



Lunar Rabbit

# Smart Contract Audit Report

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# AUDITED DETAILS

## Audited Project

Project name	Token ticker	Blockchain
Lunar Rabbit	LunarRabbit	Binance Smart Chain

## Addresses

Contract address	0xCF136913c4583aD8D12190DeA731e6FA75F45E95
Contract deployer address	0x9B93a0400e163b6d380D6CC1Ef98D13175B3B357

## Project Website

<a href="https://www.lunarrabbit.cz/">https://www.lunarrabbit.cz/</a>
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## Codebase

<a href="https://bscscan.com/address/0xCF136913c4583aD8D12190DeA731e6FA75F45E95#contracts">https://bscscan.com/address/0xCF136913c4583aD8D12190DeA731e6FA75F45E95#contracts</a>
---

# SUMMARY

Dev team from project x70 - the lowest project is x6 - no project yet rug and never, all still run, Nft + stake + game: Ready to launch, Cmc & Cgk list in 12 hrs - SURE there will definitely be an x1000 project

## Contract Summary

### Documentation Quality

Lunar Rabbit provides a very good documentation with standard of solidity base code.

- The technical description is provided clearly and structured and also don't have any high risk issue.

### Code Quality

The Overall quality of the basecode is standard.

- Standard solidity basecode and rules are already followed with Lunar Rabbit 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 519, 552, 568, 570, 604, 650, 711, 715, 730, 738, 750, 990, 991, 997, 1000, 1004, 1088, 1097, 1098, 1099, 1103, 1105, 1106, 1127, 1138, 1150, 1222, 1239, 1260, 1261, 1262, 1263, 1264, 1269, 1270, 1275, 1278, 1280, 1281, 1285, 1287, 1288, 1290, 1291, 1293, 1294, 1300, 1344, 1345, 1346, 1347, 1356, 1363, 1366, 1383 and 1383.
- SWC-103 | Pragma statements can be allowed to float when a contract is intended on lines 47.
- SWC-110 | It is recommended to use use of revert(), assert(), and require() in Solidity, and the new REVERT opcode in the EVM on lines 1088, 1092, 1307 and 1308.

## CONCLUSION

We have audited the Lunar Rabbit Coin which has released on January 2023 to discover issues and identify potential security vulnerabilities in Lunar Rabbit Project. This process is used to find bugs, technical issues, and security loopholes that find some common issues in the code.

The security audit report produced satisfactory results with a low risk issue on the contract project.

The most common issue found in writing code on contracts that do not pose a big risk, writing on contracts is close to the standard of writing contracts in general. Some of the low issues that were found stated variable visibility are not set, and a floating pragma is set. We recommended specifying 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.

# AUDIT RESULT

Article	Category	Description	Result
Default Visibility	SWC-100 SWC-108	Functions and state variables visibility should be set explicitly. Visibility levels should be specified consciously.	PASS
Integer Overflow and Underflow	SWC-101	If unchecked math is used, all math operations should be safe from overflows and underflows.	ISSUE FOUND
Outdated Compiler Version	SWC-102	It is recommended to use a recent version of the Solidity compiler.	PASS
Floating Pragma	SWC-103	Contracts should be deployed with the same compiler version and flags that they have been tested thoroughly.	ISSUE FOUND
Unchecked Call Return Value	SWC-104	The return value of a message call should be checked.	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
Assert Violation	SWC-110	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 Caller	SWC-112	Delegatecalls should only be allowed to trusted addresses.	PASS
DoS (Denial of Service)	SWC-113 SWC-128	Execution of the code should never be blocked by a specific contract state unless required.	PASS
Race Conditions	SWC-114	Race Conditions and Transactions Order Dependency should not be possible.	PASS

Authorization through tx.origin	SWC-115	tx.origin should not be used for authorization.	PASS
Block values as a proxy for time	SWC-116	Block numbers should not be used for time calculations.	PASS
Signature Unique ID	SWC-117 SWC-121 SWC-122	Signed messages should always have a unique id. A transaction hash should not be used as a unique id.	PASS
Shadowing State Variable	SWC-119	State variables should not be shadowed.	PASS
Weak Sources of Randomness	SWC-120	Random values should never be generated from Chain Attributes or be predictable.	PASS
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

# SMART CONTRACT ANALYSIS

Started	Tuesday Jan 10 2023 01:12:29 GMT+0000 (Coordinated Universal Time)
Finished	Wednesday Jan 11 2023 11:42:47 GMT+0000 (Coordinated Universal Time)
Mode	Standard
Main Source File	LunarRabbit.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-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged

