

Building the Futuristic Blockchain Ecosystem

SECURITY AUDIT REPORT



Pepe NFT



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OVERVIEW

The Expelee team has performed a line-by-line manual analysis and automated review of the smart contract. The smart contract was analysed mainly for common smart contract vulnerabilities, exploits, and manipulation hacks. According to the smart contract audit:

Audit Result	Passed
KYC Verification	Done
Audit Date	5 May 2023



PROJECT DESCRIPTION

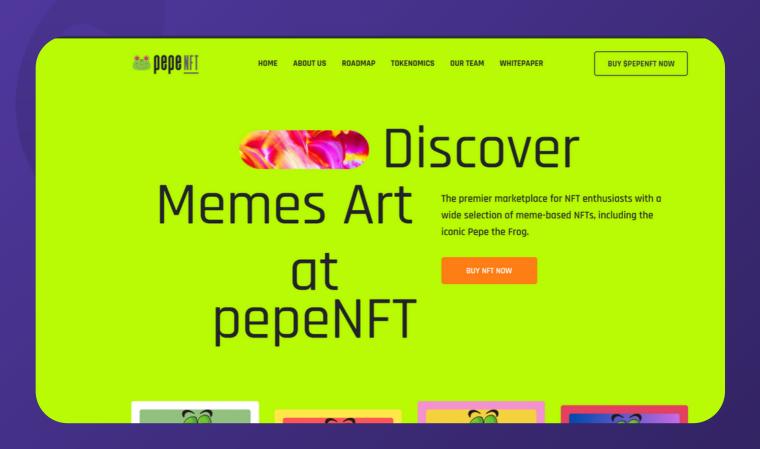
PepeNFT Platform is revolutionizing the meme token industry by opening doors to meme tokens to list their NFT collection for trading in their own currency at zero cost.





SOCIAL MEDIA PROFILES

PEPE NFT







CONTRACT DETAILS

Token Name: Pepe NFT

Symbol: Pepe NFT

Network: Binance Smart Chain

Language: Solidity

Contract Address: 0xc470018443C9A7714896eDeFe98410709637F0aD

Total Supply: 10,000,000,000

Contract SHA-256 Checksum: 6068b99e5e9716a197e39350f6f83e611db6ecf7

Owner's Wallet: 0xfbb5275b0a76fdaf583d2af315d9588845e30b34

Deployer's Wallet: 0xfbb5275b0a76fdaf583d2af315d9588845e30b34

Testnet:

https://testnet.bscscan.com/address/0x25763409946a2cb 3f7738901fc2ad3ad10643fd7



OWNER PRIVILEGES

- Contract owner is able to set buy/sell/transfer tax each one up to 10% (sell tax applies for transfer tax)
- Contract owner is not able to blacklist an arbitrary wallet
- Contract owner is not able to set limit for buy/sell/transfer/holding amounts
- Contract owner is not able to mint new tokens
- Contract owner is able to disable trades
- Contract owner must enable trades for holders manually



TESTNET VERSION

Adding Liquidity 🗹
Tx: https://testnet.bscscan.com/tx/0x8c746d4a64d9abe9ef001786619fd614683 43caa974a6f20c34bf8655934e945
Buying from a fee excluded wallet 🗸
https://testnet.bscscan.com/tx/0x037002353f59842ce7ea2ac50c72226552 8b64a9deb16b342a95ac94b5ba9305
Selling from a fee excluded wallet 🗸
Tx (0% tax): https://testnet.bscscan.com/tx/0x76001c45354c51c3ae43076e24eae60cbbc1a0a2c8782a1cb5d87c8fe98083ec
Transferring using a fee excluded wallet 🗹 Tx (0% tax):
https://testnet.bscscan.com/tx/0x19e00b853a5497b9f71c2c698eb9301359 848f34a9085b6a0f8b9f3ca7700a97
Buying from a regular wallet 🕜
Tx (up to 10% tax):
https://testnet.bscscan.com/tx/0x5082cdcba661adf6e4682baafff30eb3600

