:54:54 GMT+0000 (Coordinated Universal Time) | | |
|------------------|---|--|--|
| Finished | Saturday Mar 05 2022 19:20:03 GMT+0000 (Coordinated Universal Time) | | |
| Mode | Standard | | |
| Main Source File | Kibalnu.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-108 | STATE VARIABLE VISIBILITY IS NOT 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-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 |
| SWC-120 | POTENTIAL USE OF "BLOCK.NUMBER" AS SOURCE OF RANDOMNESS. | low | acknowledged |
| | | - | |



LINE 469

low SEVERITY

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

Source File

- Kibalnu.sol

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



LINE 501

low SEVERITY

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

Source File

- Kibalnu.sol

```
500 require(b <= a, errorMessage);
501 uint256 c = a - b;
502
503 return c;
504 }
505</pre>
```



LINE 524

low SEVERITY

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

Source File

- Kibalnu.sol

```
523
524    uint256    c = a * b;
525    require(c / a == b, "SafeMath: multiplication overflow");
526
527    return c;
528
```



LINE 525

low SEVERITY

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

Source File

- Kibalnu.sol

```
524    uint256    c = a * b;
525    require(c / a == b, "SafeMath: multiplication overflow");
526
527    return c;
528    }
529
```



LINE 560

low SEVERITY

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

Source File

- Kibalnu.sol

```
559    require(b > 0, errorMessage);
560    uint256 c = a / b;
561    // assert(a == b * c + a % b); // There is no case in which this doesn't hold
562
563    return c;
564
```



LINE 596

low SEVERITY

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

Source File

- Kibalnu.sol

```
595    require(b != 0, errorMessage);
596    return a % b;
597    }
598    }
599
600
```



LINE 662

low SEVERITY

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

Source File

- Kibalnu.sol

```
function mul(int256 a, int256 b) internal pure returns (int256) {
  int256 c = a * b;
  663
  664  // Detect overflow when multiplying MIN_INT256 with -1
  fe5   require(c != MIN_INT256 || (a & MIN_INT256) != (b & MIN_INT256));
  666
```



LINE 666

low SEVERITY

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

Source File

- Kibalnu.sol

```
665 require(c != MIN_INT256 || (a & MIN_INT256) != (b & MIN_INT256));
666 require((b == 0) || (c / b == a));
667 return c;
668 }
669
670
```



LINE 678

low SEVERITY

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

Source File

- Kibalnu.sol

```
677 // Solidity already throws when dividing by 0.
678 return a / b;
679 }
680
681 /**
682
```



LINE 685

low SEVERITY

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

Source File

- Kibalnu.sol

```
function sub(int256 a, int256 b) internal pure returns (int256) {
  int256 c = a - b;
  require((b >= 0 && c <= a) || (b < 0 && c > a));
  return c;
  ferminal pure returns (int256) {
  int256 c = a - b;
  require((b >= 0 && c <= a) || (b < 0 && c > a));
  ferminal pure returns (int256) {
  int256 c = a - b;
  require((b >= 0 && c <= a) || (b < 0 && c > a));
  ferminal pure returns (int256) {
  int256 c = a - b;
  int
```



LINE 694

low SEVERITY

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

Source File

- Kibalnu.sol

```
693 function add(int256 a, int256 b) internal pure returns (int256) {
694  int256 c = a + b;
695  require((b >= 0 && c >= a) || (b < 0 && c < a));
696  return c;
697  }
698</pre>
```



LINE 970

low SEVERITY

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

Source File

- Kibalnu.sol

```
969
970 uint256 totalSupply = 1 * 1e12 * 1e18;
971
972 maxTransactionAmount = totalSupply * 2 / 1000; // 0.2% maxTransactionAmountTxn
973 maxWallet = totalSupply; // No Max Wallet On Launch
974
```



LINE 970

low SEVERITY

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

Source File

- Kibalnu.sol

```
969
970 uint256 totalSupply = 1 * 1e12 * 1e18;
971
972 maxTransactionAmount = totalSupply * 2 / 1000; // 0.2% maxTransactionAmountTxn
973 maxWallet = totalSupply; // No Max Wallet On Launch
974
```



