



# Smart Contract Security Audit Report

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**Answerly**

September 2022

Security Status



[www.hacksafe.io](https://www.hacksafe.io)



# Audit Details



## Audited project

Answerly



## Deployer address

0x341b4D51d1021Ef5a73d3fe13F62C5bB82A72BA7



## Client contacts

Answerly Team



## Blockchain

Polygon



## Website

<https://answerly.app/>



# Disclaimer

This is a limited report on our findings based on our analysis, in accordance with good industry practice as at 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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The analysis of the security is purely based on the smart contracts alone. No applications or operations were reviewed for security. No product code has been reviewed.



# Procedure

## **Step 1 - In-Depth Manual Review**

Manual line-by-line code reviews to ensure the logic behind each function is sound and safe from various attack vectors. This is the most important and lengthy portion of the audit process (as automated tools often cannot find the nuances that lead to exploits such as flash loan attacks).

## **Step 2 - Automated Testing**

Simulation of a variety of interactions with your Smart Contract on a test blockchain leveraging a combination of automated test tools and manual testing to determine if any security vulnerabilities exist.

## **Step 3 – Leadership Review**

The engineers assigned to the audit will schedule meetings with our leadership team to review the contracts, any comments or findings, and ask questions to further apply adversarial thinking to discuss less common attack vectors.

## **Step 4 - Resolution of Issues**

Consulting with the team to provide our recommendations to ensure the code's security and optimize its gas efficiency, if possible. We assist project team's in resolving any outstanding issues or implementing our recommendations.

## **Step 5 - Published Audit Report**

Boiling down results and findings into an easy-to-read report tailored to the project. Our audit reports highlight resolved issues and any risks that exist to the project or its users, along with any remaining suggested remediation measures. Diagrams are included at the end of each report to help users understand the interactions which occur within the project.

# Background

**HackSafe was commissioned by Answerly to perform an audit of smart contract:**

- <https://polygonscan.com/address/0xdacc6be178f123d22b672808d8494eda03c6ebc4#code>

**The purpose of the audit was to achieve the**

- Ensure that the smart contract functions as intended.
- Identify potential security issues with the smart contract.

The information in this report should be understood to understand the risk exposure of the smart contract, and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

# Contract Details

## Token contract details for 21.09.2022

Token Type	: ERC20
Contract name	: Answerly
Contract address	: 0xDaCC6be178f123D22B672808d8494Eda03c6EbC4
Compiler version	: v0.8.0+commit.c7dfd78e
Total supply	: 1,500,000,000
Token ticker	: ANSR
Decimals	: 18
Token holders	: 106
Transactions count	: 150
Contract deployer address	: 0x341b4D51d1021Ef5a73d3fe13F62C5bB82A72BA7
Owner address	: No owner



# Social profiles

Twitter Profile	: <a href="https://twitter.com/answerlyapp">https://twitter.com/answerlyapp</a>
Telegram profile	: <a href="https://t.me/answerlyofficial">https://t.me/answerlyofficial</a>
Coingecko profile	: <a href="https://www.coingecko.com/en/coins/answerly/">https://www.coingecko.com/en/coins/answerly/</a>
Coinmarketcap profile	: <a href="https://coinmarketcap.com/currencies/answerly/">https://coinmarketcap.com/currencies/answerly/</a>
Opensea profile	: <a href="https://opensea.io/Answerly/">https://opensea.io/Answerly/</a>

# Claimed Smart Contract Features

## Claimed Feature Detail

Tokenomics :

- Name : Answerly
- Symbol : ANSR
- Decimals : 18
- Protocol : ERC20
- Total supply : 1,500,000,000
- Contract address : 0xDaCC6be178f123D22B672808d8494Eda03c6EbC4

## Our Observation

YES, this is valid.



# Audit Summary

According to the standard audit assessment, Customer`s solidity smart contracts are “well secure”. This token contract does not contain owner control, which do make it fully decentralized as owner does not have control over smart contract.

Insecure	Poor secured	Secure	Well-secured
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We used various tools like Slither, Mythril and Remix IDE. At the same time this finding is based on critical analysis of the manual audit. All issues found during automated analysis were manually reviewed and applicable vulnerabilities are presented in the issues checking status.

We found 0 critical, 0 high, 0 medium and 1 low and some very low-level issues.

