

# SECURITY ASSESSMENT Futures AI TOKEN

March 21, 2024

**Audit Status: Pass** 







## RISK ANALYSIS Futures Al.

#### ■ Classifications of Manual Risk Results

| Classification  | Description                      |
|-----------------|----------------------------------|
| Critical        | Danger or Potential Problems.    |
| High            | Be Careful or Fail test.         |
| Medium          | Improve is needed.               |
| Low             | Pass, Not-Detected or Safe Item. |
| i Informational | Function Detected                |

#### Manual Code Review Risk Results

| Manual Code Review Risk | Results      |  |
|-------------------------|--------------|--|
| Contract Security       | Description  |  |
| Buy Tax                 | 0%           |  |
| Sale Tax                | 0%           |  |
| Cannot Buy              | Pass         |  |
| Cannot Sale             | Pass         |  |
| Max Tax                 | 0%           |  |
| Modify Tax              | No           |  |
| Fee Check               | Pass         |  |
| Is Honeypot?            | Not Detected |  |
| Trading Cooldown        | Not Detected |  |
| Enable Trade?           | True         |  |
| Pause Transfer?         | Not Detected |  |

CFG.NINJA Page 1 of 14



| Contract Security   | Description                                |
|---------------------|--|
| Max Tx?             | Pass                                       |
| Is Anti Whale?      | Not Detected                               |
| Is Anti Bot?        | Not Detected                               |
| Is Blacklist?       | Not Detected                               |
| Blacklist Check     | Pass                                       |
| is Whitelist?       | Pass                                       |
| Can Mint?           | Pass                                       |
| Is Proxy?           | Not Detected                               |
| Can Take Ownership? | Not Detected                               |
| Hidden Owner?       | Not Detected                               |
| 1 Owner             | OxE2a17134b59cF53876479e90D06485f42A360e84 |
| Self Destruct?      | Not Detected                               |
| External Call?      | Detected                                   |
| Other?              | Not Detected                               |
| Holders             | 750  |
| Audit Confidence    | High                                       |
| Authority Check     | Pass                                       |
| Freeze Check        | Pass                                       |

The summary section reveals the strengths and weaknesses identified during the assessment, including any vulnerabilities or potential risks that may exist. It serves as a valuable snapshot of the overall security status of the audited project. However, it is highly recommended to read the entire security assessment report for a comprehensive understanding of the findings. The full report provides detailed insights into the assessment process, methodology, and specific recommendations for addressing the identified issues.

CFG.NINJA Page 2 of 14



CFG Ninja Verified on March 21, 2024

## **FuturesAl**



## **Executive Summary**

TYPES ECOSYSTEM LANGUAGE

DeFi Ethereum Solidity

#### **Timeline**



## **Vulnerability Summary**



| O Critical        |                       | Critical risks are the most severe and can have a significant impact on the smart contracts functionality, security, or the entire system. These vulnerabilities can lead to the loss of user funds, unauthorized access, or complete system compromise.                                     |
|-------------------|-----------------------|--|
| O High            |                       | High-risk vulnerabilities have the potential to cause significant harm to the smart contract or the system. While not as severe as critical risks, they can still result in financial losses, data breaches, or denial of service attacks.   |
| 1 Medium          | 0 Resolved, 1 Pending | Medium-risk vulnerabilities pose a moderate level of risk to the smart contracts security and functionality. They may not have an immediate and severe impact but can still lead to potential issues if exploited. These risks should be addressed to ensure the contracts overall security. |
| O Low             |                       | Low-risk vulnerabilities have a minimal impact on the smart contracts security and functionality. They may not pose a significant threat, but it is still advisable to address them to maintain a robust security posture.   |
| 1 0 Informational |                       | Informational risks are not actual vulnerabilities but provide useful information about potential improvements or best practices. These findings may include suggestions for code optimizations, documentation enhancements, or other non-critical areas for improvement.                    |