LINE 972

low SEVERITY

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

Source File

- Kibalnu.sol

```
971
972 maxTransactionAmount = totalSupply * 2 / 1000; // 0.2% maxTransactionAmountTxn
973 maxWallet = totalSupply; // No Max Wallet On Launch
974 swapTokensAtAmount = totalSupply * 5 / 10000; // 0.05% swap wallet
975
976
```



LINE 972

low SEVERITY

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

Source File

- Kibalnu.sol

```
971
972 maxTransactionAmount = totalSupply * 2 / 1000; // 0.2% maxTransactionAmountTxn
973 maxWallet = totalSupply; // No Max Wallet On Launch
974 swapTokensAtAmount = totalSupply * 5 / 10000; // 0.05% swap wallet
975
976
```



LINE 974

low SEVERITY

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

Source File

- Kibalnu.sol

```
973 maxWallet = totalSupply; // No Max Wallet On Launch
974 swapTokensAtAmount = totalSupply * 5 / 10000; // 0.05% swap wallet
975
976 buyMarketingFee = _buyMarketingFee;
977 buyLiquidityFee = _buyLiquidityFee;
978
```



LINE 974

low SEVERITY

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

Source File

- Kibalnu.sol

```
973 maxWallet = totalSupply; // No Max Wallet On Launch
974 swapTokensAtAmount = totalSupply * 5 / 10000; // 0.05% swap wallet
975
976 buyMarketingFee = _buyMarketingFee;
977 buyLiquidityFee = _buyLiquidityFee;
978
```



LINE 979

low SEVERITY

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

Source File

- Kibalnu.sol

```
978 buyDevFee = _buyDevFee;
979 buyTotalFees = buyMarketingFee + buyLiquidityFee + buyDevFee;
980
981 sellMarketingFee = _sellMarketingFee;
982 sellLiquidityFee = _sellLiquidityFee;
983
```



LINE 979

low SEVERITY

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

Source File

- Kibalnu.sol

```
978 buyDevFee = _buyDevFee;
979 buyTotalFees = buyMarketingFee + buyLiquidityFee + buyDevFee;
980
981 sellMarketingFee = _sellMarketingFee;
982 sellLiquidityFee = _sellLiquidityFee;
983
```



LINE 984

low SEVERITY

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

Source File

- Kibalnu.sol

```
983 sellDevFee = _sellDevFee;
984 sellTotalFees = sellMarketingFee + sellLiquidityFee + sellDevFee;
985
986 earlySellLiquidityFee = _earlySellLiquidityFee;
987 earlySellMarketingFee = _earlySellMarketingFee;
988
```



LINE 984

low SEVERITY

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

Source File

- Kibalnu.sol

```
983 sellDevFee = _sellDevFee;
984 sellTotalFees = sellMarketingFee + sellLiquidityFee + sellDevFee;
985
986 earlySellLiquidityFee = _earlySellLiquidityFee;
987 earlySellMarketingFee = _earlySellMarketingFee;
988
```



LINE 1051

low SEVERITY

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

Source File

- Kibalnu.sol

```
1050 function updateSwapTokensAtAmount(uint256 newAmount) external onlyOwner returns
(bool){
1051    require(newAmount >= totalSupply() * 1 / 100000, "Swap amount cannot be lower than
0.001% total supply.");
1052    require(newAmount <= totalSupply() * 5 / 1000, "Swap amount cannot be higher than
0.5% total supply.");
1053    swapTokensAtAmount = newAmount;
1054    return true;
1055</pre>
```



LINE 1051

low SEVERITY

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

Source File

- Kibalnu.sol

```
function updateSwapTokensAtAmount(uint256 newAmount) external onlyOwner returns
(bool){

1051    require(newAmount >= totalSupply() * 1 / 100000, "Swap amount cannot be lower than
0.001% total supply.");

1052    require(newAmount <= totalSupply() * 5 / 1000, "Swap amount cannot be higher than
0.5% total supply.");

1053    swapTokensAtAmount = newAmount;

1054    return true;
</pre>
```



