

# SMART CONTRACT SECURITY AUDIT

Rocket Launcher

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Website: Approved.ltd



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#### **Disclaimer**

This is a comprehensive report based on our automated and manual examination of cybersecurity vulnerabilities and framework flaws of the project's smart contract.

Reading the full analysis report is essential to build your understanding of project's security level. It is crucial to take note, though we have done our best to perform this analysis and report, that you should not rely on the our research and cannot claim what it states or how we created it.

Before making any judgments, you have to conduct your own independent research.

We will discuss this in more depth in the following disclaimer - please read it fully.

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Security analysis is based only on the smart contracts. No applications or operations were reviewed for security. No product code has been reviewed.



#### **Procedure**

#### Our analysis contains following steps:

- 1. Project Analysis;
- 2. Unit Testing:
  - Smart contract functions will be unit tested on multiple parameters and under multiple conditions to ensure that all paths of functions are functioning as intended.
  - In this phase intended behaviour of smart contract is verified.
  - In this phase, we would also ensure that smart contract functions are not consuming unnecessary gas.
  - · Gas limits of functions will be verified in this stage.
- 3. Manual Testing



## **Terminology**

# We categorize the finding into 4 categories based on their vulnerability:

- Informational —The issue does not affect the contract's operational capability but is considered good practice to address
- Low-severity issue less important, must be analyzed
- Medium-severity issue important, needs to be analyzed and fixed
- High-severity issue —important, might cause vulnerabilities, must be analyzed and fixed
- Critical-severity issue —serious bug causes, must be analyzed and fixed.

#### Limitations

The security audit of Smart Contract cannot cover all vulnerabilities. Even if no vulnerabilities are detected in the audit, there is no guarantee that future smart contracts are safe. Smart contracts are in most cases safeguarded against specific sorts of attacks. In order to find as many flaws as possible, we carried out a comprehensive smart contract audit. Audit is a document that is not legally binding and guarantees nothing.

#### **Basic Security Recommendation**

Unlike hardware and paper wallets, hot wallets are connected to the internet and store private keys online, which exposes them to greater risk. If a company or an individual holds significant amounts of cryptocurrency in a hot wallet, they should consider using MultiSig addresses. Wallet security is enhanced when private keys are stored in different locations and are not controlled by a single entity.



#### Token Contract Details for 30.07.2024



Project Name: Rocket Launcher

Language: Rust

Blockchain: Solana

#### **Social Profiles**

Project Website: https://www.rocketlauncher.gg/

Project Twitter: https://x.com/RocketInchr

Project Telegram: https://t.me/rrrocketlauncher

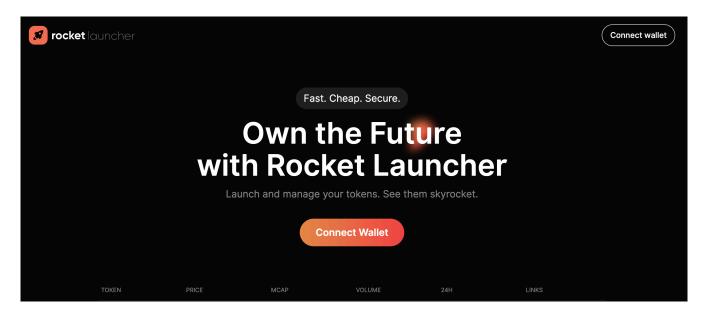
Project Discord: https://discord.com/invite/n8DUKWwXj9

Project TikTok: https://www.tiktok.com/@rrrocketlauncher

Project Medium: https://medium.com/@Inchthisrckt



# **Project Website Overview**



- ✓ JavaScript errors hasn't been found.
- ✓ Malware pop-up windows hasn't been detected.
- ✓ No issues with loading elements, code, or stylesheets.



# Vulnerabilities checking

Issue Description	Checking Status
Compiler Errors	Completed
Delays in Data Delivery	Completed
Re-entrancy	Completed
Transaction-Ordering Dependence	Completed
Timestamp Dependence	Completed
Shadowing State Variables	Completed
DoS with Failed Call	Completed
DoS with Block Gas Limit	Completed
Outdated Complier Version	Completed
Assert Violation	Completed
Use of Deprecated Solidity Functions	Completed
Integer Overflow and Underflow	Completed
Function Default Visibility	Completed
Malicious Event Log	Completed
Math Accuracy	Completed
Design Logic	Completed
Fallback Function Security	Completed
Cross-function Race Conditions	Completed
Safe Zeppelin Module	Completed



## **Security Issues**

1) File: lib.rs

Severity: High

Function: Create\_token (L35)

Overview: An unlimited amount of tokens can be minted.

**Suggestion:** the token creator can mint unlimited amount of tokens which is not recommended. There should be a fixed total supply of tokens.

2) File: lib.rs

**Severity: Medium** 

Function: add\_to\_raydium (L188-L190)

**Overview:** Missing Check

**Suggestion:** this functionality means that the upper tick Index and low tick index can be set to an identical value, if this happens the transaction will fail so it is recommended that the upper tick index be greater than the lower tick index

3) File: lib.rs

**Severity: Medium** 

Function: add\_to\_raydium (L193)

**Overview:** Missing Check

**Suggestion:** the token amount max should be checked, and it is not an excessive amount to prevent overfunding and underfunding.



4) File: lib.rs

**Severity: Medium** 

Function: add\_to\_raydium (L225)

**Overview:** Incorrect Check

**Suggestion:** the contract contains the functionality in which the token amount spent should be greater than the token account amount not more than the token mint supply as this check will fail the transaction and will not be able to provide the correct details that 95% if the total supply was provided into the liquidity. It is recommended that to apply the correct check.

5) File: lib.rs

**Severity: Informational** 

Function: (L479)

Overview: Add more custom errors.

6) File: lib.rs

**Severity: Informational** 

Function: create\_token (L93)

**Overview:** Ensure proper checks and validation before revoking mint authority. For example, confirm that the mint authority has indeed performed all required operations before proceeding with the revocation.



# Conclusion for project owner

High, Medium and Informational issues exist within smart contracts.

NOTE: Please check the disclaimer above and note, that the audit makes no statements or warranties on the business model, investment attractiveness, or code sustainability. Contract security report for community



# **Approved Contact Info**

Website: https://approved.ltd

Telegram: @team\_approved

**GitHub:** https://github.com/Approved-Audits/smart\_contracts