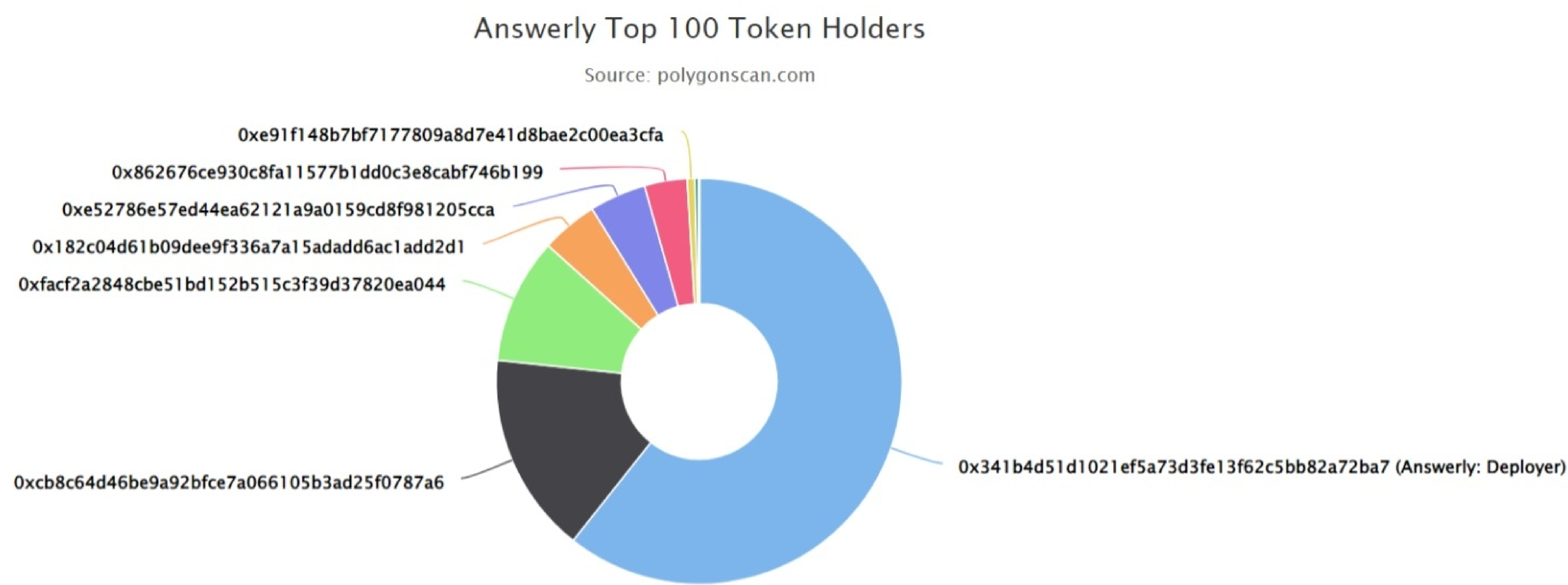
# Answerly Token Distribution

 The top 100 holders collectively own 100.00% (1,499,999,553.37 Tokens) of Answerly