91b1f8e2541d83c0623c8905abf2d



TESTNET VERSION

Selling from a regular wallet 🗹						
Tx (up to 10% tax):						
https://testnet.bscscan.com/tx/0xeb646f055ea24c2cdc3f77f681a47632fa0a						
d5681c9e525638585ea43d68d029						
Transferring a regular wallet 🗹						
Tx (up to 10% tax, currently 0%):						
https://testnet.bscscan.com/tx/0xe6f7682f79d5f7862055862ba5a7b534a50						
4c296b3169ae40ea0a35b85c064f4						
4C290D3 1098E4UE8U833D03CU0414						

Internal swap (BNB to marketing wallet, Auto liquidity)

Tx:

https://testnet.bscscan.com/tx/0xeb646f055ea24c2cdc3f77f681a47632fa0a d5681c9e525638585ea43d68d029



AUDIT METHODOLOGY

Audit Details

Our comprehensive audit report provides a full overview of the audited system's architecture, smart contract codebase, and details on any vulnerabilities found within the system.

Audit Goals

The audit goal is to ensure that the project is built to protect investors and users, preventing potentially catastrophic vulnerabilities after launch, that lead to scams and rugpulls.

Code Quality

Our analysis includes both automatic tests and manual code analysis for the following aspects:

- Exploits
- Back-doors
- Vulnerability
- Accuracy
- Readability

Tools

- DE
- Open Zeppelin
- Code Analyzer
- Solidity Code
- Compiler
- Hardhat



VULNERABILITY CHECKS

Design Logic	Passed
Compiler warnings	Passed
Private user data leaks	Passed
Timestamps dependence	Passed
Integer overflow and underflow	Passed
Race conditions & reentrancy. Cross-function race conditions	Passed
Possible delays in data delivery	Passed
Oracle calls	Passed
Front Running	Passed
DoS with Revert	Passed
DoS with block gas limit	Passed
Methods execution permissions	Passed
Economy model	Passed
Impact of the exchange rate on the logic	Passed
Malicious event log	Passed
Scoping and declarations	Passed
Uninitialized storage pointers	Passed
Arithmetic accuracy	Passed
Cross-function race conditions	Passed
Safe Zepplin module	Passed



RISK CLASSIFICATION

When performing smart contract audits, our specialists look for known vulnerabilities as well as logical and acces control issues within the code. The exploitation of these issues by malicious actors may cause serious financial damage to projects that failed to get an audit in time. We categorize these vulnerabilities by the following levels:

High Risk

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

Medium Risk

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

Low Risk

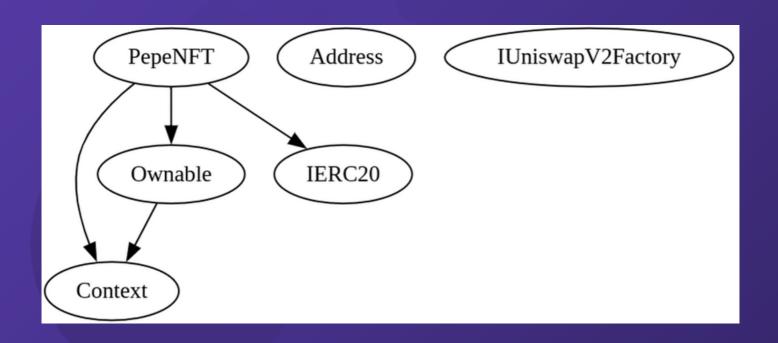
Issues on this level are minor details and warning that can remain unfixed.

Informational

Issues on this level are minor details and warning that can remain unfixed.



