



Shinjiru Inu  
**Smart Contract  
Audit Report**

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## Disclaimer

## About Us

# AUDITED DETAILS

## Audited Project

Project name	Token ticker	Blockchain
Shinjiru Inu	SHINJI	Binance Smart Chain

## Addresses

Contract address	0x87e0ce18ce0ce0a86b22537b48c15e03a519b112
Contract deployer address	0xe3930701d4d74a5CfD6438A37ACd25b078D358bd

## Project Website

<https://github.com/ShinjiruInu>

## Codebase

<https://bscscan.com/address/0x87e0ce18ce0ce0a86b22537b48c15e03a519b112#contracts>

# SUMMARY

The Shinjiru Swap is a secure and reliable platform for investors to easily swap their tokens. It is powered by a peer-to-peer protocol, allowing users to securely and anonymously exchange tokens without having to trust a third party. Additionally, the swap is integrated with the Shinjiru Multi-Chain Staking Pools, allowing investors to quickly and easily stake their tokens and earn rewards. It is easy to use and accessible to all investors, regardless of their experience. The swap is also highly liquid, allowing investors to quickly and easily convert their holdings into other digital assets. Furthermore, the platform has low fees, allowing investors to maximize their profits. Finally, the Shinjiru Swap is backed by the Shinjiru team, providing investors with peace of mind that their funds are safe and secure. Using the Shinjiru Swap is relatively straightforward. First, investors will need to connect their wallets that hold their Shinjiru Tokens to the Shinjiru Swap. After that, they can select the tokens they wish to exchange and set their own exchange rate. Once the transaction is complete, the tokens will be credited to the investor's wallet. Finally, the investor can use the tokens to stake and earn rewards.

## Contract Summary

### Documentation Quality

Shinjiru Inu 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 by Shinjiru Inu 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 25, 29, 33, 37, 43, 50, 363, 363, 363, 378, 378, 381, 381, 505, 538, 554, 554, 555, 556, 557, 559, 559, 560, 560, 561, 561, 564, 564, 565, 567, 567, 567, 567, 568, 568, 570, 570, 570, 570, 571, 571, 574, 574, 575, 575, 616, 616, 627, 628, 632, 636, 636, 637, 639, 640, 641, 645, 649, 649, 650, 652, 653, 654 and 658.
- 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 587 and 588.

## CONCLUSION

We have audited the Shinjiru Inu project released on January 2023 to discover issues and identify potential security vulnerabilities in Shinjiru 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 issues found in the Shinjiru Inu smart contract code do not pose a considerable risk. The writing of the contract is close to the standard of writing contracts in general. The low-risk issues found are some arithmetic operation issues 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	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.	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.	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
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.	PASS
Write to Arbitrary Storage Location	SWC-124	The contract is responsible for ensuring that only authorized user or contract accounts may write to sensitive storage locations.	PASS
Incorrect Inheritance Order	SWC-125	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.	PASS
Override control character	SWC-130	Malicious actors can use the Right-To-Left-Override unicode character to force RTL text rendering and confuse users as to the real intent of a contract.	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 <code>abi.encodePacked()</code> with multiple variable length arguments can, in certain situations, lead to a hash collision.	PASS
Hardcoded gas amount	SWC-134	The <code>transfer()</code> and <code>send()</code> 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	Tuesday Jan 21 2003 11:48:55 GMT+0000 (Coordinated Universal Time)
Finished	Wednesday Jan 22 2003 10:54:22 GMT+0000 (Coordinated Universal Time)
Mode	Standard
Main Source File	Shinjiru.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-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 25

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
24  function add(uint256 a, uint256 b) internal pure returns (uint256) {
25  return a + b;
26  }
27
28  function sub(uint256 a, uint256 b) internal pure returns (uint256) {
29
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 29

