#### **Smart Contract**

# Security Assessment

For LooksYummyToken 25 Oct 2022



#### **Ascendant**

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The audit report has made all reasonable attempts to provide clear and articulate recommendations to the Project team with respect to the rectification, amendment and/or revision of any highlighted issues, vulnerabilities or exploits within the contracts provided. It is the sole responsibility of the Project team to sufficiently test and perform checks, ensuring that the contracts are functioning as intended, specifically that the functions therein contained within said contracts have the desired intended effects, functionalities and outcomes of the Project team. Ascendant retains full rights over all intellectual property (including expertise and new attack or exploit vectors) discovered during the audit process. Ascendant is therefore allowed and expected to re-use this knowledge in subsequent audits and to inform existing projects that may have similar vulnerabilities. Ascendant may, at its discretion, claim bug bounties from third-parties while doing so.

#### **Executive Summary**

Severity	Found
High	0
Medium	2
Low	21
Informational	140
Total	163

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 LooksYummyToken on the Binance 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	LooksYummyToken	
Platform	Binance	
Language	Solidity	

### **Contracts Assessed**

Name	Location
LooksYummyToken.sol	Not Published
SafeMath.sol	In LooksYummyToken contract
IERC20.sol	In LooksYummyToken contract
IERC165Upgradeable.sol	In LooksYummyToken contract
StringsUpgradeable.sol	In LooksYummyToken contract
IAccessControlUpgradeable.sol	In LooksYummyToken contract

Name	Location
StorageSlotUpgradeable.sol	In LooksYummyToken contract
IBeaconUpgradeable.sol	In LooksYummyToken contract
IERC1822ProxiableUpgradeable.sol	In LooksYummyToken contract
AddressUpgradeable.sol	In LooksYummyToken contract
Initializable.sol	In LooksYummyToken contract
ERC165Upgradeable.sol	In LooksYummyToken contract
ERC1967UpgradeUpgradeable.sol	In LooksYummyToken contract
UUPSUpgradeable.sol	In LooksYummyToken contract
ContextUpgradeable.sol	In LooksYummyToken contract
AccessControlUpgradeable.sol	In LooksYummyToken contract
OwnableUpgradeable.sol	In LooksYummyToken contract
IERC20Upgradeable.sol	In LooksYummyToken contract
IERC20MetadataUpgradeable.sol	In LooksYummyToken contract
ERC20Upgradeable.sol	In LooksYummyToken contract
Math.sol	In LooksYummyToken contract
IYummyswapFactory.sol	In LooksYummyToken contract
IYummyswapPair	In LooksYummyToken contract
IYummyswapRouter02	In LooksYummyToken contract

## Findings Summary

Severity	Found
High	0
Medium	2
Low	21
Informational	140
Total	163

#### 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



### **Comments**

This report has been prepared for LooksYummyToken on the Binance network. In addition to the standard security audit, the client has requested a review of the following additional items:

Issue	Comments
UUPS Upgradeability:	UUPS standard has been implemented to correctly.
Contract should be able to upgrade the proxy contract to reduce the number of owners from 5 to 1.	The contract owner will only need to deploy the proxy contract and then upgrade it with the desired source code to reflect the changes.

### **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

Severity	Medium
Contract	LooksYummyToken.sol
Description	Logic: swapTokensforBUSD attempts to swap BEP20 tokens but calls swapExactTokensForETHSupportingFees
Code Snippet	function swapTokensForBUSD(uint256 tokenAmount) private { // generate the uniswap pair path of token -> weth address[] memory path = new address[](2); path[0] = address(this); path[1] = busdAddress;  _approve(address(this), address(yummyswapV2Router), tokenAmount);  // make the swap yummyswapV2Router.swapExactTok ensForETHSupportingFeeOnTransfer Tokens(
Recommendation	The correct Yummyswap function to call is swapExactTokensForTokensSupportingFe eOnTransferToken, since that's what the path specifies.
Status	AMENDED

Severity	Medium
Contract	LooksYummyToken.sol
Description	No fallback function
Code Snippet	N/A
Recommendation	Note: This issue is partly dependent on Medium Issue #1. The contract swaps tokens for BNB (or the chain's native token). The contract must contain a fallback or receiver function in order to handle the BNB, or else this function will fail when it is triggered. Regardless of whether your intention is to swap for BNB or a BEP20 token, it is good practice to include a fallback
Status	AMENDED

Severity	Lowx3
Contract	LooksYummyToken.sol
Description	Functions lack zero-check.
Code Snippet	LooksYummyToken.setVaultAddre ss LooksYummyToken.setFaucetAddr ess LooksYummyToken.setBondingAd dress

Recommendation

Require statements should be added to the above functions to prevent being set to the zero address.

