

YourWallet

Smart Contract Audit Report





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# **AUDITED DETAILS**

### Audited Project

Project name	Token ticker	Blockchain	
YourWallet	YourWallet	Binance Smart Chain	

## Addresses

Contract address	0x4AAF59deE18eCc1BbD2BF68b3f7Ba3AF47Eb9CfC	
Contract deployer address	0x2e76Af6DDD9C3314BC7f8ed6BB4690326731301e	

### Project Website

https://yourwallet.live/

### Codebase

https://bscscan.com/address/0x4AAF59deE18eCc1BbD2BF68b3f7Ba3AF47Eb9CfC#code



### **SUMMARY**

Unlock the full potential of your digital assets with YourWallet, the fastest EVM wallet that allows for seamless access to your wallet and decentralized apps, all without the need for any additional software installation.

YourWallet: The ultimate web-based crypto wallet solution!

### Contract Summary

#### **Documentation Quality**

YourWallet 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 YourWallet 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 510, 519, 531, 552, 555, 571, 572, 589, 590, 668, 672 and 767.
- SWC-110 | It is recommended to use of revert(), assert(), and require() in Solidity, and the new REVERT opcode in the EVM on line 767.



# CONCLUSION

We have audited the YourWallet project released on January 2023 to discover issues and identify potential security vulnerabilities in YourWallet Project. This process is used to find technical issues and security loopholes which might be found in the smart contract.

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

The issues found in the code on YourWallet smart contract do not pose a considerable risk. The writing of the contract is close to the standard of writing contracts in general. The low-risk issues found are some arithmetic operation issues 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
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.	
Block values as a proxy for time	SWC-116	Block numbers should not be used for time calculations.	
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.	
Weak Sources of Randomness	SWC-120	Random values should never be generated from Chain Attributes or be predictable.	
Incorrect Inheritance Order  When inheriting multiple contracts, especially if they have identical functions, a developer should carefully specify inheritance in the correct order. The rule of thumb is to inherit contracts from more /general/ to more /specific/.		PASS	



# **SMART CONTRACT ANALYSIS**

Started	Thursday Jan 26 2023 15:05:06 GMT+0000 (Coordinated Universal Time)		
Finished	Friday Jan 27 2023 18:01:27 GMT+0000 (Coordinated Universal Time)		
Mode	Standard		
Main Source File	YourWallet.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-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged



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

**LINE 510** 

#### **low SEVERITY**

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

#### Source File

- YourWallet.sol

```
509
510 _beforeTokenTransfer(address(0), account, amount);
511
512 _totalSupply += amount;
513 _balances[account] += amount;
514
```



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

**LINE 519** 

#### **low SEVERITY**

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

#### Source File

- YourWallet.sol

```
518
519 function _burn(address account, uint256 amount) internal virtual {
520 require(account != address(0), "ERC20: burn from the zero address");
521
522 _beforeTokenTransfer(account, address(0), amount);
523
```



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

**LINE 531** 

#### **low SEVERITY**

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

#### Source File

- YourWallet.sol

```
530
531 emit Transfer(account, address(0), amount);
532
533 _afterTokenTransfer(account, address(0), amount);
534 }
535
```



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

**LINE 552** 

#### **low SEVERITY**

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

#### Source File

- YourWallet.sol

```
551  uint256 amount
552  ) internal virtual {}
553
554  function _afterTokenTransfer(
555  address from,
556
```



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

**LINE 555** 

#### **low SEVERITY**

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

#### Source File

- YourWallet.sol

```
function _afterTokenTransfer(
f
```



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

**LINE 571** 

#### **low SEVERITY**

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

#### Source File

- YourWallet.sol

```
570
571 uint256 public marketingFeeOnBuy;
572 uint256 public marketingFeeOnSell;
573
574 address public marketingWallet;
575
```



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

**LINE 572** 

#### **low SEVERITY**

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

#### Source File

- YourWallet.sol

```
571 uint256 public marketingFeeOnBuy;
572 uint256 public marketingFeeOnSell;
573
574 address public marketingWallet;
575
576
```



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

**LINE 589** 

#### **low SEVERITY**

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

#### Source File

- YourWallet.sol

```
588  address router;
589  if (block.chainid == 56) {
590   router = 0x10ED43C718714eb63d5aA57B78B54704E256024E; // BSC Pancake Mainnet Router
591  } else if (block.chainid == 97) {
592   router = 0xD99D1c33F9fC3444f8101754aBC46c52416550D1; // BSC Pancake Testnet Router
593
```



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

**LINE 590** 

### **low SEVERITY**

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

#### Source File

- YourWallet.sol

```
589  if (block.chainid == 56) {
590    router = 0x10ED43C718714eb63d5aA57B78B54704E256024E; // BSC Pancake Mainnet Router
591  } else if (block.chainid == 97) {
592    router = 0xD99D1c33F9fC3444f8101754aBC46c52416550D1; // BSC Pancake Testnet Router
593  } else if (block.chainid == 1 || block.chainid == 5) {
594
```



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

**LINE 668** 

#### **low SEVERITY**

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

#### Source File

- YourWallet.sol

```
require(!tradingEnabled, "Trading already enabled.");

tradingEnabled = true;

swapEnabled = true;

70 }

71 }
```



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

**LINE** 668

#### **low SEVERITY**

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

#### Source File

- YourWallet.sol



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

**LINE 672** 

#### **low SEVERITY**

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

#### Source File

- YourWallet.sol



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

**LINE** 767

#### **low SEVERITY**

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

#### Source File

- YourWallet.sol



## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

**LINE** 767

#### **low SEVERITY**

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

#### Source File

- YourWallet.sol



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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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### **ABOUT US**

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