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
28  function sub(uint256 a, uint256 b) internal pure returns (uint256) {
29  return a - b;
30  }
31
32  function mul(uint256 a, uint256 b) internal pure returns (uint256) {
33
```

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

LINE 33

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
32  function mul(uint256 a, uint256 b) internal pure returns (uint256) {
33  return a * b;
34  }
35
36  function div(uint256 a, uint256 b) internal pure returns (uint256) {
37
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 37

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
36  function div(uint256 a, uint256 b) internal pure returns (uint256) {
37  return a / b;
38  }
39
40  function sub(uint256 a, uint256 b, string memory errorMessage) internal pure returns
(uint256) {
41
```



# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 43

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
42   require(b <= a, errorMessage);
43   return a - b;
44   }
45   }
46
47
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 50

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
49   require(b > 0, errorMessage);
50   return a / b;
51   }
52   }
53
54
```

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

LINE 363

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
362 uint8 private constant _decimals = 9;
363 uint256 private _tTotal = 10**15 * 10**_decimals;
364 string private constant _name = "Shinjiru Inu";
365 string private constant _symbol = unicode"SHINJI";
366
367
```

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

LINE 363

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
362 uint8 private constant _decimals = 9;
363 uint256 private _tTotal = 10**15 * 10**_decimals;
364 string private constant _name = "Shinjiru Inu";
365 string private constant _symbol = unicode"SHINJI";
366
367
```

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

LINE 363

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
362 uint8 private constant _decimals = 9;
363 uint256 private _tTotal = 10**15 * 10**_decimals;
364 string private constant _name = "Shinjiru Inu";
365 string private constant _symbol = unicode"SHINJI";
366
367
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 378

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
377
378  uint256 public _maxWalletToken = _tTotal * 100 / 100;
379  uint256 private _previousMaxWalletToken = _maxWalletToken;
380
381  uint256 public _maxTxAmount = _tTotal * 100 / 100;
382
```

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

LINE 378

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
377
378  uint256 public _maxWalletToken = _tTotal * 100 / 100;
379  uint256 private _previousMaxWalletToken = _maxWalletToken;
380
381  uint256 public _maxTxAmount = _tTotal * 100 / 100;
382
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 381

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
380
381  uint256 public _maxTxAmount = _tTotal * 100 / 100;
382  uint256 private _previousMaxTxAmount = _maxTxAmount;
383
384
385
```



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

LINE 381

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
380
381  uint256 public _maxTxAmount = _tTotal * 100 / 100;
382  uint256 private _previousMaxTxAmount = _maxTxAmount;
383
384
385
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 505

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
504 uint256 heldTokens = balanceOf(to);
505 require((heldTokens + amount) <= _maxWalletToken, "Over wallet limit.");}
506
507 if (from != owner())
508 require(amount <= _maxTxAmount, "Over transaction limit.");
509
```

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

LINE 538

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
537
538     txCount++;
539
540     }
541
542
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 554

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
553
554 uint256 tokens_to_Burn = contractTokenBalance * Percent_Burn / 100;
555 _tTotal = _tTotal - tokens_to_Burn;
556 _tOwned[Wallet_Burn] = _tOwned[Wallet_Burn] + tokens_to_Burn;
557 _tOwned[address(this)] = _tOwned[address(this)] - tokens_to_Burn;
558
```

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

LINE 554

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
553
554  uint256 tokens_to_Burn = contractTokenBalance * Percent_Burn / 100;
555  _tTotal = _tTotal - tokens_to_Burn;
556  _tOwned[Wallet_Burn] = _tOwned[Wallet_Burn] + tokens_to_Burn;
557  _tOwned[address(this)] = _tOwned[address(this)] - tokens_to_Burn;
558
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 555

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
554 uint256 tokens_to_Burn = contractTokenBalance * Percent_Burn / 100;
555 _tTotal = _tTotal - tokens_to_Burn;
556 _tOwned[Wallet_Burn] = _tOwned[Wallet_Burn] + tokens_to_Burn;
557 _tOwned[address(this)] = _tOwned[address(this)] - tokens_to_Burn;
558
559
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 556

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
555  _tTotal = _tTotal - tokens_to_Burn;
556  _tOwned[Wallet_Burn] = _tOwned[Wallet_Burn] + tokens_to_Burn;
557  _tOwned[address(this)] = _tOwned[address(this)] - tokens_to_Burn;
558
559  uint256 tokens_to_M = contractTokenBalance * Percent_Marketing / 100;
560
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 557

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
556  _tOwned[Wallet_Burn] = _tOwned[Wallet_Burn] + tokens_to_Burn;
557  _tOwned[address(this)] = _tOwned[address(this)] - tokens_to_Burn;
558
559  uint256 tokens_to_M = contractTokenBalance * Percent_Marketing / 100;
560  uint256 tokens_to_D = contractTokenBalance * Percent_Dev / 100;
561
```



# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 559

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
558
559  uint256 tokens_to_M = contractTokenBalance * Percent_Marketing / 100;
560  uint256 tokens_to_D = contractTokenBalance * Percent_Dev / 100;
561  uint256 tokens_to_LP_Half = contractTokenBalance * Percent_AutoLP / 200;
562
563
```

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

LINE 559

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
558
559  uint256 tokens_to_M = contractTokenBalance * Percent_Marketing / 100;
560  uint256 tokens_to_D = contractTokenBalance * Percent_Dev / 100;
561  uint256 tokens_to_LP_Half = contractTokenBalance * Percent_AutoLP / 200;
562
563
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 560

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
559 uint256 tokens_to_M = contractTokenBalance * Percent_Marketing / 100;
560 uint256 tokens_to_D = contractTokenBalance * Percent_Dev / 100;
561 uint256 tokens_to_LP_Half = contractTokenBalance * Percent_AutoLP / 200;
562
563 uint256 balanceBeforeSwap = address(this).balance;
564
```

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

LINE 560

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
559 uint256 tokens_to_M = contractTokenBalance * Percent_Marketing / 100;
560 uint256 tokens_to_D = contractTokenBalance * Percent_Dev / 100;
561 uint256 tokens_to_LP_Half = contractTokenBalance * Percent_AutoLP / 200;
562
563 uint256 balanceBeforeSwap = address(this).balance;
564
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 561

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
560 uint256 tokens_to_D = contractTokenBalance * Percent_Dev / 100;
561 uint256 tokens_to_LP_Half = contractTokenBalance * Percent_AutoLP / 200;
562
563 uint256 balanceBeforeSwap = address(this).balance;
564 swapTokensForBNB(tokens_to_LP_Half + tokens_to_M + tokens_to_D);
565
```

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

LINE 561

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
560 uint256 tokens_to_D = contractTokenBalance * Percent_Dev / 100;
561 uint256 tokens_to_LP_Half = contractTokenBalance * Percent_AutoLP / 200;
562
563 uint256 balanceBeforeSwap = address(this).balance;
564 swapTokensForBNB(tokens_to_LP_Half + tokens_to_M + tokens_to_D);
565
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 564

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
563  uint256 balanceBeforeSwap = address(this).balance;
564  swapTokensForBNB(tokens_to_LP_Half + tokens_to_M + tokens_to_D);
565  uint256 BNB_Total = address(this).balance - balanceBeforeSwap;
566
567  uint256 split_M = Percent_Marketing * 100 / (Percent_AutoLP + Percent_Marketing +
Percent_Dev);
568
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 564

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
563  uint256 balanceBeforeSwap = address(this).balance;
564  swapTokensForBNB(tokens_to_LP_Half + tokens_to_M + tokens_to_D);
565  uint256 BNB_Total = address(this).balance - balanceBeforeSwap;
566
567  uint256 split_M = Percent_Marketing * 100 / (Percent_AutoLP + Percent_Marketing +
Percent_Dev);
568
```



# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 565

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
564  swapTokensForBNB(tokens_to_LP_Half + tokens_to_M + tokens_to_D);
565  uint256 BNB_Total = address(this).balance - balanceBeforeSwap;
566
567  uint256 split_M = Percent_Marketing * 100 / (Percent_AutoLP + Percent_Marketing +
Percent_Dev);
568  uint256 BNB_M = BNB_Total * split_M / 100;
569
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 567

