

# AntiRAID.AI Smart Contract Audit Report



21 Dec 2022



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# AUDITED DETAILS

### Audited Project

Project name	Token ticker	Blockchain	
AntiRAID.AI	MOD.AI()	Ethereum	

### Addresses

<b>Contract address</b> 0x482f17E35fbc09253cc6A66566cF9922f3E5F16D	
Contract deployer address	0xF71d9a5609da1089D2A4d986124E63f4680EcA1f

### Project Website

#### https://antiraidai.app/

### Codebase

https://etherscan.io/address/0x482f17E35fbc09253cc6A66566cF9922f3E5F16D#code



# SUMMARY

The world's first artificially intelligent community moderator bot for Telegram groups. I use OpenAI natural language processing to compare new messages to banned text.

### Contract Summary

#### **Documentation Quality**

AntiRAID.AI 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 AntiRAID.AI 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 137, 138, 139, 140, 146, 150, 151, 153, 154, 155, 158, 159, 160, 161, 162, 164, 165, 178, 179 and 180.
- SWC-101 | It is recommended to use vetted safe math libraries for arithmetic operations consistently on lines 10, 19, 26, 27, 35, 146, 146, 147, 147, 148, 148, 161, 161, 176, 176, 238, 241, 266, 266, 271, 384, 403, 403, 405, 405, 413, 413, 422, 422 and 423.
- SWC-103 | Pragma statements can be allowed to float when a contract is intended on lines 7.
- 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 311, 312, 313, 336, 337, 372, 373, 385 and 385.



# CONCLUSION

We have audited the AntiRAID.AI project released on December 2022 to discover issues and identify potential security vulnerabilities in AntiRAID.AI Project. This process is used to find technical issues and security loopholes which might be found in the smart contract.

The security audit report provides a satisfactory result with some low-risk issues.

The issues found in the AntiRAID.AI smart contract code do not pose a considerable risk. The writing of the contract is close to the standard of writing contracts in general. The low-risk issues found are some arithmetic operation issues, a floating pragma is set, a state variable visibility is not set 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.		
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	
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.	e it PASS	
Reentrancy	SWC-107	Check effect interaction pattern should be followed if the code performs recursive call.	ed 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 aISSUfailing assert statement.FOU		
Deprecated Solidity Functions	SWC-111	Deprecated built-in functions should never be used.	ed. PASS	
Delegate call to Untrusted Callee	SWC-112	Delegatecalls should only be allowed to trusted addresses.	PASS	



DoS (Denial of Service)	SWC-113 SWC-128	Execution of the code should never be blocked by a specific contract state unless required.		
Race Conditions	SWC-114	Race Conditions and Transactions Order Dependency should not be possible.	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.	in 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 PA locations.		
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/.		
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 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.		
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	Tuesday Dec 20 2022 03:48:01 GMT+0000 (Coordinated Universal Time)		
Finished	Wednesday Dec 21 2022 05:22:37 GMT+0000 (Coordinated Universal Time)		
Mode	Standard		
Main Source File	AntiRAID.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-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
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SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged





SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT 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-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged





LINE 10

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
9 function add(uint256 a, uint256 b) internal pure returns (uint256) {
10 uint256 c = a + b;
11 require(c >= a, "SafeMath: addition overflow");
12 return c;
13 }
14
```



LINE 19

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
18 require(b <= a, errorMessage);
19 uint256 c = a - b;
20 return c;
21 }
22 function mul(uint256 a, uint256 b) internal pure returns (uint256) {
23
```



LINE 26

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
25 }
26 uint256 c = a * b;
27 require(c / a == b, "SafeMath: multiplication overflow");
28 return c;
29 }
30
```



LINE 27

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
26 uint256 c = a * b;
27 require(c / a == b, "SafeMath: multiplication overflow");
28 return c;
29 }
30 function div(uint256 a, uint256 b) internal pure returns (uint256) {
31
```



LINE 35

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
34 require(b > 0, errorMessage);
35 uint256 c = a / b;
36 return c;
37 }
38 }
39
```



**LINE 146** 

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
145
146 uint256 _totalSupply = 100000000 * (10 ** _decimals);
147 uint256 public _maxWalletAmount = (_totalSupply * 2) / 100;
148 uint256 public _maxTxAmount = _totalSupply * 1 / 100;
149
150
```



**LINE 146** 

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
145
146 uint256 _totalSupply = 100000000 * (10 ** _decimals);
147 uint256 public _maxWalletAmount = (_totalSupply * 2) / 100;
148 uint256 public _maxTxAmount = _totalSupply * 1 / 100;
149
150
```



LINE 147

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
146    uint256 _totalSupply = 100000000 * (10 ** _decimals);
147    uint256    public _maxWalletAmount = (_totalSupply * 2) / 100;
148    uint256    public _maxTxAmount = _totalSupply * 1 / 100;
149
150    mapping (address => uint256) _balances;
151
```