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

LINE 519

### low SEVERITY

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

### Source File

- LunarRabbit.sol

### Locations

```
518  */
519  function sub(uint256 a, uint256 b, string memory errorMessage) internal pure
returns (uint256) {
520  require(b <= a, errorMessage);
521  uint256 c = a - b;
522
523
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 552

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
551 * @dev Returns the integer division of two unsigned integers. Reverts on
552 * division by zero. The result is rounded towards zero.
553 *
554 * Counterpart to Solidity's `/` operator. Note: this function uses a
555 * `revert` opcode (which leaves remaining gas untouched) while Solidity
556
```

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

LINE 568

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
567 * @dev Returns the integer division of two unsigned integers. Reverts with custom
message on
568 * division by zero. The result is rounded towards zero.
569 *
570 * Counterpart to Solidity's `/` operator. Note: this function uses a
571 * `revert` opcode (which leaves remaining gas untouched) while Solidity
572
```

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

LINE 570

### low SEVERITY

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

### Source File

- LunarRabbit.sol

### Locations

```
569 *  
570 * Counterpart to Solidity's `/` operator. Note: this function uses a  
571 * `revert` opcode (which leaves remaining gas untouched) while Solidity  
572 * uses an invalid opcode to revert (consuming all remaining gas).  
573 *  
574
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 604

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
603  * @dev Returns the remainder of dividing two unsigned integers. (unsigned integer
modulo),
604  * Reverts with custom message when dividing by zero.
605  *
606  * Counterpart to Solidity's `%` operator. This function uses a `revert`
607  * opcode (which leaves remaining gas untouched) while Solidity uses an
608
```



# SWC-101 | ARITHMETIC OPERATION "%" DISCOVERED

LINE 650

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
649  /**
650  * @dev Leaves the contract without owner. It will not be possible to call
651  * `onlyOwner` functions anymore. Can only be called by the current owner.
652  *
653  * NOTE: Renouncing ownership will leave the contract without an owner,
654
```

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

LINE 711

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
710  /**
711  * @dev Adds two int256 variables and fails on overflow.
712  */
713  function add(int256 a, int256 b) internal pure returns (int256) {
714      int256 c = a + b;
715  }
```

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

LINE 715

### low SEVERITY

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

### Source File

- LunarRabbit.sol

### Locations

```
714   int256 c = a + b;  
715   require((b >= 0 && c >= a) || (b < 0 && c < a));  
716   return c;  
717 }  
718  
719
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 730

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
729     require(a >= 0);  
730     return uint256(a);  
731 }  
732 }  
733  
734
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 738

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
737     require(b >= 0);  
738     return b;  
739 }  
740 }  
741  
742
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 750

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
749     address tokenB,  
750     uint amountADesired,  
751     uint amountBDesired,  
752     uint amountAMin,  
753     uint amountBMin,  
754
```

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

LINE 990

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
989
990  marketingWallet = address(0x6bd7f652BB574c6f3336b45448c1b4b2d09CF777); // set as
marketing wallet
991  stakingWallet = address(_owner); // set as dev wallet
992  teamWallet = address(0x2ea8EE42dA22f5208905B55F15C66EdA3BFDcfA6); // set as
teamWallet
993
994
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 991

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
990    marketingWallet = address(0x6bd7f652BB574c6f3336b45448c1b4b2d09CF777); // set as
marketing wallet
991    stakingWallet = address(_owner); // set as dev wallet
992    teamWallet = address(0x2ea8EE42dA22f5208905B55F15C66EdA3BFDcfA6); // set as
teamWallet
993
994
995
```



# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 997

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
996
997 //Adding Variables for all the routers for easier deployment for our customers.
998 if (block.chainid == 56) {
999     currentRouter = 0x10ED43C718714eb63d5aA57B78B54704E256024E; // PCS Router
1000 } else if (block.chainid == 97) {
1001
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 1000

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
999   currentRouter = 0x10ED43C718714eb63d5aA57B78B54704E256024E; // PCS Router
1000   } else if (block.chainid == 97) {
1001     currentRouter = 0xD99D1c33F9fC3444f8101754aBC46c52416550D1; // PCS Testnet
1002   } else if (block.chainid == 43114) {
1003     currentRouter = 0x60aE616a2155Ee3d9A68541Ba4544862310933d4; //Avax Mainnet
1004
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 1004