LINE 1052

low SEVERITY

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

Source File

- Kibalnu.sol

```
1051 require(newAmount >= totalSupply() * 1 / 100000, "Swap amount cannot be lower than
0.001% total supply.");
1052 require(newAmount <= totalSupply() * 5 / 1000, "Swap amount cannot be higher than
0.5% total supply.");
1053 swapTokensAtAmount = newAmount;
1054 return true;
1055 }
1056</pre>
```



LINE 1052

low SEVERITY

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

Source File

- Kibalnu.sol

```
1051 require(newAmount >= totalSupply() * 1 / 100000, "Swap amount cannot be lower than
0.001% total supply.");
1052 require(newAmount <= totalSupply() * 5 / 1000, "Swap amount cannot be higher than
0.5% total supply.");
1053 swapTokensAtAmount = newAmount;
1054 return true;
1055 }
1056</pre>
```



LINE 1058

low SEVERITY

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

Source File

- Kibalnu.sol

```
1057 function updateMaxTxnAmount(uint256 newNum) external onlyOwner {
1058  require(newNum >= (totalSupply() * 1 / 1000)/1e18, "Cannot set
maxTransactionAmount lower than 0.1%");
1059  maxTransactionAmount = newNum * (10**18);
1060  }
1061
1062
```



LINE 1058

low SEVERITY

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

Source File

- Kibalnu.sol

```
1057 function updateMaxTxnAmount(uint256 newNum) external onlyOwner {
1058  require(newNum >= (totalSupply() * 1 / 1000)/1e18, "Cannot set
maxTransactionAmount lower than 0.1%");
1059  maxTransactionAmount = newNum * (10**18);
1060  }
1061
1062
```



LINE 1058

low SEVERITY

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

Source File

- Kibalnu.sol

```
1057 function updateMaxTxnAmount(uint256 newNum) external onlyOwner {
1058 require(newNum >= (totalSupply() * 1 / 1000)/1e18, "Cannot set
maxTransactionAmount lower than 0.1%");
1059 maxTransactionAmount = newNum * (10**18);
1060 }
1061
1062
```



LINE 1059

low SEVERITY

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

Source File

- Kibalnu.sol

```
1058  require(newNum >= (totalSupply() * 1 / 1000)/le18, "Cannot set
maxTransactionAmount lower than 0.1%");
1059  maxTransactionAmount = newNum * (10**18);
1060  }
1061
1062  function updateMaxWalletAmount(uint256 newNum) external onlyOwner {
1063
```



LINE 1059

low SEVERITY

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

Source File

- Kibalnu.sol

```
1058  require(newNum >= (totalSupply() * 1 / 1000)/1e18, "Cannot set
maxTransactionAmount lower than 0.1%");
1059  maxTransactionAmount = newNum * (10**18);
1060  }
1061
1062  function updateMaxWalletAmount(uint256 newNum) external onlyOwner {
1063
```



LINE 1063

low SEVERITY

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

Source File

- Kibalnu.sol

```
function updateMaxWalletAmount(uint256 newNum) external onlyOwner {
  require(newNum >= (totalSupply() * 5 / 1000)/le18, "Cannot set maxWallet lower
  than 0.5%");
  maxWallet = newNum * (10**18);
  }
  1065  }
  1066
  1067
```



LINE 1063

low SEVERITY

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

Source File

- Kibalnu.sol

```
function updateMaxWalletAmount(uint256 newNum) external onlyOwner {
  require(newNum >= (totalSupply() * 5 / 1000)/le18, "Cannot set maxWallet lower
  than 0.5%");
  maxWallet = newNum * (10**18);
  }
  1065  }
  1066
  1067
```



LINE 1063

low SEVERITY

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

Source File

- Kibalnu.sol

```
1062 function updateMaxWalletAmount(uint256 newNum) external onlyOwner {
1063    require(newNum >= (totalSupply() * 5 / 1000)/1e18, "Cannot set maxWallet lower
than 0.5%");
1064    maxWallet = newNum * (10**18);
1065    }
1066
1067
```