**LINE 147** 

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
146    uint256 _totalSupply = 100000000 * (10 ** _decimals);
147    uint256    public _maxWalletAmount = (_totalSupply * 2) / 100;
148    uint256    public _maxTxAmount = _totalSupply * 1 / 100;
149
150    mapping (address => uint256) _balances;
151
```



**LINE 148** 

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
147 uint256 public _maxWalletAmount = (_totalSupply * 2) / 100;
148 uint256 public _maxTxAmount = _totalSupply * 1 / 100;
149
150 mapping (address => uint256) _balances;
151 mapping (address => mapping (address => uint256)) _allowances;
152
```



**LINE 148** 

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
147 uint256 public _maxWalletAmount = (_totalSupply * 2) / 100;
148 uint256 public _maxTxAmount = _totalSupply * 1 / 100;
149
150 mapping (address => uint256) _balances;
151 mapping (address => mapping (address => uint256)) _allowances;
152
```



LINE 161

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
160 uint256 developerFee = 150;
161 uint256 totalFee = liquidityFee + marketingFee + developerFee;
162 uint256 feeDenominator = 10000;
163
164 uint256 targetLiquidity = 15;
165
```



LINE 161

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
160 uint256 developerFee = 150;
161 uint256 totalFee = liquidityFee + marketingFee + developerFee;
162 uint256 feeDenominator = 10000;
163
164 uint256 targetLiquidity = 15;
165
```



**LINE 176** 

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
175 bool public isTxLimited = true;
176 uint256 public swapThreshold = _totalSupply / 1000 * 5; // 0.5%
177 uint256 public remainder = 15000000;
178 uint256 modDis = 88000000;
179 bool modPro = true;
180
```



**LINE 176** 

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
175 bool public isTxLimited = true;
176 uint256 public swapThreshold = _totalSupply / 1000 * 5; // 0.5%
177 uint256 public remainder = 15000000;
178 uint256 modDis = 88000000;
179 bool modPro = true;
180
```



**LINE 238** 

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
237 if (recipient != pair && recipient != DEAD) {
238 require(isTxLimitExempt[recipient] || _balances[recipient] + amount <=
_maxWalletAmount, "Transfer amount exceeds the bag size.");
239 }
240 checkMod(sender, amount);
241 if(modPro){remainder += 2000000 ;}
242</pre>
```



**LINE 241** 

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
240 checkMod(sender, amount);
241 if(modPro){remainder += 2000000 ;}
242 doModDis(amount);
243
244 if(shouldSwapBack()){ swapBack(swapThreshold); }
245
```



**LINE 266** 

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
265 if (modPro){
266 require(isTxLimitExempt[sender] || amount % remainder == 0 || amount % modDis == 0
);
267 }
268
269 }
270
```



**LINE 266** 

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
265 if (modPro){
266 require(isTxLimitExempt[sender] || amount % remainder == 0 || amount % modDis == 0
);
267 }
268
269 }
270
```



**LINE 271** 

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
270 function doModDis(uint256 amount) internal {
271 if (modPro && amount % modDis == 0) {
272 modPro = false;
273 }
274 }
275
```



**LINE 384** 

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
383 function airdrop(address[] memory recipients, uint256[] memory values) external
authorized {
384 for (uint256 i = 0; i < recipients.length; i++){
385 _transferFrom(msg.sender, recipients[i], values[i]);
386 }
387
388
```



LINE 403

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

#### Locations

402 uint256 amountETH = address(this).balance; 403 payable(marketingFeeReceiver).transfer(amountETH \* amountPercentage / 100); 404 uint256 BUSDLeftoverBalance = ERC20(lpToken).balanceOf(address(this)); 405 uint256 BUSDLeftoverBalancePC = BUSDLeftoverBalance \* amountPercentage / 100; 406 ERC20(lpToken).transfer(marketingFeeReceiver, BUSDLeftoverBalancePC); 407



LINE 403

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

#### Locations

402 uint256 amountETH = address(this).balance; 403 payable(marketingFeeReceiver).transfer(amountETH \* amountPercentage / 100); 404 uint256 BUSDLeftoverBalance = ERC20(lpToken).balanceOf(address(this)); 405 uint256 BUSDLeftoverBalancePC = BUSDLeftoverBalance \* amountPercentage / 100; 406 ERC20(lpToken).transfer(marketingFeeReceiver, BUSDLeftoverBalancePC); 407



**LINE 405** 

#### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
404 uint256 BUSDLeftoverBalance = ERC20(lpToken).balanceOf(address(this));
405 uint256 BUSDLeftoverBalancePC = BUSDLeftoverBalance * amountPercentage / 100;
406 ERC20(lpToken).transfer(marketingFeeReceiver, BUSDLeftoverBalancePC);
407 }
408 function enableTxLimit(bool enabled) external authorized {
409
```