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
566
567  uint256 split_M = Percent_Marketing * 100 / (Percent_AutoLP + Percent_Marketing +
Percent_Dev);
568  uint256 BNB_M = BNB_Total * split_M / 100;
569
570  uint256 split_D = Percent_Dev * 100 / (Percent_AutoLP + Percent_Marketing +
Percent_Dev);
571
```

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

LINE 567

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
566
567  uint256 split_M = Percent_Marketing * 100 / (Percent_AutoLP + Percent_Marketing +
Percent_Dev);
568  uint256 BNB_M = BNB_Total * split_M / 100;
569
570  uint256 split_D = Percent_Dev * 100 / (Percent_AutoLP + Percent_Marketing +
Percent_Dev);
571
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 567

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
566
567  uint256 split_M = Percent_Marketing * 100 / (Percent_AutoLP + Percent_Marketing +
Percent_Dev);
568  uint256 BNB_M = BNB_Total * split_M / 100;
569
570  uint256 split_D = Percent_Dev * 100 / (Percent_AutoLP + Percent_Marketing +
Percent_Dev);
571
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 567

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
566
567  uint256 split_M = Percent_Marketing * 100 / (Percent_AutoLP + Percent_Marketing +
Percent_Dev);
568  uint256 BNB_M = BNB_Total * split_M / 100;
569
570  uint256 split_D = Percent_Dev * 100 / (Percent_AutoLP + Percent_Marketing +
Percent_Dev);
571
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 568

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
567  uint256 split_M = Percent_Marketing * 100 / (Percent_AutoLP + Percent_Marketing +  
Percent_Dev);  
568  uint256 BNB_M = BNB_Total * split_M / 100;  
569  
570  uint256 split_D = Percent_Dev * 100 / (Percent_AutoLP + Percent_Marketing +  
Percent_Dev);  
571  uint256 BNB_D = BNB_Total * split_D / 100;  
572
```

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

LINE 568

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
567  uint256 split_M = Percent_Marketing * 100 / (Percent_AutoLP + Percent_Marketing +
Percent_Dev);
568  uint256 BNB_M = BNB_Total * split_M / 100;
569
570  uint256 split_D = Percent_Dev * 100 / (Percent_AutoLP + Percent_Marketing +
Percent_Dev);
571  uint256 BNB_D = BNB_Total * split_D / 100;
572
```

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

LINE 570

### low SEVERITY

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

### Source File

- Shinjiru.sol

### Locations

```
569
570  uint256 split_D = Percent_Dev * 100 / (Percent_AutoLP + Percent_Marketing +
Percent_Dev);
571  uint256 BNB_D = BNB_Total * split_D / 100;
572
573
574
```



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

LINE 570

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
569
570  uint256 split_D = Percent_Dev * 100 / (Percent_AutoLP + Percent_Marketing +
Percent_Dev);
571  uint256 BNB_D = BNB_Total * split_D / 100;
572
573
574
```

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

LINE 570

### low SEVERITY

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

### Source File

- Shinjiru.sol

### Locations

```
569
570  uint256 split_D = Percent_Dev * 100 / (Percent_AutoLP + Percent_Marketing +
Percent_Dev);
571  uint256 BNB_D = BNB_Total * split_D / 100;
572
573
574
```

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

LINE 570

### low SEVERITY

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

### Source File

- Shinjiru.sol

### Locations

```
569
570  uint256 split_D = Percent_Dev * 100 / (Percent_AutoLP + Percent_Marketing +
Percent_Dev);
571  uint256 BNB_D = BNB_Total * split_D / 100;
572
573
574
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 571

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
570  uint256 split_D = Percent_Dev * 100 / (Percent_AutoLP + Percent_Marketing +
Percent_Dev);
571  uint256 BNB_D = BNB_Total * split_D / 100;
572
573
574  addLiquidity(tokens_to_LP_Half, (BNB_Total - BNB_M - BNB_D));
575
```