LINE 1064

low SEVERITY

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

Source File

- Kibalnu.sol

```
1063  require(newNum >= (totalSupply() * 5 / 1000)/1e18, "Cannot set maxWallet lower
than 0.5%");
1064  maxWallet = newNum * (10**18);
1065  }
1066
1067  function excludeFromMaxTransaction(address updAds, bool isEx) public onlyOwner {
1068
```



LINE 1064

low SEVERITY

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

Source File

- Kibalnu.sol

```
1063  require(newNum >= (totalSupply() * 5 / 1000)/1e18, "Cannot set maxWallet lower
than 0.5%");
1064  maxWallet = newNum * (10**18);
1065  }
1066
1067  function excludeFromMaxTransaction(address updAds, bool isEx) public onlyOwner {
1068
```



LINE 1080

low SEVERITY

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

Source File

- Kibalnu.sol

```
buyDevFee = _devFee;
buyTotalFees = buyMarketingFee + buyLiquidityFee + buyDevFee;
require(buyTotalFees <= 20, "Must keep fees at 20% or less");

1082 }
1083
1084</pre>
```



LINE 1080

low SEVERITY

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

Source File

- Kibalnu.sol

```
buyDevFee = _devFee;
buyTotalFees = buyMarketingFee + buyLiquidityFee + buyDevFee;
require(buyTotalFees <= 20, "Must keep fees at 20% or less");

1082 }
1083
1084</pre>
```



LINE 1090

low SEVERITY

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

Source File

- Kibalnu.sol

```
1089 earlySellMarketingFee = _earlySellMarketingFee;
1090 sellTotalFees = sellMarketingFee + sellLiquidityFee + sellDevFee;
1091 require(sellTotalFees <= 25, "Must keep fees at 25% or less");
1092 }
1093
1094</pre>
```



LINE 1090

low SEVERITY

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

Source File

- Kibalnu.sol

```
1089 earlySellMarketingFee = _earlySellMarketingFee;
1090 sellTotalFees = sellMarketingFee + sellLiquidityFee + sellDevFee;
1091 require(sellTotalFees <= 25, "Must keep fees at 25% or less");
1092 }
1093
1094</pre>
```



LINE 1168

low SEVERITY

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

Source File

- Kibalnu.sol

```
1167 require(amount <= maxTransactionAmount, "Buy transfer amount exceeds the
maxTransactionAmount.");
1168 require(amount + balanceOf(to) <= maxWallet, "Max wallet exceeded");
1169 }
1170
1171 //when sell
1172</pre>
```



LINE 1176

low SEVERITY

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

Source File

- Kibalnu.sol

```
1175 else if(!_isExcludedMaxTransactionAmount[to]){
1176    require(amount + balanceOf(to) <= maxWallet, "Max wallet exceeded");
1177    }
1178    }
1179   }
1180</pre>
```



LINE 1182

low SEVERITY

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

Source File

- Kibalnu.sol

```
1181  // anti bot logic
1182  if (block.number <= (launchedAt + 1) &&
1183   to != uniswapV2Pair &&
1184   to != address(0x10ED43C718714eb63d5aA57B78B54704E256024E)
1185  ) {
1186</pre>
```



LINE 1194

low SEVERITY

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

Source File

- Kibalnu.sol

```
if (_holderFirstBuyTimestamp[from] != 0 &&
1194    (_holderFirstBuyTimestamp[from] + (24 hours) >= block.timestamp)) {
1195    sellLiquidityFee = earlySellLiquidityFee;
1196    sellMarketingFee = earlySellMarketingFee;
1197    sellTotalFees = sellMarketingFee + sellLiquidityFee + sellDevFee;
1198
```