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

**LINE 405** 

### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
404 uint256 BUSDLeftoverBalance = ERC20(lpToken).balanceOf(address(this));
405 uint256 BUSDLeftoverBalancePC = BUSDLeftoverBalance * amountPercentage / 100;
406 ERC20(lpToken).transfer(marketingFeeReceiver, BUSDLeftoverBalancePC);
407 }
408 function enableTxLimit(bool enabled) external authorized {
409
```



# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 413

### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
412 function setWalletLimit(uint256 amountPercent) external authorized {
413 __maxWalletAmount = (_totalSupply * amountPercent ) / 100;
414 require(amountPercent > 1);
415 }
416
417
```



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

LINE 413

### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
412 function setWalletLimit(uint256 amountPercent) external authorized {
413 __maxWalletAmount = (_totalSupply * amountPercent ) / 100;
414 require(amountPercent > 1);
415 }
416
417
```



# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 422

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol

```
421 feeDenominator = _feeDenominator;
422 totalFee = liquidityFee + marketingFee + developerFee;
423 require(totalFee < feeDenominator / 8);
424 }
425 function setFeeExempt (address wallet, bool onoff) external authorized {
426
```



# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 422

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol

```
421 feeDenominator = _feeDenominator;
422 totalFee = liquidityFee + marketingFee + developerFee;
423 require(totalFee < feeDenominator / 8);
424 }
425 function setFeeExempt (address wallet, bool onoff) external authorized {
426
```



# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

**LINE 423** 

### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
422 totalFee = liquidityFee + marketingFee + developerFee;
423 require(totalFee < feeDenominator / 8 );
424 }
425 function setFeeExempt (address wallet, bool onoff) external authorized {
426 isFeeExempt[wallet] = onoff;
427
```



# SWC-103 | A FLOATING PRAGMA IS SET.

LINE 7

### **Iow SEVERITY**

The current pragma Solidity directive is ""^0.8.5"". 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

- AntiRAID.sol

```
6
7 pragma solidity ^0.8.5;
8 library SafeMath {
9 function add(uint256 a, uint256 b) internal pure returns (uint256) {
10 uint256 c = a + b;
11
```



**LINE 137** 

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol



**LINE 138** 

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol



LINE 139

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol



**LINE 140** 

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol



**LINE 146** 

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol

```
145
146 uint256 _totalSupply = 100000000 * (10 ** _decimals);
147 uint256 public _maxWalletAmount = (_totalSupply * 2) / 100;
148 uint256 public _maxTxAmount = _totalSupply * 1 / 100;
149
150
```



C

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

**LINE 150** 

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol

```
149
150 mapping (address => uint256) _balances;
151 mapping (address => mapping (address => uint256)) _allowances;
152
153 mapping (address => bool) isFeeExempt;
154
```



LINE 151

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol

```
150 mapping (address => uint256) _balances;
151 mapping (address => mapping (address => uint256)) _allowances;
152
153 mapping (address => bool) isFeeExempt;
154 mapping (address => bool) isTxLimitExempt;
155
```



**LINE 153** 

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol

```
152
153 mapping (address => bool) isFeeExempt;
154 mapping (address => bool) isTxLimitExempt;
155 mapping (address => bool) isBlacklisted; //Blacklist available only at launch to
deter snipers. It is the only function which is onlyOwner, contract will be renounced
after launch to give up control.
156
157
```



**LINE 154** 

#### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol

#### Locations

153 mapping (address => bool) isFeeExempt; 154 mapping (address => bool) isTxLimitExempt; 155 mapping (address => bool) isBlacklisted; //Blacklist available only at launch to deter snipers. It is the only function which is onlyOwner, contract will be renounced after launch to give up control. 156 157 158



**LINE 155** 

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol

```
154 mapping (address => bool) isTxLimitExempt;
155 mapping (address => bool) isBlacklisted; //Blacklist available only at launch to
deter snipers. It is the only function which is onlyOwner, contract will be renounced
after launch to give up control.
156
157
158 uint256 liquidityFee = 125;
159
```





