

FBcoin.live Coin

Smart Contract

Audit Report





TABLE OF CONTENTS

| Audited Details

- Audited Project
- Blockchain
- Addresses
- Project Website
- Codebase

Summary

- Contract Summary
- Audit Findings Summary
- Vulnerabilities Summary

Conclusion

| Audit Results

Smart Contract Analysis

- Detected Vulnerabilities

Disclaimer

About Us



AUDITED DETAILS

| Audited Project

Project name	Token ticker	Blockchain	
FBcoin.live Coin	FB	Binance Smart Chain	

Addresses

Contract address	0x770f030fdbf63ebf1c939de8bcff8943c2c2d454
Contract deployer address	0x189ACf59cCf0844C67058d80Ebf2f4D47560BfE5

Project Website

https://github.com/cubeforex/FBBank

Codebase

https://bscscan.com/address/0x770f030fdbf63ebf1c939de8bcff8943c2c2d454#code



SUMMARY

FBBank is the Web3 world's first decentralized crypto fund. It uses the DAO organization form of the blockchain to build an investment system, which is an unprecedented new financial organization. The FBBank project is committed to solving the shortcomings of ordinary investors, focusing on solving various pain points of ordinary investors, and helping investors to effectively avoid investment decision mistakes caused by various psychological factors. With its excellent results, FBBank has successfully obtained strategic cooperation support from well-known Web3 wallets and DeFi institutions such as Bitkeep, Onto, OKC, CoinHub, CherrySwap, HyperPay, and Ivy Market.

Contract Summary

Documentation Quality

FBcoin.live Coin provides a very poor documentation with standard of solidity base code.

• The technical description is provided unclear and disorganized.

Code Quality

The Overall quality of the basecode is poor.

• Solidity basecode and rules are unclear and disorganized by FBcoin.live Coin.

Test Coverage

Test coverage of the project is 100% (Through Codebase)

Audit Findings Summary

- SWC-100 SWC-108 | Explicitly define visibility for all state variables on lines 71, 86, 97, 106, 119, 128, 137, 147 and 153.
- SWC-103 | Pragma statements can be allowed to float when a contract is intended on lines 10.
- SWC-111 | It is recommended to use alternatives to the deprecated constructions on lines 42, 87, 88, 89, 90, 99, 107, 108, 109, 110, 111, 120, 121, 129, 130, 138, 139 and 148.



CONCLUSION

We have audited the FBcoin.live Coin project released on January 2022 to find issues and identify potential security vulnerabilities in FBcoin.live Coin project. This process is used to find technical issues and security loopholes that may be found in smart contracts.

The security audit report yielded unsatisfactory results, discovering medium-risk and low-risk issues.

Writing a contract that does not follow the Solidity style guide can pose a significant risk. The serious and low problems we found in the smart contract are the built-in symbol "assert" shadowing and the definition "assert" using the same name as a built-in symbol. Reserved names should not be used to avoid confusion. Low-risk found are a floating pragma is set, and the "throw" keyword is deprecated. The current pragma Solidity directive is ""^0.4.12"". Specifying a fixed compiler version is recommended to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code. "throw" is disallowed as of Solidity version 0.5.0. Use one of "revert()", "require()" or "assert()" instead

We were recommended to keep being aware of investing in this risky smart contract.



AUDIT RESULT

Article	Category	Description	Result	
Default Visibility	SWC-100 SWC-108	Functions and state variables visibility should be set explicitly. Visibility levels should be specified consciously.		
Integer Overflow and Underflow	SWC-101	If unchecked math is used, all math operations should be safe from overflows and underflows.	PASS	
Outdated Compiler Version	SWC-102	It is recommended to use a recent version of the Solidity compiler.	PASS	
Floating Pragma	SWC-103	Contracts should be deployed with the same compiler version and flags that they have been tested thoroughly.		
Unchecked Call Return Value	SWC-104	The return value of a message call should be checked.		
Unprotected Ether Withdrawal	SWC-105	Due to missing or insufficient access controls, malicious parties can withdraw from the contract.		
SELFDESTRUCT Instruction	SWC-106	The contract should not be self-destructible while it has funds belonging to users.		
Reentrancy	SWC-107	Check effect interaction pattern should be followed if the code performs recursive call.		
Uninitialized Storage Pointer	SWC-109	Uninitialized local storage variables can point to unexpected storage locations in the contract.		
Assert Violation	SWC-110 SWC-123	PA		
Deprecated Solidity Functions	SWC-111	Deprecated built-in functions should never be used.		
Delegate call to Untrusted Callee	SWC-112	Delegatecalls should only be allowed to trusted addresses.		



