Smart Contract

Security Assessment

For LinaMeets 25 June 2022



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Executive Summary

Severity	Found
High	1
Medium	1
Low	3
Informational	68
Total	73

We performed an independent technical audit to identify Smart Contracts uncertainties. This shall protect the code from illegitimate authorization attempts or external & internal threats of any type. This also ensures end-to-end proofing of the contract from frauds. The audit was performed semi-manually. We analyzed the Smart Contracts code line-by-line and used an automation tool to report any suspicious code.

The following tools were used:

- Truffle
- Remix IDE
- Slither

Overview

This report has been prepared for LinaMeets on the Polygon network. Ascendant provides a user-centered examination of the smart contracts to look for vulnerabilities, logic errors or other issues from both an internal and external perspective.

Summary

Project Name	LinaMeets
Platform	Polygon
Language	Solidity

Contracts Assessed

Name	Location
linameets.sol	Not deployed
ERC721A.sol	In LinaMeets_NFT Contract
IERC721A.sol	In LinaMeets_NFT Contract
ERC721A_IERC721Receiver.sol	In LinaMeets_NFT Contract
Ownable.sol	In LinaMeets_NFT Contract
Context.sol	In LinaMeets_NFT Contract
Strings.sol	In LinaMeets_NFT Contract

Findings Summary

Severity	Found
High	1
Medium	1
Low	3
Informational	68
Total	73

Classification of Issues

High	Exploits, vulnerabilities or errors that will certainly or probabilistically lead towards loss of funds, control, or impairment of the contract and its functions. Issues under this classification are recommended to be fixed with utmost urgency.
Medium	Bugs or issues that may be subject to exploit, though their impact is somewhat limited. Issues under this classification are recommended to be fixed as soon as possible.
Low	Effects are minimal in isolation and do not pose a significant danger to the project or its users. Issues under this classification are recommended to be fixed nonetheless.
Informational	Consistency, syntax or style best practices, Generally pose a negligible level of risk, if any.

Manual Review



Issues Checking Status

Issue Description	Checking Status
Compiler errors	PASS
Race conditions and Reentrancy. Crossfunction race conditions.	PASS
Possible delays in data delivery.	PASS
Oracle calls.	PASS
Front running.	PASS
Timestamp dependence.	PASS
Integer Overflow and Underflow.	PASS
DoS with Revert.	PASS
DoS with block gas limit.	PASS
Methods execution permissions.	PASS
Economy model of the contract.	PASS
The impact of the exchange rate on the logic.	PASS
Private user data leaks.	PASS
Malicious Event log.	PASS
Scoping and Declarations.	PASS
Uninitialized storage pointers.	PASS

Arithmetic accuracy.	PASS
Design Logic.	PASS
Cross-function race conditions.	PASS
Safe Open Zeppelin contracts implementation and usage.	PASS
Fallback function security.	PASS

Audit Findings

Severity	High
Contract	linameets.sol
Description	IPFS hash visible in comments
Code Snippet	1510: //QmVJZya8rKExh5qw14QEqo92WbPKgtZrpf5sJP adSevuny
Recommendation	Delete the comment containing the ipfs hash on line 1510

Severity	Medium
Contract	linameets.sol
Description	string baseURI declared public
Code Snippet	1407: string public baseURI;
Recommendation	When the baseURI is public, this means that even before the reveal function is called, any person can read the baseURI variable, which in the best case scenario, makes the reveal pointless, but in the worse case scenario, a bad actor can use the hash to locate your stored images, download them, and sell them on their own without paying for them.
	Make the baseURI a private variable.

Functional Test Status

Function Name	Type/Return Type	Score
baseURI	read/public	PASS
unrevURI	read/public	PASS
baseExtension	read/public	PASS
cost	read/public	PASS
maxSupply	read/public	PASS
public_paused	read/public	PASS
revealed	read/public	PASS
_baseURI	internal	PASS
mint	payable/public	PASS
ownerMint	write/public	PASS
tokenURI	read/public	PASS
setCost	write/public	PASS
setBaseURI	write/public	PASS
setUnrevURI	write/public	PASS
setBaseExtension	write/public	PASS
startPublicSale	write/public	PASS
stopPublicSale	write/public	PASS
revealNFT	write/public	PASS