CFG.NINJA Page 3 of 14



## PROJECT OVERVIEW FuturesAl.

## I Token Summary

| Parameter     | Result   |
|---------------|--|
| Address       | 0xcdBB2498fA9E7b5849bed5D3661386d0cE2733B2                                     |
| Name          | FuturesAl  |
| Token Tracker | FuturesAl (FAI)  |
| Decimals      | 18   |
| Supply        | 1,000,000,000  |
| Platform      | Ethereum   |
| Compiler      | v0.8.19+commit.7dd6d404  |
| Contract Name | FAI  |
| Optimization  | Yes with 200 runs  |
| LicenseType   | MIT  |
| Language      | Solidity   |
| Codebase      | https://etherscan.io/<br>token/0xcdBB2498fA9E7b5849bed5D3661386d0cE2733B2#code |

CFG.NINJA Page 4 of 14



## Main Contract Assessed

| Name      | Contract                                   | Live |
|-----------|--|------|
| FuturesAl | OxcdBB2498fA9E7b5849bed5D3661386dOcE2733B2 | Yes  |

## I TestNet Contract Was Not Assessed

## Solidity Code Provided

| SolID | File Sha-1 | FileName |
|-------|------------|----------|
|       | N/A        |          |
|       |            |          |
|       |            |          |
|       |            |          |
|       |            |          |
|       |            |          |

CFG.NINJA Page 5 of 14



## TECHNICAL FINDINGS Futures Al.

Smart contract security audits classify risks into several categories: Critical, High, Medium, Low, and Informational. These classifications help assess the severity and potential impact of vulnerabilities found in smart contracts.

#### Classification of Risk

| Severity        | Description  |
|-----------------|--|
| Critical        | Critical risks are the most severe and can have a significant impact on the smart contracts functionality, security, or the entire system. These vulnerabilities can lead to the loss of user funds, unauthorized access, or complete system compromise.                                     |
| High            | High-risk vulnerabilities have the potential to cause significant harm to the smart contract or the system. While not as severe as critical risks, they can still result in financial losses, data breaches, or denial of service attacks.   |
| Medium          | Medium-risk vulnerabilities pose a moderate level of risk to the smart contracts security and functionality. They may not have an immediate and severe impact but can still lead to potential issues if exploited. These risks should be addressed to ensure the contracts overall security. |
| Low             | Low-risk vulnerabilities have a minimal impact on the smart contracts security and functionality. They may not pose a significant threat, but it is still advisable to address them to maintain a robust security posture.   |
| 1 Informational | Informational risks are not actual vulnerabilities but provide useful information about potential improvements or best practices. These findings may include suggestions for code optimizations, documentation enhancements, or other non-critical areas for improvement.                    |

By categorizing risks into these classifications, smart contract security audits can prioritize the resolution of critical and high-risk vulnerabilities to ensure the contract's overall security and protect user funds and data.

CFG.NINJA Page 6 of 14



#### FAI-19 | Centralization Privileges of FAI.

| Category        | Severity | Location    | Status       |
|-----------------|----------|-------------|--------------|
| Coding<br>Style | Medium   | : L: 0 C: 0 | Not Detected |

#### **Description**

In a smart contract, the concept of "onlyOwner" functions refers to certain functions that can only be executed by the owner or creator of the contract. These functions are typically designed to perform critical actions or modify sensitive data within the contract. By restricting access to these functions, the contract owner maintains control and ensures the integrity and security of the contract.

| Function Name      | Parameters        | Visibility |
|--------------------|-------------------|------------|
| Renounce Ownership | renounceOwnership | public     |
| Transfer Ownership | transferOwnership | public     |

#### Recommendation

Inheriting from Ownable and calling its constructor on yours ensures that the address deploying your contract is registered as the owner. The onlyOwner modifier makes a function revert if not called by the address registered as the owner. It is important that deployr or owner secure the credentials that has owner priviledge to ensure the security of the project.