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

LINE 571

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
570  uint256 split_D = Percent_Dev * 100 / (Percent_AutoLP + Percent_Marketing +
Percent_Dev);
571  uint256 BNB_D = BNB_Total * split_D / 100;
572
573
574  addLiquidity(tokens_to_LP_Half, (BNB_Total - BNB_M - BNB_D));
575
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 574

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
573
574  addLiquidity(tokens_to_LP_Half, (BNB_Total - BNB_M - BNB_D));
575  emit SwapAndLiquify(tokens_to_LP_Half, (BNB_Total - BNB_M - BNB_D),
tokens_to_LP_Half);
576
577  sendToWallet(Wallet_Marketing, BNB_M);
578
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 574

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
573
574  addLiquidity(tokens_to_LP_Half, (BNB_Total - BNB_M - BNB_D));
575  emit SwapAndLiquify(tokens_to_LP_Half, (BNB_Total - BNB_M - BNB_D),
tokens_to_LP_Half);
576
577  sendToWallet(Wallet_Marketing, BNB_M);
578
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 575

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
574  addLiquidity(tokens_to_LP_Half, (BNB_Total - BNB_M - BNB_D));
575  emit SwapAndLiquify(tokens_to_LP_Half, (BNB_Total - BNB_M - BNB_D),
tokens_to_LP_Half);
576
577  sendToWallet(Wallet_Marketing, BNB_M);
578
579
```



# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 575

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
574  addLiquidity(tokens_to_LP_Half, (BNB_Total - BNB_M - BNB_D));
575  emit SwapAndLiquify(tokens_to_LP_Half, (BNB_Total - BNB_M - BNB_D),
tokens_to_LP_Half);
576
577  sendToWallet(Wallet_Marketing, BNB_M);
578
579
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 616

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
615     uint256 totalRandom = IERC20(random_Token_Address).balanceOf(address(this));
616     uint256 removeRandom = totalRandom*percent_of_Tokens/100;
617     _sent = IERC20(random_Token_Address).transfer(Wallet_Dev, removeRandom);
618
619 }
620
```

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

LINE 616

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
615     uint256 totalRandom = IERC20(random_Token_Address).balanceOf(address(this));
616     uint256 removeRandom = totalRandom*percent_of_Tokens/100;
617     _sent = IERC20(random_Token_Address).transfer(Wallet_Dev, removeRandom);
618
619 }
620
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 627

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
626
627  _tOwned[sender] = _tOwned[sender]-tAmount;
628  _tOwned[recipient] = _tOwned[recipient]+tAmount;
629  emit Transfer(sender, recipient, tAmount);
630
631
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 628

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
627  _tOwned[sender] = _tOwned[sender]-tAmount;  
628  _tOwned[recipient] = _tOwned[recipient]+tAmount;  
629  emit Transfer(sender, recipient, tAmount);  
630  
631  if(recipient == Wallet_Burn)  
632
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 632

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
631  if(recipient == Wallet_Burn)
632  _tTotal = _tTotal-tAmount;
633
634  } else if (isBuy){
635
636
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 636

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
635
636  uint256 buyFEE = tAmount*_Tax_On_Buy/100;
637  uint256 tTransferAmount = tAmount-buyFEE;
638
639  _tOwned[sender] = _tOwned[sender]-tAmount;
640
```

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

LINE 636

### low SEVERITY

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

### Source File

- Shinjiru.sol

### Locations