LINE 1197

low SEVERITY

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

Source File

- Kibalnu.sol

```
1196    sellMarketingFee = earlySellMarketingFee;
1197    sellTotalFees = sellMarketingFee + sellLiquidityFee + sellDevFee;
1198    }
1199    } else {
1200    if (_holderFirstBuyTimestamp[to] == 0) {
1201
```



LINE 1197

low SEVERITY

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

Source File

- Kibalnu.sol

```
1196    sellMarketingFee = earlySellMarketingFee;
1197    sellTotalFees = sellMarketingFee + sellLiquidityFee + sellDevFee;
1198    }
1199    } else {
1200    if (_holderFirstBuyTimestamp[to] == 0) {
1201
```



LINE 1224

low SEVERITY

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

Source File

- Kibalnu.sol

```
1223
1224 if(!swapping && automatedMarketMakerPairs[to] && lpBurnEnabled && block.timestamp
>= lastLpBurnTime + lpBurnFrequency && !_isExcludedFromFees[from]){
1225 autoBurnLiquidityPairTokens();
1226 }
1227
1228
```



LINE 1242

low SEVERITY

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

Source File

- Kibalnu.sol

```
fees = amount.mul(sellTotalFees).div(100);
tokensForLiquidity += fees * sellLiquidityFee / sellTotalFees;
tokensForDev += fees * sellDevFee / sellTotalFees;
tokensForMarketing += fees * sellMarketingFee / sellTotalFees;
}
1245 }
1246
```



LINE 1242

low SEVERITY

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

Source File

- Kibalnu.sol

```
fees = amount.mul(sellTotalFees).div(100);
tokensForLiquidity += fees * sellLiquidityFee / sellTotalFees;
tokensForDev += fees * sellDevFee / sellTotalFees;
tokensForMarketing += fees * sellMarketingFee / sellTotalFees;
}
1244 tokensForMarketing += fees * sellMarketingFee / sellTotalFees;
1245 }
1246
```



LINE 1242

low SEVERITY

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

Source File

- Kibalnu.sol

```
fees = amount.mul(sellTotalFees).div(100);
tokensForLiquidity += fees * sellLiquidityFee / sellTotalFees;
tokensForDev += fees * sellDevFee / sellTotalFees;
tokensForMarketing += fees * sellMarketingFee / sellTotalFees;
}
1245 }
1246
```



LINE 1243

low SEVERITY

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

Source File

- Kibalnu.sol

```
tokensForLiquidity += fees * sellLiquidityFee / sellTotalFees;
tokensForDev += fees * sellDevFee / sellTotalFees;

tokensForMarketing += fees * sellMarketingFee / sellTotalFees;

l245 }

1246 // on buy
1247
```



LINE 1243

low SEVERITY

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

Source File

- Kibalnu.sol

```
tokensForLiquidity += fees * sellLiquidityFee / sellTotalFees;
tokensForDev += fees * sellDevFee / sellTotalFees;

tokensForMarketing += fees * sellMarketingFee / sellTotalFees;

l245 }

1246 // on buy
1247
```



LINE 1243

low SEVERITY

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

Source File

- Kibalnu.sol

```
tokensForLiquidity += fees * sellLiquidityFee / sellTotalFees;
tokensForDev += fees * sellDevFee / sellTotalFees;

tokensForMarketing += fees * sellMarketingFee / sellTotalFees;

la45 }

// on buy

1247
```



LINE 1244

low SEVERITY

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

Source File

- Kibalnu.sol

```
tokensForDev += fees * sellDevFee / sellTotalFees;
tokensForMarketing += fees * sellMarketingFee / sellTotalFees;

1245  }
1246  // on buy
1247  else if(automatedMarketMakerPairs[from] && buyTotalFees > 0) {
1248
```



LINE 1244

low SEVERITY

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

Source File

- Kibalnu.sol

```
tokensForDev += fees * sellDevFee / sellTotalFees;
tokensForMarketing += fees * sellMarketingFee / sellTotalFees;

1245  }
1246  // on buy
1247  else if(automatedMarketMakerPairs[from] && buyTotalFees > 0) {
1248
```



