

# CFG NINJA AUDITS

Security Assessment

**MyToken Token** 

September 2, 2023

Audit Status: Pass

Audit Edition: Advance



## **Risk Analysis**

#### **Classifications of Manual Risk Results**

Classification	Description	
Critical	Danger or Potential Problems.	
Major	Be Careful or Fail test.	
Minor	Pass, Not-Detected or Safe Item.	
<ul><li>Informational</li></ul>	Function Detected	

#### **Manual Code Review Risk Results**

Contract Priviledge	Description
Buy Tax	2%
<ul><li>Sale Tax</li></ul>	2%
Cannot Sale	Pass
Cannot Sale	Pass
Max Tax	6%
Modify Tax	Yes
Fee Check	Pass
Is Honeypot?	Not Detected
Trading Cooldown	Not Detected
Can Pause Trade?	Fail
Pause Transfer?	Not Detected





Contract Priviledge	Description
Max Tx?	Pass
Is Anti Whale?	Not Detected
Is Anti Bot?	Not Detected
Is Blacklist?	Not Detected
Blacklist Check	Pass
is Whitelist?	Not Detected
Can Mint?	Pass
Is Proxy?	Not Detected
Can Take Ownership?	Not Detected
Hidden Owner?	Not Detected
<ul><li>Owner</li></ul>	
Self Destruct?	Not Detected
Other?	Not Detected
Other?	Not Detected
Holders	1
Auditor Confidence	High

The following quick summary it's added to the project overview; however, there are more details about the audit and its results. Please read every detail.





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## **Assessment Summary**

This report has been prepared for MyToken Token on the Ethereum network. CFGNINJA provides both client-centered and user-centered examination of the smart contracts and their current status when applicable. This report represents the security assessment made to find issues and vulnerabilities on the source code along with the current liquidity and token holder statistics of the protocol.

A comprehensive examination has been performed, utilizing Cross Referencing, Static Analysis, In-House Security Tools, and line-by-line Manual Review.

The auditing process pays special attention to the following considerations:

- Testing the smart contracts against both common and uncommon attack vectors.
- Inspecting liquidity and holders statistics to inform the current status to both users and client when applicable.
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Verifying contract functions that allow trusted and/or untrusted actors to mint, lock, pause, and transfer assets.
- Cross referencing contract structure and implementation against similar smart contracts produced by industry leaders
- Thorough line-by-line manual review of the entire codebase by industry experts.





Name

## Project Overview Oxd5a0E6EbD5B0805F68e45fA2984C0A40ebACe411

Live

MyToken

No

## **Token Summary**

Parameter	Solidity Code Provided Result	
SollD	File Shap 1 Oxd 9 e A 8 6 B 1 8 9 e 9 7 C 6 1 1 9 2 3 8 D 1 0 f a 9 4 0 e 2 3	FEIBNOOP3
\$wenToken Name	c93f108160b6fd216e65a4eb8d9a28f5d2e42681 MyToken	TokenERC20Pinksale.sol
\$wenToken Token Tracker	MyToken (MTK)	
\$wenToken Decimals	9	
\$wenToken Supply	1,000,000,000	
Platform	Ethereum	
compiler	v0.9.19+commit.7dd6d404	
Contract Name	MyToken	
Optimization	Yes with 200 runs	
LicenseType	Unlicensed	
Language	Solidity	
Codebase		
Payment Tx	Corporate	

#### **MainNet Contract was Not Assessed**

#### **TestNet Contract Assessed Contract Name**





### **Mint Check**

The project owners of MyToken do not have a mint function in the contract, owner cannot mint tokens after initial deploy.

The Project has a Total Supply of 1,000,000,000 and cannot mint any more than the Max Supply.

Mint Notes:

**Auditor Notes:** 

**Project Owner Notes:** 







## **Fees Check**

The project owners of MyToken do not have the ability to set fees higher than 6%.

The team May have fees defined; however, they can't set those fees higher than 6% or may not be able to configure the same.

Tax Fee Notes:

Auditor Notes: Sala Tax is 10% and Buy Tax is 10% and Max Tax can be set to 6%

**Project Owner Notes: Not Detected** 







## **Blacklist Check**

The project owners of MyToken do not have a blacklist function their contract.