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1003     currentRouter = 0x60aE616a2155Ee3d9A68541Ba4544862310933d4; //Avax Mainnet
1004     } else if (block.chainid == 137) {
1005     currentRouter = 0xa5E0829CaCEd8fFDD4De3c43696c57F7D7A678ff; //Polygon Ropsten
1006     } else if (block.chainid == 250) {
1007     currentRouter = 0xF491e7B69E4244ad4002BC14e878a34207E38c29; //SpookySwap FTM
1008
```

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

LINE 1088

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1087
1088     function decimals() public view override returns (uint8) {
1089         return _decimals;
1090     }
1091
1092
```

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

LINE 1097

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1096
1097 // only use this to disable swapback and send tax in form of tokens
1098 function updateRescueSwap(bool enabled) external onlyOwner(){
1099     rescueSwap = enabled;
1100 }
1101
```

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

LINE 1098

### low SEVERITY

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

### Source File

- LunarRabbit.sol

### Locations

```
1097 // only use this to disable swapback and send tax in form of tokens
1098 function updateRescueSwap(bool enabled) external onlyOwner(){
1099     rescueSwap = enabled;
1100 }
1101
1102
```

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

LINE 1099

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1098     function updateRescueSwap(bool enabled) external onlyOwner(){
1099         rescueSwap = enabled;
1100     }
1101
1102     function setStakingEnabled(bool enabled) external onlyOwner(){
1103
```

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

LINE 1103

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1102     function setStakingEnabled(bool enabled) external onlyOwner(){
1103         stakingEnabled = enabled;
1104     }
1105
1106     function updateBuyFees(uint256 _marketingFee, uint256 _liquidityFee, uint256
_devFee, uint256 _teamFee) external onlyOwner {
1107
```



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

LINE 1105

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1104     }  
1105  
1106     function updateBuyFees(uint256 _marketingFee, uint256 _liquidityFee, uint256  
_devFee, uint256 _teamFee) external onlyOwner {  
1107         buyMarketingFee = _marketingFee;  
1108         buyLiquidityFee = _liquidityFee;  
1109     }
```

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

LINE 1106

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1105
1106     function updateBuyFees(uint256 _marketingFee, uint256 _liquidityFee, uint256
_devFee, uint256 _teamFee) external onlyOwner {
1107     buyMarketingFee = _marketingFee;
1108     buyLiquidityFee = _liquidityFee;
1109     buyStakingFee = _devFee;
1110
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 1127

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1126     transferLiquidityFee = _liquidityFee;
1127     transferStakingFee = _devFee;
1128     transferTeamFee = _teamFee;
1129     transferTotalFees = transferMarketingFee + transferLiquidityFee +
transferStakingFee + transferTeamFee;
1130     require(transferTotalFees <= 11, "Must keep fees at 11% or less");
1131
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 1138

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1137
1138     function setAutomatedMarketMakerPair(address pair, bool value) external onlyOwner
1139     {
1140         require(pair != uniswapV2Pair, "The pair cannot be removed from
automatedMarketMakerPairs");
1141         _setAutomatedMarketMakerPair(pair, value);
1142     }
```

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

LINE 1150

### low SEVERITY

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

### Source File

- LunarRabbit.sol

### Locations

```
1149
1150     function updateMarketingWallet(address newMarketingWallet) external onlyOwner {
1151         emit marketingWalletUpdated(newMarketingWallet, marketingWallet);
1152         marketingWallet = newMarketingWallet;
1153     }
1154
```

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

LINE 1222

### low SEVERITY

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

### Source File

- LunarRabbit.sol

### Locations

```
1221     !_isExcludedFromFees[from] &&
1222     !_isExcludedFromFees[to]
1223   ) {
1224     swapping = true;
1225
1226
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 1239

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1238     uint256 fees = 0;
1239     // only take fees on buys/sells, do not take on wallet transfers
1240     if(takeFee){
1241
1242         if (automatedMarketMakerPairs[to]){
1243
```

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

LINE 1260

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1259     }  
1260     } else if (transferTotalFees > 0){  
1261         fees = amount.mul(transferTotalFees).div(100);  
1262         tokensForLiquidity += fees * transferLiquidityFee / transferTotalFees;  
1263         tokensForStaking += fees * transferStakingFee / transferTotalFees;  
1264     }
```



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

LINE 1261

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1260 } else if (transferTotalFees > 0){  
1261 fees = amount.mul(transferTotalFees).div(100);  
1262 tokensForLiquidity += fees * transferLiquidityFee / transferTotalFees;  
1263 tokensForStaking += fees * transferStakingFee / transferTotalFees;  
1264 tokensForMarketing += fees * transferMarketingFee / transferTotalFees;  
1265
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 1262