LINE 1244

low SEVERITY

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

Source File

- Kibalnu.sol

```
tokensForDev += fees * sellDevFee / sellTotalFees;
tokensForMarketing += fees * sellMarketingFee / sellTotalFees;

1245  }
1246  // on buy
1247  else if(automatedMarketMakerPairs[from] && buyTotalFees > 0) {
1248
```



LINE 1249

low SEVERITY

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

Source File

- Kibalnu.sol

```
fees = amount.mul(buyTotalFees).div(100);
tokensForLiquidity += fees * buyLiquidityFee / buyTotalFees;
tokensForDev += fees * buyDevFee / buyTotalFees;
tokensForMarketing += fees * buyMarketingFee / buyTotalFees;
}
1251 tokensForMarketing += fees * buyMarketingFee / buyTotalFees;
1252 }
1253
```



LINE 1249

low SEVERITY

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

Source File

- Kibalnu.sol

```
fees = amount.mul(buyTotalFees).div(100);
tokensForLiquidity += fees * buyLiquidityFee / buyTotalFees;
tokensForDev += fees * buyDevFee / buyTotalFees;
tokensForMarketing += fees * buyMarketingFee / buyTotalFees;
}
1251 tokensForMarketing += fees * buyMarketingFee / buyTotalFees;
1252 }
1253
```



LINE 1249

low SEVERITY

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

Source File

- Kibalnu.sol

```
fees = amount.mul(buyTotalFees).div(100);
tokensForLiquidity += fees * buyLiquidityFee / buyTotalFees;
tokensForDev += fees * buyDevFee / buyTotalFees;
tokensForMarketing += fees * buyMarketingFee / buyTotalFees;
}
1251 tokensForMarketing += fees * buyMarketingFee / buyTotalFees;
1252 }
1253
```



LINE 1250

low SEVERITY

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

Source File

- Kibalnu.sol

```
tokensForLiquidity += fees * buyLiquidityFee / buyTotalFees;
tokensForDev += fees * buyDevFee / buyTotalFees;

tokensForMarketing += fees * buyMarketingFee / buyTotalFees;

1252 }

1253
1254
```



SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 1250

low SEVERITY

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

Source File

- Kibalnu.sol

```
tokensForLiquidity += fees * buyLiquidityFee / buyTotalFees;
tokensForDev += fees * buyDevFee / buyTotalFees;

tokensForMarketing += fees * buyMarketingFee / buyTotalFees;

1252 }

1253
1254
```



SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 1250

low SEVERITY

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

Source File

- Kibalnu.sol

```
tokensForLiquidity += fees * buyLiquidityFee / buyTotalFees;
tokensForDev += fees * buyDevFee / buyTotalFees;

tokensForMarketing += fees * buyMarketingFee / buyTotalFees;

1252 }

1253
1254
```



SWC-101 | ARITHMETIC OPERATION "+=" DISCOVERED

LINE 1251

low SEVERITY

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

Source File

- Kibalnu.sol

```
1250 tokensForDev += fees * buyDevFee / buyTotalFees;
1251 tokensForMarketing += fees * buyMarketingFee / buyTotalFees;
1252 }
1253
1254 if(fees > 0){
1255
```



SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 1251

low SEVERITY

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

Source File

- Kibalnu.sol

```
1250 tokensForDev += fees * buyDevFee / buyTotalFees;
1251 tokensForMarketing += fees * buyMarketingFee / buyTotalFees;
1252 }
1253
1254 if(fees > 0){
1255
```



SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 1251

low SEVERITY

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

Source File

- Kibalnu.sol

```
1250 tokensForDev += fees * buyDevFee / buyTotalFees;
1251 tokensForMarketing += fees * buyMarketingFee / buyTotalFees;
1252 }
1253
1254 if(fees > 0){
1255
```



SWC-101 | ARITHMETIC OPERATION "-=" DISCOVERED

LINE 1258

low SEVERITY

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

Source File

- Kibalnu.sol

```
1257
1258    amount -= fees;
1259    }
1260
1261    super._transfer(from, to, amount);
1262
```



SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 1303

low SEVERITY

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

Source File

- Kibalnu.sol

```
1302  uint256 contractBalance = balanceOf(address(this));
1303  uint256 totalTokensToSwap = tokensForLiquidity + tokensForMarketing +
tokensForDev;
1304  bool success;
1305
1306  if(contractBalance == 0 || totalTokensToSwap == 0) {return;}
1307
```



SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 1303

low SEVERITY

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

Source File

- Kibalnu.sol

```
1302  uint256 contractBalance = balanceOf(address(this));
1303  uint256 totalTokensToSwap = tokensForLiquidity + tokensForMarketing +
tokensForDev;
1304  bool success;
1305
1306  if(contractBalance == 0 || totalTokensToSwap == 0) {return;}
1307
```



SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 1308

low SEVERITY

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

Source File

- Kibalnu.sol

```
1307
1308 if(contractBalance > swapTokensAtAmount * 20){
1309   contractBalance = swapTokensAtAmount * 20;
1310 }
1311
1312
```



SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 1309

low SEVERITY

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

Source File

- Kibalnu.sol

```
1308 if(contractBalance > swapTokensAtAmount * 20){
1309   contractBalance = swapTokensAtAmount * 20;
1310 }
1311
1312  // Halve the amount of liquidity tokens
1313
```



SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 1313

low SEVERITY

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

Source File

- Kibalnu.sol

```
1312  // Halve the amount of liquidity tokens
1313  uint256 liquidityTokens = contractBalance * tokensForLiquidity / totalTokensToSwap
/ 2;
1314  uint256 amountToSwapForETH = contractBalance.sub(liquidityTokens);
1315
1316  uint256 initialETHBalance = address(this).balance;
1317
```



SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 1313

low SEVERITY

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

Source File

- Kibalnu.sol

```
1312  // Halve the amount of liquidity tokens
1313  uint256 liquidityTokens = contractBalance * tokensForLiquidity / totalTokensToSwap
/ 2;
1314  uint256 amountToSwapForETH = contractBalance.sub(liquidityTokens);
1315
1316  uint256 initialETHBalance = address(this).balance;
1317
```



SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 1313

low SEVERITY

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

Source File

- Kibalnu.sol

```
1312  // Halve the amount of liquidity tokens
1313  uint256 liquidityTokens = contractBalance * tokensForLiquidity / totalTokensToSwap
/ 2;
1314  uint256 amountToSwapForETH = contractBalance.sub(liquidityTokens);
1315
1316  uint256 initialETHBalance = address(this).balance;
1317
```



SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 1326

low SEVERITY

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

Source File

- Kibalnu.sol

```
1325
1326 uint256 ethForLiquidity = ethBalance - ethForMarketing - ethForDev;
1327
1328
1329 tokensForLiquidity = 0;
1330
```



SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 1326

low SEVERITY

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

Source File

- Kibalnu.sol

```
1325
1326 uint256 ethForLiquidity = ethBalance - ethForMarketing - ethForDev;
1327
1328
1329 tokensForLiquidity = 0;
1330
```



SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 1375

low SEVERITY

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

Source File

- Kibalnu.sol

```
1374 function manualBurnLiquidityPairTokens(uint256 percent) external onlyOwner returns
(bool){
1375    require(block.timestamp > lastManualLpBurnTime + manualBurnFrequency , "Must wait
for cooldown to finish");
1376    require(percent <= 1000, "May not nuke more than 10% of tokens in LP");
1377    lastManualLpBurnTime = block.timestamp;
1378
1379</pre>
```



SWC-108 | STATE VARIABLE VISIBILITY IS NOT SET.