```
635
636  uint256 buyFEE = tAmount*_Tax_On_Buy/100;
637  uint256 tTransferAmount = tAmount-buyFEE;
638
639  _tOwned[sender] = _tOwned[sender]-tAmount;
640
```



# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 637

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
636 uint256 buyFEE = tAmount*_Tax_On_Buy/100;
637 uint256 tTransferAmount = tAmount-buyFEE;
638
639 _tOwned[sender] = _tOwned[sender]-tAmount;
640 _tOwned[recipient] = _tOwned[recipient]+tTransferAmount;
641
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 639

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
638
639  _tOwned[sender] = _tOwned[sender]-tAmount;
640  _tOwned[recipient] = _tOwned[recipient]+tTransferAmount;
641  _tOwned[address(this)] = _tOwned[address(this)]+buyFEE;
642  emit Transfer(sender, recipient, tTransferAmount);
643
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 640

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
639  _tOwned[sender] = _tOwned[sender]-tAmount;  
640  _tOwned[recipient] = _tOwned[recipient]+tTransferAmount;  
641  _tOwned[address(this)] = _tOwned[address(this)]+buyFEE;  
642  emit Transfer(sender, recipient, tTransferAmount);  
643  
644
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 641

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
640  _tOwned[recipient] = _tOwned[recipient]+tTransferAmount;  
641  _tOwned[address(this)] = _tOwned[address(this)]+buyFEE;  
642  emit Transfer(sender, recipient, tTransferAmount);  
643  
644  if(recipient == Wallet_Burn)  
645
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 645

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
644     if(recipient == Wallet_Burn)
645         _tTotal = _tTotal-tTransferAmount;
646
647     } else {
648
649
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 649

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
648
649     uint256 sellFEE = tAmount*_Tax_On_Sell/100;
650     uint256 tTransferAmount = tAmount-sellFEE;
651
652     _tOwned[sender] = _tOwned[sender]-tAmount;
653
```

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

LINE 649

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
648
649     uint256 sellFEE = tAmount*_Tax_On_Sell/100;
650     uint256 tTransferAmount = tAmount-sellFEE;
651
652     _tOwned[sender] = _tOwned[sender]-tAmount;
653
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 650

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
649 uint256 sellFEE = tAmount*_Tax_On_Sell/100;
650 uint256 tTransferAmount = tAmount-sellFEE;
651
652 _tOwned[sender] = _tOwned[sender]-tAmount;
653 _tOwned[recipient] = _tOwned[recipient]+tTransferAmount;
654
```



# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 652

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
651
652  _tOwned[sender] = _tOwned[sender]-tAmount;
653  _tOwned[recipient] = _tOwned[recipient]+tTransferAmount;
654  _tOwned[address(this)] = _tOwned[address(this)]+sellFEE;
655  emit Transfer(sender, recipient, tTransferAmount);
656
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 653

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
652  _tOwned[sender] = _tOwned[sender]-tAmount;  
653  _tOwned[recipient] = _tOwned[recipient]+tTransferAmount;  
654  _tOwned[address(this)] = _tOwned[address(this)]+sellFEE;  
655  emit Transfer(sender, recipient, tTransferAmount);  
656  
657
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 654

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
653  _tOwned[recipient] = _tOwned[recipient]+tTransferAmount;  
654  _tOwned[address(this)] = _tOwned[address(this)]+sellFEE;  
655  emit Transfer(sender, recipient, tTransferAmount);  
656  
657  if(recipient == Wallet_Burn)  
658
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 658

## low SEVERITY

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

## Source File

- Shinjiru.sol

## Locations

```
657     if(recipient == Wallet_Burn)
658         _tTotal = _tTotal-tTransferAmount;
659
660
661     }
662
```

## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 587

### low SEVERITY

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

### Source File

- Shinjiru.sol

### Locations

```
586 address[] memory path = new address[](2);
587 path[0] = address(this);
588 path[1] = uniswapV2Router.WETH();
589 _approve(address(this), address(uniswapV2Router), tokenAmount);
590 uniswapV2Router.swapExactTokensForETHSupportingFeeOnTransferTokens(
591
```

## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 588

### low SEVERITY

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

### Source File

- Shinjiru.sol

### Locations

```
587 path[0] = address(this);
588 path[1] = uniswapV2Router.WETH();
589 _approve(address(this), address(uniswapV2Router), tokenAmount);
590 uniswapV2Router.swapExactTokensForETHSupportingFeeOnTransferTokens(
591 tokenAmount,
592
```

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This is a limited report on our findings based on our analysis, in accordance with good industry practice as of the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn’t say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the below disclaimer below – please make sure to read it in full.

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