 Token Total Supply: 1,500,000,000.00 Token


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Total Token Holders: 106



## Answerly Top 20 Token Holders

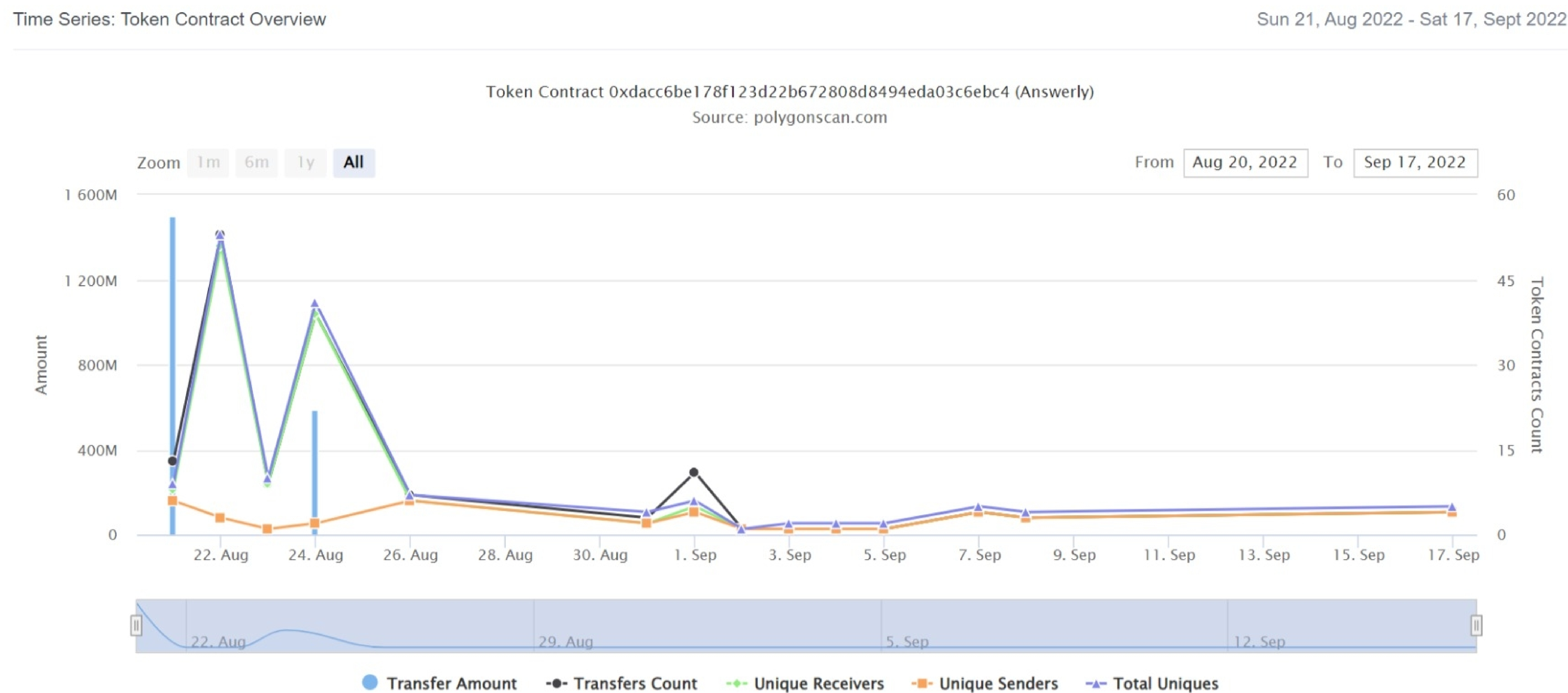
(A total of 1,499,999,553.37 tokens held by the top 100 accounts from the total supply of 1,500,000,000.00 token)

Rank	Address	Quantity (Token)	Percentage
1	Answerly: Deployer	909,886,449.103423511838199823	60.6591%
2	0xcb8c64d46be9a92bfce7a066105b3ad25f0787a6	240,003,165.288186238369792555	16.0002%
3	0xfacf2a2848cbe51bd152b515c3f39d37820ea044	150,000,000	10.0000%
4	0x182c04d61b09dee9f336a7a15adadd6ac1add2d1	67,500,000	4.5000%
5	0xe52786e57ed44ea62121a9a0159cd8f981205cca	67,500,000	4.5000%
6	0x862676ce930c8fa11577b1dd0c3e8cabf746b199	51,000,000	3.4000%
7	0xe91f148b7bf7177809a8d7e41d8bae2c00ea3cfa	9,000,000	0.6000%
8	0x76aee70bcb3369d0d35252e87300d93318212377	5,000,000	0.3333%
9	 0x07cc785bcabd5f60d921874c034894f71cf71499	87,986.497513103541019186	0.0059%
10	0x3def240c8df3e1d95b407b94d2a8cebb37b1c386	9,855	0.0007%
11	0xc772279caca7bb1ec79efff9d61b7814cabeee62	2,297.480410380073925113	0.0002%
12	0xc35cbe933af738c0406d36d9c7f13a434af70587	800	0.0001%
13	0x3fbd140a4ae8eeb650d5fceb0c230c5bbe857162	200	0.0000%
14	0xfaab6068f0feafe60169a1439b34835735262b84	200	0.0000%
15	0x08f539782136f5ecd62fdccda4e34ce2d5c4da83	100	0.0000%
16	0x0cce91e63f7a5d57312d4d81e83db479d79817ae	100	0.0000%
17	0x126b174964e762719e7641e145bcbd8ba6938852	100	0.0000%
18	0x13e2284d6eb74eb9b0dc6426545f28a7897d6824	100	0.0000%
19	0x13e91642033c42786abba6f90a838cdf7bdd0f6	100	0.0000%
20	0x15569a77fa01940e8ebc20e5e22fdb574570c72a	100	0.0000%