LINE 916

low SEVERITY

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

Source File

- Kibalnu.sol

```
915 // block number of opened trading

916 uint256 launchedAt;

917

918 /*************/

919

920
```



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

LINE 1160

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

- Kibalnu.sol

```
1159 if (to != owner() && to != address(uniswapV2Router) && to !=
address(uniswapV2Pair)){
1160   require(_holderLastTransferTimestamp[tx.origin] < block.number, "_transfer::
Transfer Delay enabled. Only one purchase per block allowed.");
1161   _holderLastTransferTimestamp[tx.origin] = block.number;
1162  }
1163 }
1164</pre>
```



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

LINE 1161

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

- Kibalnu.sol

```
1160 require(_holderLastTransferTimestamp[tx.origin] < block.number, "_transfer::
Transfer Delay enabled. Only one purchase per block allowed.");
1161 _holderLastTransferTimestamp[tx.origin] = block.number;
1162 }
1163 }
1164
1165</pre>
```



SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 1268

low SEVERITY

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

Source File

- Kibalnu.sol

```
1267 address[] memory path = new address[](2);
1268 path[0] = address(this);
1269 path[1] = uniswapV2Router.WETH();
1270
1271 _approve(address(this), address(uniswapV2Router), tokenAmount);
1272
```



SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 1269

low SEVERITY

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

Source File

- Kibalnu.sol

```
1268 path[0] = address(this);
1269 path[1] = uniswapV2Router.WETH();
1270
1271 _approve(address(this), address(uniswapV2Router), tokenAmount);
1272
1273
```



LINE 1021

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

- Kibalnu.sol

```
1020 lastLpBurnTime = block.timestamp;
1021 launchedAt = block.number;
1022 }
1023
1024 // remove limits after token is stable
1025
```



LINE 1160

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

- Kibalnu.sol

```
1159 if (to != owner() && to != address(uniswapV2Router) && to !=
address(uniswapV2Pair)){
1160   require(_holderLastTransferTimestamp[tx.origin] < block.number, "_transfer::
Transfer Delay enabled. Only one purchase per block allowed.");
1161   _holderLastTransferTimestamp[tx.origin] = block.number;
1162  }
1163 }
1164</pre>
```



LINE 1161

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

- Kibalnu.sol

```
1160 require(_holderLastTransferTimestamp[tx.origin] < block.number, "_transfer::
    Transfer Delay enabled. Only one purchase per block allowed.");
1161 _holderLastTransferTimestamp[tx.origin] = block.number;
1162 }
1163 }
1164
1165</pre>
```



LINE 1182

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

- Kibalnu.sol

```
1181 // anti bot logic

1182 if (block.number <= (launchedAt + 1) &&

1183 to != uniswapV2Pair &&

1184 to != address(0x10ED43C718714eb63d5aA57B78B54704E256024E)

1185 ) {

1186
```



DISCLAIMER

This report is subject to the terms and conditions (including without limitation, description of services, confidentiality, disclaimer and limitation of liability) set forth in the Services Agreement, or the scope of services, and terms and conditions provided to you ("Customer" or the "Company") in connection with the Agreement. This report provided in connection with the Services set forth in the Agreement shall be used by the Company only to the extent permitted under the terms and conditions set forth in the Agreement. This report may not be transmitted, disclosed, referred to, or relied upon by any person for any purposes, nor may copies be delivered to any other person other than the Company, without Sysfixed's prior written consent in each instance.

This report is not, nor should be considered, an "endorsement" or "disapproval" of any particular project or team. This report is not, nor should be considered, an indication of the economics or value of any "product" or "asset" created by any team or project that contracts Sysfixed to perform a security assessment. This report does not provide any warranty or guarantee regarding the absolute bug-free nature of the technology analyzed, nor do they provide any indication of the technologies proprietors, business, business model, or legal compliance.

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.

This report should not be used in any way to make decisions around investment or involvement with any particular project. This report in no way provides investment advice, nor should be leveraged as investment advice of any sort. This report represents an extensive assessing process intending to help our customers increase the quality of their code while reducing the high level of risk presented by cryptographic tokens and blockchain technology.

This report is provided for information purposes only and on a non-reliance basis and does not constitute investment advice. No one shall have any right to rely on the report or its contents, and Sysfixed and its affiliates (including holding companies, shareholders, subsidiaries, employees, directors, officers, and other representatives) (Sysfixed) owe no duty of care.



ABOUT US

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