INHERITANCE TREES







```
Contract
                Type
                              Bases
   | **Function Name** | **Visibility** | **Mutability** | **Modifiers** |
**Mutability** | **Modifiers** |
| **Context** | Implementation | || |
| L | msgSender | Internal 🔒 | | |
| L | msgData | Internal 🔒 | | |
 **Ownable** | Implementation | Context |||
 L | <Constructor> | Public | | | NO | |
 | owner | Public | | NO | | | |
| L | renounceOwnership | Public | | | | onlyOwner |
| L | transferOwnership | Public | | | left | onlyOwner |
| **IERC20** | Interface | |||
L totalSupply External | NO |
 L | balanceOf | External | | NO | |
 L | transfer | External | | | NO | |
 L | allowance | External | | NO | |
 L | approve | External | | | NO | |
 L | transferFrom | External | | | NO | |
**Address** | Library | |||
 L | isContract | Internal 🔒 | | |
 L | sendValue | Internal 🔒 | 🛑 | |
 L | functionCall | Internal 🔒 | 🛑 | |
 L | functionCall | Internal 🔒 | 🛑 | |
 | | functionCallWithValue | Internal | | | | |
 L | functionCallWithValue | Internal 🔒 | 🛑 | |
| L | functionCallWithValue | Private 🔐 | 🛑 | |
 **IUniswapV2Factory** | Interface | |||
| L | feeTo | External | | NO | |
 | | feeToSetter | External | | NO | |
 L | getPair | External | | NO | |
 L | allPairs | External | | NO | |
 | allPairsLength | External | NO | |
 L | createPair | External | | | NO | |
 L | setFeeTo | External | | | NO | |
 └ | setFeeToSetter | External ! | ● |NO! |
 **IUniswapV2Pair** | Interface | |||
 | name | External | | NO | |
 L | symbol | External | | NO | |
 | decimals | External | | NO | |
 L | totalSupply | External | | | NO | |
```



```
L | balanceOf | External | | NO | |
L | allowance | External | | NO | |
L | approve | External | | | NO | |
L | transfer | External | | | NO | |
L | transferFrom | External | | | NO | |
L | DOMAIN SEPARATOR | External | | | NO | |
L | PERMIT TYPEHASH | External | | | NO | |
I nonces | External | NO | |
| permit | External | | | NO | |
| MINIMUM LIQUIDITY | External | | | NO | |
L | factory | External | | NO | |
L | token0 | External | | NO | |
L | token1 | External | | NO | |
L | getReserves | External | | NO |
| price0CumulativeLast | External | NO | |
| | price1CumulativeLast | External | | NO | |
L|kLast|External | | NO | |
L | burn | External | | | NO | |
L | swap | External | | | NO | |
L | skim | External | | | NO | |
L|sync|External | | | NO | |
| initialize | External | | | NO | |
**IUniswapV2Router01** | Interface | |||
L | factory | External | | NO | |
L | WETH | External | | NO | |
L | addLiquidity | External | | | NO | |
| addLiquidityETH | External | | | | | | | | | | | | | | |
└ | removeLiquidity | External ! | ● |NO! |
| removeLiquidityETH | External | | | NO | |
| removeLiquidityWithPermit | External | | | NO | |
| removeLiquidityETHWithPermit | External | | | NO | |
| swapExactTokensForTokens | External | | | NO | |
| swapTokensForExactTokens | External | | | NO | |
| swapExactTokensForETH | External | | | NO |
| swapETHForExactTokens | External | | | NO | |
L | quote | External | | | NO | |
L | getAmountOut | External | NO | |
L | getAmountIn | External | | NO | |
L | getAmountsOut | External | NO | |
| getAmountsIn | External | NO | |
**IUniswapV2Router02** | Interface | IUniswapV2Router01 |||
```



```
L | swapExactTokensForETHSupportingFeeOnTransferTokens | External | | | NO | |
**PepeNFT** | Implementation | Context, IERC20, Ownable |||
L | <Constructor> | Public | | | NO | |
L | name | Public | | NO | |
L | symbol | Public | | NO | |
L | decimals | Public | | | NO |
L | totalSupply | Public | | NO | |
L | balanceOf | Public | | NO | |
L | transfer | Public | | | NO | |
L | allowance | Public | | NO | |
L | approve | Public | | | NO | |
L | transferFrom | Public | | | NO |
L | increaseAllowance | Public | | | NO |
L | decreaseAllowance | Public | | | NO | |
L | isExcludedFromReward | Public | | NO | |
| totalReflectionDistributed | Public | NO | |
L | deliver | Public | | | NO | |
| reflectionFromToken | Public | NO | |
L | tokenFromReflection | Public | NO | |
| excludeFromReward | Public | | | | onlyOwner |
| includeInReward | External | | | onlyOwner |
L | claimStuckTokens | External | | | | onlyOwner |
L | reflectFee | Private 🔐 | 🛑 | |
L | getValues | Private 🔐 | | |
L | getTValues | Private 🔐 | ||
L | getRValues | Private 🔐 | ||
L | getRate | Private 🔐 | | |
L | getCurrentSupply | Private 🔐 | | |
L | takeLiquidity | Private 🔐 | 🛑 | |
📙 takeMarketing | Private 🔐 | 🛑 | |
L | calculateTaxFee | Private 🔐 | ||
| calculateLiquidityFee | Private | | |
L | calculateMarketingFee | Private 🔐 | ||
└ | removeAllFee | Private 🔐 | 🛑 | |
L | setBuyFee | Private 🔐 | 🛑 | |
L | setSellFee | Private 🔐 | 🛑 | |
L | isExcludedFromFee | Public | | NO | |
L | approve | Private 🔐 | 🌑 | |
└ | enableTrading | External ! | ● | onlyOwner |
L | transfer | Private 🔐 | 🛑 | |
```