The Project allow owners to transfer their tokens without any restrictions.

Token owner cannot blacklist the contract: Malicious or compromised owners can trap contracts relying on tokens with a blacklist.

**Blacklist Notes:** 

**Auditor Notes:.** 

**Project Owner Notes:** 







## MaxTx Check

## The Project Owners of MyToken cannot set max tx amount

The Team allows any investors to swap, transfer or sell their total amount if needed.

MaxTX Notes:

Auditor Notes: Max tax is 6%.

**Project Owner Notes:** 

Project Has No MaxTX







## **Pause Trade Check**

The Project Owners of MyToken can stop or pause trading

We recommend the Team only allow Open Trade and never use Stop Trade, as this will be catastrophic for the Project and Investors.

We recommend the Team create a reconsider doing it without the stop trade function.

Pause Trade Notes:

Auditor Notes: Dev needs to enable trading

Project Owner Notes: .

Owner can pause trading







## **Contract Ownership**

The contract ownership of MyToken is not currently renounced. The ownership of the contract grants special powers to the protocol creators, making them the sole addresses that can call sensible ownable functions that may alter the state of the protocol.

The current owner is the address which can be viewed: <u>HERE</u>

The owner wallet has the power to call the functions displayed on the privileged functions chart below, if the owner's wallet is compromised, they could exploit these privileges.

We recommend the team renounce ownership at the right time, if possible, or gradually migrate to a timelock with governing functionalities regarding transparency and safety considerations.

We recommend the team use a Multisignature Wallet if the contract is not going to be renounced; this will give the team more control over the contract.





## **Liquidity Ownership**

The token does not have liquidity at the moment of the audit, block 30339170

If liquidity is unlocked, then the token developers can do what is infamously known as 'rugpull'. Once investors start buying token from the exchange, the liquidity pool will accumulate more and more coins of established value (e.g., ETH or BNB or Tether). This is because investors are basically sending these tokens of value to the exchange, to get the new token. Developers can withdraw this liquidity from the exchange, cash in all the value and run off with it. Liquidity is locked by renouncing the ownership of liquidity pool (LP) tokens for a fixed time period, by sending them to a time-lock smart contract. Without ownership of LP tokens, developers cannot get liquidity pool funds back. This provides confidence to the investors that the token developers will not run away with the liquidity money. It is now a standard practice that all token developers follow, and this is what really differentiates a scam coin from a real one.

#### Read More







## **KYC Information**

### The Project Owners of MyToken is not KYC.

**KYC Information Notes:** 

Auditor Notes: KYC to be completed by PinkSale, project will be a SAFU Project.

**Project Owner Notes:** 







# Smart Contract Vulnerability Checks

The Smart Contract Weakness Classification Registry (SWC Registry) is an implementation of the weakness classification scheme proposed in EIP-1470. It is loosely aligned to the terminologies and structure used in the Common Weakness Enumeration (CWE) while overlaying a wide range of weakness variants that are specific to smart contracts.

ID	Severity	Name	File	location
SWC-100	Pass	Function Default Visibility	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-101	Pass	Integer Overflow and Underflow.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-102	Pass	Outdated Compiler Version file.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-103	Low	A floating pragma is set.	TokenERC20Pinksal e.sol	L: 13 C: 0
SWC-104	Pass	Unchecked Call Return Value.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-105	Pass	Unprotected Ether Withdrawal.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-106	Pass	Unprotected SELFDESTRUCT Instruction	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-107	Pass	Read of persistent state following external call.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-108	Low	State variable visibility is not set	TokenERC20Pinksal e.sol	L: 457 C: 9
SWC-109	Pass	Uninitialized Storage Pointer.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-110	Pass	Assert Violation.	TokenERC20Pinksal e.sol	L: 0 C: 0