	withdraw	payable/public	PASS
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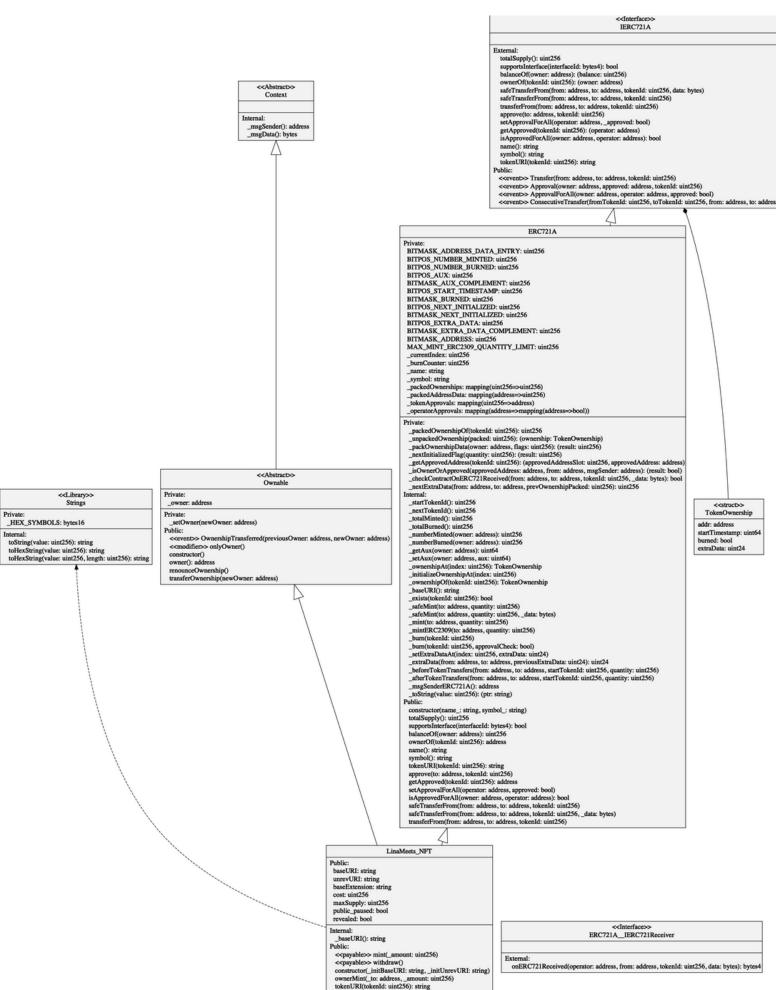
Automated Review



Inheritance Graph

LinaMeets_NFT mint(uint256) setCost(uint256) setBaseURI(string) setUnrevURI(string) setBaseExtension(string) startPublicSale() Strings Private Function ERC721A_IERC721Receiver toString(uint256) stopPublicSale() toHexString(uint256) toHexString(uint256,uint256) revealNFT() withdraw() onERC721Received(address,address,uint256,bytes) Private Variables: Private Functions _HEX_SYMBOLS baseURI unrevURI baseExtension cost maxSupply public_paused revealed ERC721A Public Functions: startTokenId() _nextTokenId() totalMinted() _totalBurned() _numberMinted(address) numberBurned(address) _getAux(address) _setAux(address,uint64) _packedOwnershipOf(uint256) _unpackedOwnership(uint256) _ownershipAt(uint256) _initializeOwnershipAt(uint256) _ownershipOf(uint256) packOwnershipData(address.uint256) Ownable _baseURI() _nextInitializedFlag(uint256) Public Functions: owner() exists(uint256) renounceOwnership() _safeMint(address,uint256) _safeMint(address,uint256,bytes) transferOwnership(address) Private Functions: _mint(address,uint256) _mintERC2309(address,uint256) _setOwner(address) Modifiers: getApprovedAddress(uint256) onlyOwner() Private Variables _isOwnerOrApproved(address,address,address) _burn(uint256) owner burn(uint256.bool) _nextExtraData(address,address,uint256) _extraData(address,address,uint24) _beforeTokenTransfers(address,address,uint256,uint256) _afterTokenTransfers(address,address,uint256,uint256) _msgSenderERC721A() _toString(uint256) Private Variables: BITMASK_ADDRESS_DATA_ENTRY BITPOS_NUMBER_MINTED BITPOS_NUMBER_BURNED BITPOS AUX BITMASK_AUX_COMPLEMENT BITPOS_START_TIMESTAMP BITMASK BURNED BITPOS_NEXT_INITIALIZED BITMASK_NEXT_INITIALIZED BITPOS_EXTRA_DATA BITMASK_EXTRA_DATA_COMPLEMENT BITMASK ADDRESS MAX_MINT_ERC2309_QUANTITY_LIMIT _currentIndex burnCounter _name _symbol _packedOwnerships _packedAddressData _tokenApprovals operatorApprovals IERC721A Public Functions totalSupply() supportsInterface(bytes4) balanceOf(address) ownerOf(uint256) safeTransferFrom(address,address,uint256,bytes) safeTransferFrom(address,address,uint256) Private Function _msgSender() transferFrom(address,address,uint256) approve(address,uint256) setApprovalForAll(address,bool) getApproved(uint256) isApprovedForAll(address,address) symbol() tokenURI(uint256)