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1261 fees = amount.mul(transferTotalFees).div(100);
1262 tokensForLiquidity += fees * transferLiquidityFee / transferTotalFees;
1263 tokensForStaking += fees * transferStakingFee / transferTotalFees;
1264 tokensForMarketing += fees * transferMarketingFee / transferTotalFees;
1265 tokensForTeam += fees * transferTeamFee / transferTotalFees;
1266
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 1263

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1262 tokensForLiquidity += fees * transferLiquidityFee / transferTotalFees;
1263 tokensForStaking += fees * transferStakingFee / transferTotalFees;
1264 tokensForMarketing += fees * transferMarketingFee / transferTotalFees;
1265 tokensForTeam += fees * transferTeamFee / transferTotalFees;
1266 }
1267
```

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

LINE 1264

### low SEVERITY

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

### Source File

- LunarRabbit.sol

### Locations

```
1263     tokensForStaking += fees * transferStakingFee / transferTotalFees;  
1264     tokensForMarketing += fees * transferMarketingFee / transferTotalFees;  
1265     tokensForTeam += fees * transferTeamFee / transferTotalFees;  
1266 }  
1267  
1268
```

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

LINE 1269

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1268     if(fees > 0){  
1269         super._transfer(from, address(this), fees);  
1270     }  
1271  
1272     amount -= fees;  
1273
```

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

LINE 1270

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1269     super._transfer(from, address(this), fees);
1270   }
1271
1272     amount -= fees;
1273   }
1274
```

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

LINE 1275

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1274
1275     super._transfer(from, to, amount);
1276     }
1277
1278     function swapTokensForEth(uint256 tokenAmount) private {
1279
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 1278

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1277
1278     function swapTokensForEth(uint256 tokenAmount) private {
1279
1280         // generate the uniswap pair path of token -> weth
1281         address[] memory path = new address[](2);
1282
```



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

LINE 1280

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1279
1280 // generate the uniswap pair path of token -> weth
1281 address[] memory path = new address[](2);
1282 path[0] = address(this);
1283 path[1] = uniswapV2Router.WETH();
1284
```

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

LINE 1281

### low SEVERITY

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

### Source File

- LunarRabbit.sol

### Locations

```
1280 // generate the uniswap pair path of token -> weth
1281 address[] memory path = new address[](2);
1282 path[0] = address(this);
1283 path[1] = uniswapV2Router.WETH();
1284
1285
```

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

LINE 1285

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1284
1285     _approve(address(this), address(uniswapV2Router), tokenAmount);
1286
1287     // make the swap
1288     uniswapV2Router.swapExactTokensForETHSupportingFeeOnTransferTokens(
1289
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 1287

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1286
1287 // make the swap
1288 uniswapV2Router.swapExactTokensForETHSupportingFeeOnTransferTokens(
1289     tokenAmount,
1290     0, // accept any amount of ETH
1291
```

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

LINE 1288

### low SEVERITY

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

### Source File

- LunarRabbit.sol

### Locations

```
1287 // make the swap
1288 uniswapV2Router.swapExactTokensForETHSupportingFeeOnTransferTokens(
1289     tokenAmount,
1290     0, // accept any amount of ETH
1291     path,
1292
```

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

LINE 1290

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1289     tokenAmount,  
1290     0, // accept any amount of ETH  
1291     path,  
1292     address(this),  
1293     block.timestamp  
1294
```

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

LINE 1291

### low SEVERITY

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

### Source File

- LunarRabbit.sol

### Locations

```
1290 0, // accept any amount of ETH
1291 path,
1292 address(this),
1293 block.timestamp
1294 );
1295
```

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

LINE 1293

### low SEVERITY

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

### Source File

- LunarRabbit.sol

### Locations

```
1292     address(this),  
1293     block.timestamp  
1294 );  
1295  
1296 }  
1297
```



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

LINE 1294

### low SEVERITY

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

### Source File

- LunarRabbit.sol

### Locations

```
1293     block.timestamp
1294   );
1295
1296   }
1297
1298
```

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

LINE 1294

### low SEVERITY

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

### Source File

- LunarRabbit.sol

### Locations

```
1293     block.timestamp
1294   );
1295
1296   }
1297
1298
```

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

LINE 1300

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1299 // approve token transfer to cover all possible scenarios
1300 _approve(address(this), address(uniswapV2Router), tokenAmount);
1301
1302 // add the liquidity
1303 uniswapV2Router.addLiquidityETH{value: ethAmount}(
1304
```

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

LINE 1344

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1343
1344 // Halve the amount of liquidity tokens
1345 uint256 liquidityTokens = contractBalance * tokensForLiquidity / totalTokensToSwap
/ 2;
1346 uint256 stakingTokens = contractBalance * tokensForStaking / totalTokensToSwap;
1347 uint256 amountToSwapForETH =
contractBalance.sub(liquidityTokens).sub(stakingTokens);
1348
```

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

LINE 1345

### low SEVERITY

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

### Source File

- LunarRabbit.sol

### Locations