ID	Severity	Name	File	location
SWC-111	Pass	Use of Deprecated Solidity Functions.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-112	Pass	Delegate Call to Untrusted Callee.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-113	Pass	Multiple calls are executed in the same transaction.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-114	Pass	Transaction Order Dependence.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-115	Pass	Authorization through tx.origin.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-116	Pass	A control flow decision is made based on The block.timestamp environment variable.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-117	Pass	Signature Malleability.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-118	Pass	Incorrect Constructor Name.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-119	Pass	Shadowing State Variables.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-120	Low	Potential use of block.number as source of randonmness.	TokenERC20Pinksal e.sol	L: 79 C: 6376
SWC-121	Pass	Missing Protection against Signature Replay Attacks.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-122	Pass	Lack of Proper Signature Verification.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-123	Pass	Requirement Violation.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-124	Pass	Write to Arbitrary Storage Location.	TokenERC20Pinksal e.sol	L: 0 C: 0





ID	Severity	Name	File	location
SWC-125	Pass	Incorrect Inheritance Order.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-126	Pass	Insufficient Gas Griefing.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-127	Pass	Arbitrary Jump with Function Type Variable.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-128	Pass	DoS With Block Gas Limit.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-129	Pass	Typographical Error.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-130	Pass	Right-To-Left-Override control character (U +202E).	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-131	Pass	Presence of unused variables.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-132	Pass	Unexpected Ether balance.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-133	Pass	Hash Collisions with Multiple Variable Length Arguments.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-134	Pass	Message call with hardcoded gas amount.	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-135	Pass	Code With No Effects (Irrelevant/Dead Code).	TokenERC20Pinksal e.sol	L: 0 C: 0
SWC-136	Pass	Unencrypted Private Data On-Chain.	TokenERC20Pinksal e.sol	L: 0 C: 0

We scan the contract for additional security issues using MYTHX and industry-standard security scanning tools.





# Smart Contract Vulnerability Details

SWC-103 - Floating Pragma.

CWE-664: Improper Control of a Resource	Through its
Lifetime.	

**References:** 

#### **Description:**

Contracts should be deployed with the same compiler version and flags that they have been tested with thoroughly. Locking the pragma helps to ensure that contracts do not accidentally get deployed using, for example, an outdated compiler version that might introduce bugs that affect the contract system negatively.

#### Remediation:

Lock the pragma version and also consider known bugs (https://github.com/ethereum/solidity/releases) for the compiler version that is chosen.

Pragma statements can be allowed to float when a contract is intended for consumption by other developers, as in the case with contracts in a library or EthPM package. Otherwise, the developer would need to manually update the pragma in order to compile locally.

#### **References:**

Ethereum Smart Contract Best Practices - Lock pragmas to specific compiler version.





# Smart Contract Vulnerability Details

SWC-108 - State Variable Default Visibility

#### **CWE-710: Improper Adherence to Coding Standards**

#### **Description:**

Labeling the visibility explicitly makes it easier to catch incorrect assumptions about who can access the variable.

#### Remediation:

Variables can be specified as being public, internal or private. Explicitly define visibility for all state variables.

#### References:

Ethereum Smart Contract Best Practices - Explicitly mark visibility in functions and state variables





# Smart Contract Vulnerability Details

## SWC-120 - Weak Sources of Randomness from Chain Attributes

**CWE-330: Use of Insufficiently Random Values** 

#### **Description:**

Solidity allows for ambiguous naming of state variables when inheritance is used. Contract A with a variable x could inherit contract B that also has a state variable x defined. This would result in two separate versions of x, one of them being accessed from contract A and the other one from contract B. In more complex contract systems this condition could go unnoticed and subsequently lead to security issues.

Shadowing state variables can also occur within a single contract when there are multiple definitions on the contract and function level.

#### Remediation:

Using commitment scheme, e.g. RANDAO. Using external sources of randomness via oracles, e.g. Oraclize. Note that this approach requires trusting in oracle, thus it may be reasonable to use multiple oracles. Using Bitcoin block hashes, as they are more expensive to mine.

#### References:

How can I securely generate a random number in my smart contract?)

When can BLOCKHASH be safely used for a random number? When would it be unsafe?

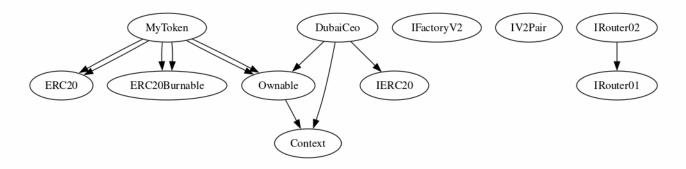
The Run smart contract.