MANUAL REVIEW

Severity Criteria

Expelee assesses the severity of disclosed vulnerabilities according to methodology based on OWASP standarts.

Vulnerabilities are dividend into three primary risk categroies:

High

Medium

Low

High-level considerations for vulnerabilities span the following key areas when conducting assessments:

- Malicious input handling
- Escalation of privileges
- Arithmetic
- Gas use

Overall Risk Severity						
	HIGH	Medium	High	Critical		
Impact	MEDIUM	Low	Medium	High		
Impact	LOW	Note	Low	Medium		
		LOW	MEDIUM	HIGH		
	Likelihood					



FINDINGS

Findings	Severity	Found
High Risk	High	1 (1 Resolved)
Medium Risk	Medium	0
Low Risk	Low	0
Suggestion & discussion	Informational	0
Gas Optimizations	● Gas Opt.	0



HIGH RISK FINDING

Enabling trades is not guaranteed

Severity: High

Overview

The owner of the contract must enable trades for public, otherwise no one would be able to buy/sell/transfer their tokens except whitelisted wallets.

```
function enableTrading() external onlyOwner {
require(tradingEnabled == false, "Trading is already
enabled");
tradingEnabled = true;
}
```

Suggestion:

To mitigate this issue there are several options:

- Enable tradings before presale
- Transfer ownership to safu dev for initial days after presale

Issue Status: Resolved (Contract is owned by safu dev for 14 days)



ABOUT EXPELEE

Expelee is a product-based aspirational Web3 start-up.
Coping up with numerous solutions for blockchain security and constructing a Web3 ecosystem from deal making platform to developer hosting open platform, while also developing our own commercial and sustainable blockchain.

www.expelee.com

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Building the Futuristic Blockchain Ecosystem



DISCLAIMER

All the content provided in this document is for general information only and should not be used as financial advice or a reason to buy any investment. Team provides no guarantess against the sale of team tokens or the removal of liquidity by the project audited in this document.

Always do your own research and project yourselves from being scammed. The Expelee team has audited this project for general information and only expresses their opinion based on similar projects and checks from popular diagnostic tools.

Under no circumstances did Expelee receive a payment to manipulate those results or change the awarding badge that we will be adding in our website. Alway do your own research and protect yourselves from scams.

This document should not be presented as a reason to buy or not buy any particular token. The Expelee team disclaims any liability for the resulting losses.



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