# Answerly Token Distribution

## Answerly Contract Overview



# Contract functions details

## + Context

- [Int] \_msgSender
- [Int] \_msgData

## + [Int] IERC20

- [Ext] totalSupply
- [Ext] balanceOf
- [Ext] transfer
- [Ext] allowance
- [Ext] approve
- [Ext] transferFrom

## + [Int] IERC20Metadata (IERC20)

- [Ext] name
- [Ext] symbol
- [Ext] decimals

## + ERC20 (Context, IERC20, IERC20Metadata)

- < constructor>
- [Pub] name
- [Pub] symbol
- [Pub] decimals
- [Pub] totalSupply
- [Pub] balanceOf
- [Pub] transfer
- [Pub] allowance
- [Pub] approve #
- [Pub] transferFrom #
- [Pub] increaseAllowance #
- [Pub] decreaseAllowance #
- [Int] \_transfer #
- [Int] \_mint #
- [Int] \_burn #
- [Int] \_approve #
- [Int] \_spendAllowance #
- [Int] \_beforeTokenTransfer
- [Int] \_afterTokenTransfer



# Contract functions details

+Answerly (ERC20)

-<constructor> #

(\$) = payable function

# = non-constant function

# Issues Checking Status

No.	Title	Status
1.	Unlocked Compiler Version	Low issue
2.	Missing Input Validation	Passed
3.	Race conditions and Reentrancy. Cross-function race conditions.	Passed
4.	Possible delays in data delivery	Passed
5.	Oracle calls.	Passed
6.	Timestamp dependence.	Passed
7.	Integer Overflow and Underflow	Passed
8.	DoS with Revert.	Passed
9.	DoS with block gas limit.	Passed
10.	Methods execution permissions.	Passed
11.	Economy model of the contract.	Passed
12.	Private use data leaks.	Passed
13.	Malicious Event log.	Passed
14.	Scoping and Declarations.	Passed
15.	Uninitialized storage pointers.	Passed
16.	Arithmetic accuracy.	Passed
17.	Design Logic.	Passed
18.	Safe Open Zeppelin contracts implementation and usage.	Passed
19.	Incorrect Naming State Variable	Passed
20.	Too old version	Passed



# Severity Definitions

Risk Level	Description
Critical	Critical vulnerabilities are usually straightforward to exploit and can lead to assets loss or data manipulations.
High	High-level vulnerabilities are difficult to exploit; however, they also have a significant impact on smart contract execution, e.g., public access to crucial functions
Medium	Medium-level vulnerabilities are important to fix; however, they can't lead to assets loss or data manipulations.
Low	Low-level vulnerabilities are mostly related to outdated, unused, etc. code snippets that can't have a significant impact on execution.

# Security Issues

## ✔ Critical Severity Issues

No critical severity issue found.

## ✔ High Severity Issues

No high severity issues found.

## ✔ Medium Severity Issues

No medium severity issues found.

## ✔ Low Severity Issues

One low severity issue found.

### 1. Unlocked Compiler Version.

- **Description**

The contract utilizes an unlocked compiler version. An unlocked compiler version in the contract's source code permits the user to compile it at or above a particular version. This, in turn, leads to differences in the generated bytecode between compilations due to differing compiler version numbers. This can lead to ambiguity when debugging as compiler-specific bugs may occur in the codebase that would be difficult to identify over a span of multiple compiler versions rather than a specific one.

- **Recommendation**

It is advisable that the compiler version is alternatively locked at the lowest version possible so that the contract can be compiled. For example, for version `^0.8.0` the contract should contain the following line:

```
pragma solidity 0.8.0;
```



# Conclusion

Smart contract contains low severity issues! The further transfer and operations with the fund raised are not related to this particular contract.

HackSafe note: Please check the disclaimer above and note, the audit makes no statements or warranties on business model, investment attractiveness or code sustainability. The report is provided for the only contract mentioned in the report and does not include any other potential contracts deployed by Owner.