## **Inheritance**

The contract for MyToken has the following inheritance structure.





## Privileged Functions (onlyOwner)

Please Note if the contract is Renounced none of this functions can be executed.

Function Name	Parameters	Visibility
removeLimits		External
launch		External





## **Smart Contract Advance Checks**

ID	Severity	Name	Result	Status
MTK-01	Minor	Potential Sandwich Attacks.	Pass	Not-Found
MTK-02	Minor	Function Visibility Optimization	Pass	Not-Found
MTK-03	Medium	Lack of Input Validation.	Fail	Pending
MTK-04	Major	Centralized Risk In addLiquidity.	Pass	Not-Found
MTK-05	Medium	Missing Event Emission.	Fail	Pending
MTK-06	Minor	Conformance with Solidity Naming Conventions.	Pass	Not-Found
MTK-07	Minor	State Variables could be Declared Constant.	Pass	Not-Found
MTK-08	Minor	Dead Code Elimination.	Pass	Not-Found
MTK-09	Major	Third Party Dependencies.	Pass	Not-Found
MTK-10	Major	Initial Token Distribution.	Pass	Not-Found
MTK-11	Major		Pass	Not-Found
MTK-12	Major	Centralization Risks In The X Role	Fail	Not-Found
MTK-13	Informational	Extra Gas Cost For User	Pass	Pending
MTK-14	Medium	Unnecessary Use Of SafeMath	Pass	Pending
MTK-15	Medium	Symbol Length Limitation due to Solidity Naming Standards.	Pass	Not-Found





ID	Severity	Name	Result	Status
MTK-16	Medium	Invalid collection of Taxes during Transfer.	Pass	Not-FOund
MTK-17	Informational	Conformance to numeric notation best practice.	Pass	Not-Found
MTK-18	Minor	Enable Trade and Exclude Exist to create a whitelist.	Fail	Pending





### MTK-03 | Lack of Input Validation.

Category	Severity	Location	Status
Volatile Code	Medium	TokenERC20Pinksale.sol: L: 166 C: 14	Pending

#### **Description**

The given input is missing the check for the non-zero address.

The given input is missing the check for the .

#### Remediation

We advise the client to add the check for the passed-in values to prevent unexpected errors as below:

```
...
require(receiver != address(0), "Receiver is the zero address");
...
...
require(value X limitation, "Your not able to do this function");
```

We also recommend customer to review the following function that is missing a required validation. .





#### MTK-05 | Missing Event Emission.

Ca	ategory	Severity	Location	Status
	olatile ( ode	Medium	TokenERC20Pinksale.sol: L: 185 C: 14	Pending

#### **Description**

Detected missing events for critical arithmetic parameters. There are functions that have no event emitted, so it is difficult to track off-chain changes. The linked code does not create an event for the transfer.

#### Remediation

Emit an event for critical parameter changes. It is recommended emitting events for the sensitive functions that are controlled by centralization roles.





#### MTK-12 | Centralization Risks In The Role

Category	Severity	Location	Status
Centralization / Privilege	Major	TokenERC20Pinksale.sol: L: 17 C: 18	Not-Found

#### **Description**

In the contract , the role has authority over the following functions:

function burn(), to burn anyone's account at any amount.

function burnFrom(), to burn anyone's account at the number in the range of \_allowed .

Any compromise to the account may allow the hacker to take advantage of this authority.

We understand the role could be assigned to the smart contract, however, the is a map and more addresses could be added.

#### Remediation

The risk describes the current project design and potentially makes iterations to improve in the security operation

and level of decentralization, which in most cases cannot be resolved entirely at the present stage. We advise the

client to carefully manage the privileged account's private key to avoid any potential risks of being hacked. In

general, we strongly recommend centralized privileges or roles in the protocol be improved via a decentralized

mechanism or smart-contract-based accounts with enhanced security practices, e.g., multisignature wallets.

#### **Project Action**





#### MTK-18 | Enable Trade and Exclude from fees exist.

Category	y Severity	Location	Status
Logical Issue	<ol> <li>Minor</li> </ol>	TokenERC20Pinksale.sol: L: 185 C: 14	Pending

#### **Description**

Enable Trade is presend on the following contract and when combined with Exclude from fees it can be considered a whitelist process, this will allow anyone to trade before others and can represent and issue for the holders.