Unified Modeling Language(UML)



setCost(_newCost: uint256)

Function ID Report

ERC721AIERC721Receiver: +					
	- 1	ID	1		
on Intercontrol on ERC721Received (address, address, uint 256, bytes) 0x150b7a02					
+		+		+	
LinaMeets_NFT:					
+ Name		+ ID		+	
+				+	
owner()	0	x8da!	5cb5k)	
renounceOwnership()			0x71	5018a6	
transferOwnership(addre					
constructor(string,string)					
totalSupply()					
supportsInterface(bytes4	.)	1	0x01	ffc9a7	
balanceOf(address)		0	x70a	08231	
ownerOf(uint256)					
name()	0	x06fc	lde03	3	
symbol()	()x95d	89b4	1	
tokenURI(uint256)		0x	c87b	56dd	
approve(address,uint25					
getApproved(uint256)		(0x081	.812fc	
setApprovalForAll(address	,boc	ıl)	0x	a22cb465	
isApprovedForAll(address,address) 0xe985e9c5					
safeTransferFrom(address,address,uint256) 0x42842e0e					
safeTransferFrom(address,address,uint256,bytes) 0xb88d4fde					
transferFrom(address,addres	ss,ui	nt256	5)	0x23b872dd	
totalSupply()		0x18	160dd	bb	
supportsInterface(bytes4	.)		0x01	ffc9a7	
balanceOf(address)		0	x70a	08231	
ownerOf(uint256)		0x	6352	211e	
safeTransferFrom(address,add			-		
safeTransferFrom(address,ad	dres	s,uin	t256)	0x42842e0e	
transferFrom(address,address,uint256) 0x23b872dd					
approve(address,uint256) 0x095ea7b3					
setApprovalForAll(address,bool) 0xa22cb465					
getApproved(uint256) 0x081812fc					
isApprovedForAll(address,		•	•	0xe985e9c5	
name()	•	x06fc		•	
symbol()	()x95d	89b4	1	

	tokenURI(uint256)	0xc87b56dd
	constructor(string,string)	0xd4d8c5c3
	mint(uint256)	0xa0712d68
	ownerMint(address,uint256) 0x484b973c
- 1	tokenURI(uint256)	0xc87b56dd
	setCost(uint256)	0x44a0d68a
	setBaseURI(string)	0x55f804b3
- 1	setUnrevURI(string)	0x841bfb27
	setBaseExtension(string)	0xda3ef23f
	startPublicSale()	0x0c1c972a
	stopPublicSale()	0xda1b91c3
1	revealNFT()	0x04b4bba9
	withdraw()	0x3ccfd60b
- 1	baseURI()	0x6c0360eb
I	unrevURI()	0x580b1c8d
- 1	baseExtension()	0xc6682862
1	cost()	0x13faede6
	maxSupply()	0xd5abeb01
	public_paused()	0x5c6331bd
- 1	revealed()	0x51830227
+		+

Conclusion

The smart contracts reviewed in this audit contain no critical severity issues and all High to Medium issues have either been corrected or acknowledged.

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.