## Mitigation

#### References:

Guide to Ownership and Access Control in Solidity

Writing Clean Code for Solidity: Best Practices for Solidity Development

CFG.NINJA Page 7 of 14



#### **I FINDINGS**

In this document, we present the findings and results of the smart contract security audit. The identified vulnerabilities, weaknesses, and potential risks are outlined, along with recommendations for mitigating these issues. It is crucial for the team to address these findings promptly to enhance the security and trustworthiness of the smart contract code.

| Severity                   | Found | Pending | Resolved |
|----------------------------|-------|---------|----------|
| <ul><li>Critical</li></ul> | 0     | 0       | 0        |
| High                       | 0     | 0       | 0        |
| Medium                     | 1     | 1       | 0        |
| Low                        | 0     | 0       | 0        |
| 1 Informational            | 0     | 0       | 0        |
| Total                      | 1     | 1       | 0        |

In a smart contract, a technical finding summary refers to a compilation of identified issues or vulnerabilities discovered during a security audit. These findings can range from coding errors and logical flaws to potential security risks. It is crucial for the project owner to thoroughly review each identified item and take necessary actions to resolve them. By carefully examining the technical finding summary, the project owner can gain insights into the weaknesses or potential threats present in the smart contract. They should prioritize addressing these issues promptly to mitigate any risks associated with the contract's security. Neglecting to address any identified item in the security audit can expose the smart contract to significant risks. Unresolved vulnerabilities can be exploited by malicious actors, potentially leading to financial losses, data breaches, or other detrimental consequences. To ensure the integrity and security of the smart contract, the project owner should engage in a comprehensive review process. This involves understanding the nature and severity of each identified item, consulting with experts if needed, and implementing appropriate fixes or enhancements. Regularly updating and maintaining the smart contract's codebase is also essential to address any emerging security concerns. By diligently reviewing and resolving all identified items in the technical finding summary, the project owner can significantly reduce the risks associated with the smart contract and enhance its overall security posture.

CFG.NINJA Page 8 of 14



## SOCIAL MEDIA CHECKS Futures Al.

| Social Media | URL                        | Result  |
|--------------|----------------------------|---------|
| Website      | https://Futuresai.app      | Pass    |
| Telegram     | https://t.me/TradeWithFAI  | Pass    |
| Twitter      | https://x.com/TradeWithFAI | Pass    |
| Facebook     |                            | N/A     |
| Reddit       | N/A                        | N/A     |
| Instagram    | N/A                        | N/A     |
| CoinGecko    | N/A                        | N/A     |
| Github       |                            | N/A     |
| CMC          | N/A                        | N/A     |
| Email        | N/A                        | Contact |
| Other        |                            | Fail    |

From a security assessment standpoint, inspecting a project's social media presence is essential. It enables the evaluation of the project's reputation, credibility, and trustworthiness within the community. By analyzing the content shared, engagement levels, and the response to any security-related incidents, one can assess the project's commitment to security practices and its ability to handle potential threats.

#### **Social Media Information Notes:**

Auditor Notes: Website needs a bit of improvement.

**Project Owner Notes:** 

CFG.NINJA Page 9 of 14



## ASSESSMENT RESULTS Futures Al.

#### Score Rsesults

| Review        | Score   |
|---------------|---------|
| Overall Score | 100/100 |
| Auditor Score | 90/100  |

| Review by Section   | Score |
|---------------------|-------|
| Manual Scan Score   | 59    |
| SWC Scan Score      | 37    |
| Advance Check Score | 31    |

Our security assessment or audit score system for the smart contract and project follows a comprehensive evaluation process to ensure the highest level of security. The system assigns a score based on various security parameters and benchmarks, with a passing score set at 80 out of a total attainable score of 100. The assessment process includes a thorough review of the smart contracts codebase, architecture, and design principles. It examines potential vulnerabilities, such as code bugs, logical flaws, and potential attack vectors. The evaluation also considers the adherence to best practices and industry standards for secure coding. Additionally, the system assesses the projects overall security measures, including infrastructure security, data protection, and access controls. It evaluates the implementation of encryption, authentication mechanisms, and secure communication protocols. To achieve a passing score, the smart contract and project must attain a minimum of 80 points out of the total attainable score of 100. This ensures that the system has undergone a rigorous security assessment and meets the required standards for secure operation.