#### Remediation

We recommend the project owner to carefully review this function and avoid problems when performing both actions.

#### **Project Action**

Dev needs to enable trading.





## Technical Findings Summary

#### **Classification of Risk**

Severity	Description
Critical	Risks are those that impact the safe functioning of a platform and must be addressed before launch. Users should not invest in any project with outstanding critical risks.
Major	Risks can include centralization issues and logical errors. Under specific circumstances, these major risks can lead to loss of funds and/or control of the project.
Medium	Risks may not pose a direct risk to users' funds, but they can affect the overall functioning of a platform
Minor	Risks can be any of the above but on a smaller scale. They generally do not compromise the overall integrity of the Project, but they may be less efficient than other solutions.
<ul><li>Informational</li></ul>	Errors are often recommended to improve the code's style or certain operations to fall within industry best practices. They usually do not affect the overall functioning of the code.

#### **Findings**

Severity	Found	Pending	Resolved
Critical	0	0	0
Major	1	0	0
Medium	0	0	0
Minor	2	0	0
<ul><li>Informational</li></ul>	1	0	0
Total	4	0	-0





## **Social Media Checks**

Social Media	URL	Result
Twitter		Fail
Other		Fail
Website https://wenbase.com/		Pass
Telegram		Fail

We recommend to have 3 or more social media sources including a completed working websites.

**Social Media Information Notes:** 

**Auditor Notes: undefined** 

**Project Owner Notes:** 







### **Assessment Results**

#### **Score Results**

Review	Score
Overall Score	82/100
Auditor Score	80/100
Review by Section	Score
Manual Scan Score	32/53
SWC Scan Score	34/37
Advance Check Score	16/19

The Following Score System Has been Added to this page to help understand the value of the audit, the maximun score is 100, however to attain that value the project most pass and provide all the data needed for the assessment. Our Passing Score has been changed to 80 Points, if a project does not attain 80% is an automatic failure. Read our notes and final assessment below.

#### **Audit Passed**







#### **Assessment Results**

### **Important Notes:**

- A few issues/vulnerabilities were found.
- Dev needs to enable trade.
- Contract by Wen D.

## Auditor Score =80 Audit Passed







## **Appendix**

#### **Finding Categories**

#### **Centralization / Privilege**

Centralization / Privilege findings refer to either feature logic or implementation of components that actagainst the nature of decentralization, such as explicit ownership or specialized access roles incombination with a mechanism to relocate funds.

#### **Gas Optimization**

Gas Optimization findings do not affect the functionality of the code but generate different, more optimalEVM opcodes resulting in a reduction on the total gas cost of a transaction.

#### **Logical Issue**

Logical Issue findings detail a fault in the logic of the linked code, such as an incorrect notion on howblock.timestamp works.

#### **Control Flow**

Control Flow findings concern the access control imposed on functions, such as owneronly functionsbeing invoke-able by anyone under certain circumstances.

#### **Volatile Code**

Volatile Code findings refer to segments of code that behave unexpectedly on certain edge cases that mayresult in a vulnerability.

#### **Coding Style**

Coding Style findings usually do not affect the generated byte-code but rather comment on how to makethe codebase more legible and, as a result, easily maintainable.

#### **Inconsistency**

Inconsistency findings refer to functions that should seemingly behave similarly yet contain different code, such as a constructor assignment imposing different require statements on the input variables than a setterfunction.

#### **Coding Best Practices**

ERC 20 Conding Standards are a set of rules that each developer should follow to ensure the code meet a set of creterias and is readable by all the developers.





#### Disclaimer

CFGNINJA has conducted an independent security assessment to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the reviewed code for the scope of this assessment. This report does not constitute agreement, acceptance, or advocation for the Project, and users relying on this report should not consider this as having any merit for financial advice in any shape, form, or nature. The contracts audited do not account for any economic developments that the Project in question may pursue, and the veracity of the findings thus presented in this report relate solely to the proficiency, competence, aptitude, and discretion of our independent auditors, who make no guarantees nor assurance that the contracts are entirely free of exploits, bugs, vulnerabilities or deprecation of technologies.

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