DoS (Denial of Service)	SWC-113 SWC-128	Execution of the code should never be blocked by a specific contract state unless required.	
Race Conditions	SWC-114	Race Conditions and Transactions Order Dependency should not be possible.	
Authorization through tx.origin	SWC-115	tx.origin should not be used for authorization.	
Block values as a proxy for time	SWC-116	Block numbers should not be used for time calculations.	
Signature Unique ID	SWC-117 SWC-121 SWC-122	Signed messages should always have a unique id. A transaction hash should not be used as a unique id	
Incorrect Constructor Name	SWC-118	Constructors are special functions that are called only once during the contract creation.	
Shadowing State Variable	SWC-119	State variables should not be shadowed.	
Weak Sources of Randomness	SWC-120	Random values should never be generated from Chain Attributes or be predictable.	
Write to Arbitrary Storage Location	SWC-124	The contract is responsible for ensuring that only authorized user or contract accounts may write to sensitive storage locations.	
Incorrect Inheritance Order	SWC-125		PASS
Insufficient Gas Griefing	SWC-126 Insufficient gas griefing attacks can be performed on contracts which accept data and use it in a sub-call on another contract.		PASS
Arbitrary Jump Function	SWC-127	As Solidity doesnt support pointer arithmetics, it is impossible to change such variable to an arbitrary value.	



Typographical Error	SWC-129	A typographical error can occur for example when the intent of a defined operation is to sum a number to a variable.	
Override control character	SWC-130	Malicious actors can use the Right-To-Left-Override unicode character to force RTL text rendering and confuse users as to the real intent of a contract.	
Unused variables	SWC-131 SWC-135	Unused variables are allowed in Solidity and they do not pose a direct security issue.	
Unexpected Ether balance	SWC-132	Contracts can behave erroneously when they strictly assume a specific Ether balance.	
Hash Collisions Variable	SWC-133	Using abi.encodePacked() with multiple variable length arguments can, in certain situations, lead to a hash collision.	
Hardcoded gas amount	SWC-134	The transfer() and send() functions forward a fixed amount of 2300 gas.	
Unencrypted Private Data	SWC-136	It is a common misconception that private type variables cannot be read.	



SMART CONTRACT ANALYSIS

Started	Monday Jan 17 2022 00:20:43 GMT+0000 (Coordinated Universal Time)		
Finished	Tuesday Jan 18 2022 21:52:04 GMT+0000 (Coordinated Universal Time)		
Mode	Standard		
Main Source File	FB.sol		

Detected Issues

ID	Title	Severity	Status
SWC-000	BUILTIN SYMBOL "ASSERT" SHADOWING	medium	acknowledged
SWC-100	FUNCTION VISIBILITY IS NOT SET (PRIOR TO SOLIDITY 0.5.0)	low	acknowledged
SWC-100	FUNCTION VISIBILITY IS NOT SET (PRIOR TO SOLIDITY 0.5.0)	low	acknowledged
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SWC-100	FUNCTION VISIBILITY IS NOT SET (PRIOR TO SOLIDITY 0.5.0)	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-111	USE OF THE "THROW" KEYWORD IS DEPRECATED.	low	acknowledged
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SWC-111	USE OF THE "THROW" KEYWORD IS DEPRECATED.	low	acknowledged



SWC-000 | BUILTIN SYMBOL "ASSERT" SHADOWING

LINE 40

medium SEVERITY

Definition "assert" uses the same name as a built-in symbol. Reserved names should not be used to avoid confusion.

Source File

- FB.sol

```
39
40 function assert(bool assertion) internal {
41  if (!assertion) {
42  throw;
43  }
44
```



LINE 71

low SEVERITY

The function definition of "FB" lacks a visibility specifier. Note that the compiler assumes "public" visibility by default. Function visibility should always be specified explicitly to assure correctness of the code and improve readability.

Source File

- FB.sol

```
/* Initializes contract with initial supply tokens to the creator of the contract */
function FB(
uint256 initialSupply,
string tokenName,
uint8 decimalUnits,
```



LINE 86

low SEVERITY

The function definition of "transfer" lacks a visibility specifier. Note that the compiler assumes "public" visibility by default. Function visibility should always be specified explicitly to assure correctness of the code and improve readability.

Source File

- FB.sol



LINE 97

low SEVERITY

The function definition of "approve" lacks a visibility specifier. Note that the compiler assumes "public" visibility by default. Function visibility should always be specified explicitly to assure correctness of the code and improve readability.

Source File

- FB.sol

```
/* Allow another contract to spend some tokens in your behalf */
function approve(address _spender, uint256 _value)

returns (bool success) {

if (_value <= 0) throw;

allowance[msg.sender][_spender] = _value;

101</pre>
```



LINE 106

low SEVERITY

The function definition of "transferFrom" lacks a visibility specifier. Note that the compiler assumes "public" visibility by default. Function visibility should always be specified explicitly to assure correctness of the code and improve readability.

Source File

- FB.sol



LINE 119

low SEVERITY

The function definition of "burn" lacks a visibility specifier. Note that the compiler assumes "public" visibility by default. Function visibility should always be specified explicitly to assure correctness of the code and improve readability.

Source File

- FB.sol



LINE 128

low SEVERITY

The function definition of "freeze" lacks a visibility specifier. Note that the compiler assumes "public" visibility by default. Function visibility should always be specified explicitly to assure correctness of the code and improve readability.

Source File

- FB.sol



LINE 137

low SEVERITY

The function definition of "unfreeze" lacks a visibility specifier. Note that the compiler assumes "public" visibility by default. Function visibility should always be specified explicitly to assure correctness of the code and improve readability.