CFG.NINJA Page 10 of 14



### Important Notes for FAI

- ReentrancyGuard: Correctly implemented, mitigates reentrancy risks.
- Ownable: Centralized control, potential single point of failure. Monitor owner actions.
- ERC20: Standard implementation, no custom logic in hooks.
- \_mint: Used once, no re-minting function, initial supply set.
- No external calls: Reduces attack surface.
- Arithmetic: Solidity ^0.8.0 prevents overflows/ underflows.
- No delegatecall/selfdestruct: Good, reduces attack vectors.
- Fallback functions: Not present, good for security.
- Complexity: Low, good for reducing bugs/ vulnerabilities.
- Recommendations:
- Consider a multisig wallet for ownership.



- Ensure off-chain governance procedures are secure.
- Monitor contract interactions post-deployment.
- Future updates should be reviewed and tested thoroughly.
- Conclusion: Contract is secure based on current standards, but always subject to changes in best practices and discovery of new vulnerabilities.

## Auditor Score =90 Audit Passed



Page 12 of 14



#### 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.

CFG.NINJA Page 13 of 14



#### Disclaimer

The purpose of this disclaimer is to outline the responsibilities and limitations of the security assessment and smart contract audit conducted by Bladepool/CFG NINJA. By engaging our services, the project owner acknowledges and agrees to the following terms:

1. Limitation of Liability: Bladepool/CFG NINJA shall not be held liable for any damages, losses, or expenses incurred as a result of any contract malfunctions, vulnerabilities, or exploits discovered during the security assessment and smart contract audit. The project owner assumes full responsibility for any consequences arising from the use or implementation of the audited smart contract. 2. No Guarantee of Absolute Security: While Bladepool/CFG NINJA employs industry-standard practices and methodologies to identify potential security risks, it is important to note that no security assessment or smart contract audit can provide an absolute guarantee of security. The project owner acknowledges that there may still be unknown vulnerabilities or risks that are beyond the scope of our assessment. 3. Transfer of Responsibility: By engaging our services, the project owner agrees to assume full responsibility for addressing and mitigating any identified vulnerabilities or risks discovered during the security assessment and smart contract audit. It is the project owner's sole responsibility to ensure the proper implementation of necessary security measures and to address any identified issues promptly. 4. Compliance with Applicable Laws and Regulations: The project owner acknowledges and agrees to comply with all applicable laws, regulations, and industry standards related to the use and implementation of smart contracts. Bladepool/CFG NINJA shall not be held responsible for any non-compliance by the project owner. 5. Third-Party Services: The security assessment and smart contract audit conducted by Bladepool/CFG NINJA may involve the use of thirdparty tools, services, or technologies. While we exercise due diligence in selecting and utilizing these resources, we cannot be held liable for any issues or damages arising from the use of such third-party services. 6. Confidentiality: Bladepool/CFG NINJA maintains strict confidentiality regarding all information and data obtained during the security assessment and smart contract audit. However, we cannot guarantee the security of data transmitted over the internet or through any other means. 7. Not a Financial Advice: Bladepool/CFG NINJA please note that the information provided in the security assessment or audit should not be considered as financial advice. It is always recommended to consult with a financial professional or do thorough research before making any investment decisions.

By engaging our services, the project owner acknowledges and accepts these terms and releases Bladepool/CFG NINJA from any liability, claims, or damages arising from the security assessment and smart contract audit. It is recommended that the project owner consult legal counsel before entering into any agreement or contract.