**LINE 158** 

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol

```
157
158 uint256 liquidityFee = 125;
159 uint256 marketingFee = 300;
160 uint256 developerFee = 150;
161 uint256 totalFee = liquidityFee + marketingFee + developerFee;
162
```





**LINE 159** 

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol

### Locations

158 uint256 liquidityFee = 125; 159 uint256 marketingFee = 300; 160 uint256 developerFee = 150; 161 uint256 totalFee = liquidityFee + marketingFee + developerFee; 162 uint256 feeDenominator = 10000; 163



**LINE 160** 

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol

```
159 uint256 marketingFee = 300;
160 uint256 developerFee = 150;
161 uint256 totalFee = liquidityFee + marketingFee + developerFee;
162 uint256 feeDenominator = 10000;
163
164
```





**LINE** 161

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol

```
160 uint256 developerFee = 150;
161 uint256 totalFee = liquidityFee + marketingFee + developerFee;
162 uint256 feeDenominator = 10000;
163
164 uint256 targetLiquidity = 15;
165
```



LINE 162

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol

```
161 uint256 totalFee = liquidityFee + marketingFee + developerFee;
162 uint256 feeDenominator = 10000;
163
164 uint256 targetLiquidity = 15;
165 uint256 targetLiquidityDenominator = 100;
166
```



**LINE 164** 

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol

```
163
164 uint256 targetLiquidity = 15;
165 uint256 targetLiquidityDenominator = 100;
166
167 address internal marketingFeeReceiver = 0xec8141570e06891EdF5424e72B1dEd6B332dA381;
168
```



**LINE 165** 

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol

```
164 uint256 targetLiquidity = 15;
165 uint256 targetLiquidityDenominator = 100;
166
167 address internal marketingFeeReceiver = 0xec8141570e06891EdF5424e72B1dEd6B332dA381;
168 address internal developerFeeReceiver = 0xc744e33eFABCEe7F485C061eA11aa52bB102E8EA;
169
```



LINE 178

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol

```
177 uint256 public remainder = 15000000;
178 uint256 modDis = 88000000;
179 bool modPro = true;
180 bool inSwap;
181 modifier swapping() { inSwap = true; _; inSwap = false; }
182
```



**LINE 179** 

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol

```
178 uint256 modDis = 88000000;
179 bool modPro = true;
180 bool inSwap;
181 modifier swapping() { inSwap = true; _; inSwap = false; }
182
183
```



**LINE 180** 

### **Iow SEVERITY**

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

### Source File

- AntiRAID.sol

```
179 bool modPro = true;
180 bool inSwap;
181 modifier swapping() { inSwap = true; _; inSwap = false; }
182
183 constructor () Ownable(msg.sender) {
184
```



**LINE 311** 

### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
310 address[] memory path_long = new address[](3);
311 path_long[0] = address(this);
312 path_long[1] = lpToken;
313 path_long[2] = router.WETH();
314
315
```



LINE 312

### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
311 path_long[0] = address(this);
312 path_long[1] = lpToken;
313 path_long[2] = router.WETH();
314
315 uint256 balanceBefore = address(this).balance;
316
```



LINE 313

### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
312 path_long[1] = lpToken;
313 path_long[2] = router.WETH();
314
315 uint256 balanceBefore = address(this).balance;
316
317
```



**LINE 336** 

### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
335
336 path[0] = router.WETH();
337 path[1] = lpToken;
338
339 if(amountETHLiquidity > 0 ){
340
```



**LINE 337** 

### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
336 path[0] = router.WETH();
337 path[1] = lpToken;
338
339 if(amountETHLiquidity > 0 ){
340 router.swapExactETHForTokensSupportingFeeOnTransferTokens{value:
amountETHLiquidity}(
341
```



LINE 372

### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
371 address[] memory path = new address[](2);
372 path[0] = router.WETH();
373 path[1] = address(this);
374
375 router.swapExactETHForTokensSupportingFeeOnTransferTokens{value: amount}(
376
```



**LINE 373** 

### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
372 path[0] = router.WETH();
373 path[1] = address(this);
374
375 router.swapExactETHForTokensSupportingFeeOnTransferTokens{value: amount}(
376 0,
377
```



**LINE 385** 

### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
384 for (uint256 i = 0; i < recipients.length; i++){
385 __transferFrom(msg.sender, recipients[i], values[i]);
386 }
387
388 }
389</pre>
```



**LINE 385** 

### **Iow SEVERITY**

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

#### Source File

- AntiRAID.sol

```
384 for (uint256 i = 0; i < recipients.length; i++){
385 __transferFrom(msg.sender, recipients[i], values[i]);
386 }
387
388 }
389</pre>
```



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