Source File

- FB.sol

```
136
137 function unfreeze(uint256 _value) returns (bool success) {
138 if (freezeOf[msg.sender] < _value) throw; // Check if the sender has enough
139 if (_value <= 0) throw;
140 freezeOf[msg.sender] = SafeMath.safeSub(freezeOf[msg.sender],
_value); // Subtract from the sender
141
```



LINE 147

low SEVERITY

The function definition of "withdrawEther" lacks a visibility specifier. Note that the compiler assumes "public" visibility by default. Function visibility should always be specified explicitly to assure correctness of the code and improve readability.

Source File

- FB.sol

```
146  // transfer balance to owner
147  function withdrawEther(uint256 amount) {
148  if(msg.sender != owner)throw;
149  owner.transfer(amount);
150  }
151
```



LINE 153

low SEVERITY

The function definition of "" lacks a visibility specifier. Note that the compiler assumes "public" visibility by default. Function visibility should always be specified explicitly to assure correctness of the code and improve readability.

Source File

- FB.sol

```
152 // can accept ether
153 function() payable {
154 }
155 }
156
```



SWC-103 | A FLOATING PRAGMA IS SET.

LINE 10

low SEVERITY

The current pragma Solidity directive is ""^0.4.12"". It is recommended to specify a fixed compiler version to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code.

Source File

- FB.sol

```
9
10 pragma solidity ^0.4.12;
11
12 /**
13 * Math operations with safety checks
14
```



LINE 42

low SEVERITY

"throw" is disallowed as of Solidity version 0.5.0. Use one of "revert()", "require()" or "assert()" instead

Source File

- FB.sol

```
41 if (!assertion) {
42 throw;
43 }
44 }
45 }
```



LINE 87

low SEVERITY

"throw" is disallowed as of Solidity version 0.5.0. Use one of "revert()", "require()" or "assert()" instead

Source File

- FB.sol



LINE 88

low SEVERITY

"throw" is disallowed as of Solidity version 0.5.0. Use one of "revert()", "require()" or "assert()" instead

Source File

- FB.sol



LINE 89

low SEVERITY

"throw" is disallowed as of Solidity version 0.5.0. Use one of "revert()", "require()" or "assert()" instead

Source File

- FB.sol



LINE 90

low SEVERITY

"throw" is disallowed as of Solidity version 0.5.0. Use one of "revert()", "require()" or "assert()" instead

Source File

- FB.sol



LINE 99

low SEVERITY

"throw" is disallowed as of Solidity version 0.5.0. Use one of "revert()", "require()" or "assert()" instead

Source File

- FB.sol

```
98  returns (bool success) {
99   if (_value <= 0) throw;
100   allowance[msg.sender][_spender] = _value;
101  return true;
102  }
103</pre>
```



LINE 107

low SEVERITY

"throw" is disallowed as of Solidity version 0.5.0. Use one of "revert()", "require()" or "assert()" instead

Source File

- FB.sol



LINE 108

low SEVERITY

"throw" is disallowed as of Solidity version 0.5.0. Use one of "revert()", "require()" or "assert()" instead

Source File

- FB.sol



LINE 109

low SEVERITY

"throw" is disallowed as of Solidity version 0.5.0. Use one of "revert()", "require()" or "assert()" instead

Source File

- FB.sol



LINE 110

low SEVERITY

"throw" is disallowed as of Solidity version 0.5.0. Use one of "revert()", "require()" or "assert()" instead

Source File

- FB.sol



LINE 111

low SEVERITY

"throw" is disallowed as of Solidity version 0.5.0. Use one of "revert()", "require()" or "assert()" instead

Source File

- FB.sol



LINE 120

low SEVERITY

"throw" is disallowed as of Solidity version 0.5.0. Use one of "revert()", "require()" or "assert()" instead

Source File

- FB.sol



LINE 121

low SEVERITY

"throw" is disallowed as of Solidity version 0.5.0. Use one of "revert()", "require()" or "assert()" instead

Source File

- FB.sol



LINE 129

low SEVERITY

"throw" is disallowed as of Solidity version 0.5.0. Use one of "revert()", "require()" or "assert()" instead

Source File

- FB.sol



LINE 130

low SEVERITY

"throw" is disallowed as of Solidity version 0.5.0. Use one of "revert()", "require()" or "assert()" instead

Source File

- FB.sol



LINE 138

low SEVERITY

"throw" is disallowed as of Solidity version 0.5.0. Use one of "revert()", "require()" or "assert()" instead

Source File

- FB.sol



LINE 139

low SEVERITY

"throw" is disallowed as of Solidity version 0.5.0. Use one of "revert()", "require()" or "assert()" instead

Source File

- FB.sol



LINE 148

low SEVERITY

"throw" is disallowed as of Solidity version 0.5.0. Use one of "revert()", "require()" or "assert()" instead

Source File

- FB.sol

```
function withdrawEther(uint256 amount) {
  if(msg.sender != owner)throw;
  owner.transfer(amount);
}
```



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