```
1344 // Halve the amount of liquidity tokens
1345 uint256 liquidityTokens = contractBalance * tokensForLiquidity / totalTokensToSwap
/ 2;
1346 uint256 stakingTokens = contractBalance * tokensForStaking / totalTokensToSwap;
1347 uint256 amountToSwapForETH =
contractBalance.sub(liquidityTokens).sub(stakingTokens);
1348
1349
```

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

LINE 1346

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1345    uint256 liquidityTokens = contractBalance * tokensForLiquidity / totalTokensToSwap
      / 2;
1346    uint256 stakingTokens = contractBalance * tokensForStaking / totalTokensToSwap;
1347    uint256 amountToSwapForETH =
contractBalance.sub(liquidityTokens).sub(stakingTokens);
1348
1349    uint256 initialETHBalance = address(this).balance;
1350
```

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

LINE 1347

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1346     uint256 stakingTokens = contractBalance * tokensForStaking / totalTokensToSwap;
1347     uint256 amountToSwapForETH =
contractBalance.sub(liquidityTokens).sub(stakingTokens);
1348
1349     uint256 initialETHBalance = address(this).balance;
1350
1351
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 1356

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1355
1356     uint256 ethForMarketing =
ethBalance.mul(tokensForMarketing).div(totalTokensToSwap);
1357     uint256 ethForTeam = ethBalance.mul(tokensForTeam).div(totalTokensToSwap);
1358
1359     uint256 ethForLiquidity = ethBalance - ethForMarketing - ethForTeam;
1360
```



# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 1356

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1355
1356     uint256 ethForMarketing =
ethBalance.mul(tokensForMarketing).div(totalTokensToSwap);
1357     uint256 ethForTeam = ethBalance.mul(tokensForTeam).div(totalTokensToSwap);
1358
1359     uint256 ethForLiquidity = ethBalance - ethForMarketing - ethForTeam;
1360
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 1356

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1355
1356     uint256 ethForMarketing =
ethBalance.mul(tokensForMarketing).div(totalTokensToSwap);
1357     uint256 ethForTeam = ethBalance.mul(tokensForTeam).div(totalTokensToSwap);
1358
1359     uint256 ethForLiquidity = ethBalance - ethForMarketing - ethForTeam;
1360
```

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

LINE 1363

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1362     tokensForMarketing = 0;
1363     tokensForStaking = 0;
1364     tokensForTeam = 0;
1365
1366     (success,) = address(teamWallet).call{value: ethForTeam}("");
1367
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 1366

## low SEVERITY

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

## Source File

- LunarRabbit.sol

## Locations

```
1365
1366     (success,) = address(teamWallet).call{value: ethForTeam}("");
1367
1368     if(liquidityTokens > 0 && ethForLiquidity > 0){
1369         addLiquidity(liquidityTokens, ethForLiquidity);
1370
```

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

LINE 1383

### low SEVERITY

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

### Source File

- LunarRabbit.sol

### Locations

```
1382  }  
1383  }  
1384
```

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

LINE 47

### low SEVERITY

The current pragma Solidity directive is `""^0.8.17""`. 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

- LunarRabbit.sol

### Locations

```
46  function totalSupply() external view returns (uint);
47  function balanceOf(address owner) external view returns (uint);
48  function allowance(address owner, address spender) external view returns (uint);
49
50  function approve(address spender, uint value) external returns (bool);
51
```

## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 1088

### low SEVERITY

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

### Source File

- LunarRabbit.sol

### Locations

```
1087
1088     function decimals() public view override returns (uint8) {
1089         return _decimals;
1090     }
1091
1092
```

## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 1092

### low SEVERITY

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

### Source File

- LunarRabbit.sol

### Locations

```
1091
1092 // only use to disable contract sales if absolutely necessary (emergency use only)
1093 function updateSwapEnabled(bool enabled) external onlyOwner(){
1094     swapEnabled = enabled;
1095 }
1096
```



## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 1307

### low SEVERITY

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

### Source File

- LunarRabbit.sol

### Locations

```
1306 0, // slippage is unavoidable
1307 0, // slippage is unavoidable
1308 deadAddress,
1309 block.timestamp
1310 );
1311
```

## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 1308

### low SEVERITY

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

### Source File

- LunarRabbit.sol

### Locations

```
1307     0, // slippage is unavoidable
1308     deadAddress,
1309     block.timestamp
1310   );
1311 }
1312
```

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