Status

**AMENDED** 

Severity	Low
Contract	LooksYummyToken.sol
Description	Multiple solidity versions used
Code Snippet	N/A
Recommendation	Use only one solidity version to ensure consistency.
Status	AMENDED

Severity	Informational
Contract	LooksYummyToken.sol
Description	Optimization: Math.sol and SafeMath.sol both imported
Code Snippet	N/A
Recommendation	Both Math.sol and SafeMath.sol are used but only SafeMath is likely necessary. Remove any redundancies from the source code.
Status	AMENDED

#### **Functional Test Status**

Function Name	Type/Return Type	Score
IERC20Upgradeable		
allowance	read/external	PASS
approve	write/external	PASS
balanceOf	read/external	PASS
totalSupply	read/external	PASS
transfer	write/external	PASS
transferFrom	write/external	PASS
IAccessControlUpgradeable		
getRoleAdmin	read/external	PASS
grantRole	write/external	PASS
hasRole	read/external	PASS
renounceRole	write/external	PASS
revokeRole	write/external	PASS
StorageSlotUpgradeable		
getAddressSlot	internal	PASS
getBooleanSlot	internal	PASS
getBytes32Slot	internal	PASS
getUint256Slot	internal	PASS

Function Name	Type/Return Type	Score
AddressUpgradeable		
functionCall	internal	PASS
functionCallWithValue	internal	PASS
functionStaticCall	internal	PASS
isContract	internal	PASS
sendValue	internal	PASS
verifyCallResult	internal	PASS
Intializable		
_disableInitializers	internal	PASS
UUPSUpgradeable		
_authorizeUpgrade	internal	PASS
proxiableUUID	read/external	PASS
upgradeTo	write/external	PASS
Context		
_msgData	internal	PASS
_msgSender	internal	PASS
Ownable		
_checkOwner	internal	PASS

Function Name	Type/Return Type	Score
_transferOwnership	internal	PASS
owner	read/public	PASS
renounceOwnership	write/public	PASS
transferOwnership	write/public	PASS
IERC20MetadataUpgradeable		
decimals	read/external	PASS
name	read/external	PASS
symbol	read/external	PASS
IYummyswapFactory		
INIT_CODE_HASH	read/external	PASS
allPairs	read/external	PASS
allPairsLength	read/external	PASS
createPair	write/external	PASS
feeTo	write/external	PASS
feeToSetter	write/external	PASS
getPair	read/external	PASS
setDevFee	write/external	PASS
setFeeTo	write/external	PASS

setFeeToSetter	write/external	PASS
setSwapFee	write/external	PASS
IYummyswapPair		
DOMAIN_SEPARATOR	read/external	PASS
MINIMUM_LIQUIDITY	read/external	PASS
PERMIT_TYPEHASH	write/external	PASS
allowance	read/external	PASS
approve	write/external	PASS
balanceOf	read/external	PASS
burn	write/external	PASS
decimals	read/external	PASS
devFee	read/external	PASS
factory	read/external	PASS
getReserves	read/external	PASS
initialize	write/external	PASS
kLast	read/external	PASS
mint	write/external	PASS
name	read/external	PASS
nonces	read/external	PASS
permit	write/external	PASS
price0CumulativeLast	read/external	PASS
price1CumulativeLast	read/external	PASS

setDevFee	write/external	PASS
setSwapFee	write/external	PASS
skim	external	PASS
swapFee	external	PASS
symbol	read/external	PASS
sync	external	PASS
token0	read/external	PASS
token1	read/external	PASS
transfer	write/external	PASS
transferFrom	write/external	PASS
IYummyswapRouter02		
WETH	read/external	PASS
addLiquidity	write/external	PASS
addLiquidityETH	write/external	PASS
getAmountIn	read/external	PASS
getAmountOut	read/external	PASS
getAmountsIn	read/external	PASS
getAmountsOut	read/external	PASS
quote	external	PASS
removeLiquidity	write/external	PASS
removeLiquidityETH	write/external	PASS
removeLiquidityETHSupportingFeeOnTransferTokens	write/external	PASS

removeLiquidityETHWithPermit	write/external	PASS
removeLiquidityETHWithPermitSupportingFeeOnTransferTokens	write/external	PASS
removeLiquidityWithPermit	write/external	PASS
swapETHForExactTokens	write/external	PASS
swapExactETHForTokens	write/external	PASS
swapExactETHForTokensSupportingFeeOnTransferTokens	write/external	PASS
swapExactTokensForTokens	write/external	PASS
swapExactTokensForTokensSupportingFeeOnTransferTokens	write/external	PASS
swapFeeReward	write/external	PASS
swapTokensForExactETH	write/external	PASS
swapTokensForExactTokens	write/external	PASS
LooksYummyToken		
LooksYummyToken addLiquidity	private	PASS
	private read/public	PASS PASS
addLiquidity		
addLiquidity  calculateTransferTaxes	read/public	PASS
addLiquidity  calculateTransferTaxes  decimals	read/public	PASS PASS
addLiquidity  calculateTransferTaxes  decimals  excludeAccount	read/public read/public write/external	PASS PASS
addLiquidity  calculateTransferTaxes  decimals  excludeAccount  handleAdminRole	read/public read/public write/external write/public	PASS PASS PASS
addLiquidity  calculateTransferTaxes  decimals  excludeAccount  handleAdminRole  handleDevRole	read/public read/public write/external write/public write/public	PASS PASS PASS
addLiquidity  calculateTransferTaxes  decimals  excludeAccount  handleAdminRole  handleDevRole  handleModRole	read/public read/public write/external write/public write/public write/public	PASS PASS PASS PASS
addLiquidity  calculateTransferTaxes  decimals  excludeAccount  handleAdminRole  handleDevRole  handleModRole  includeAccount	read/public read/public write/external write/public write/public write/public	PASS PASS PASS PASS PASS

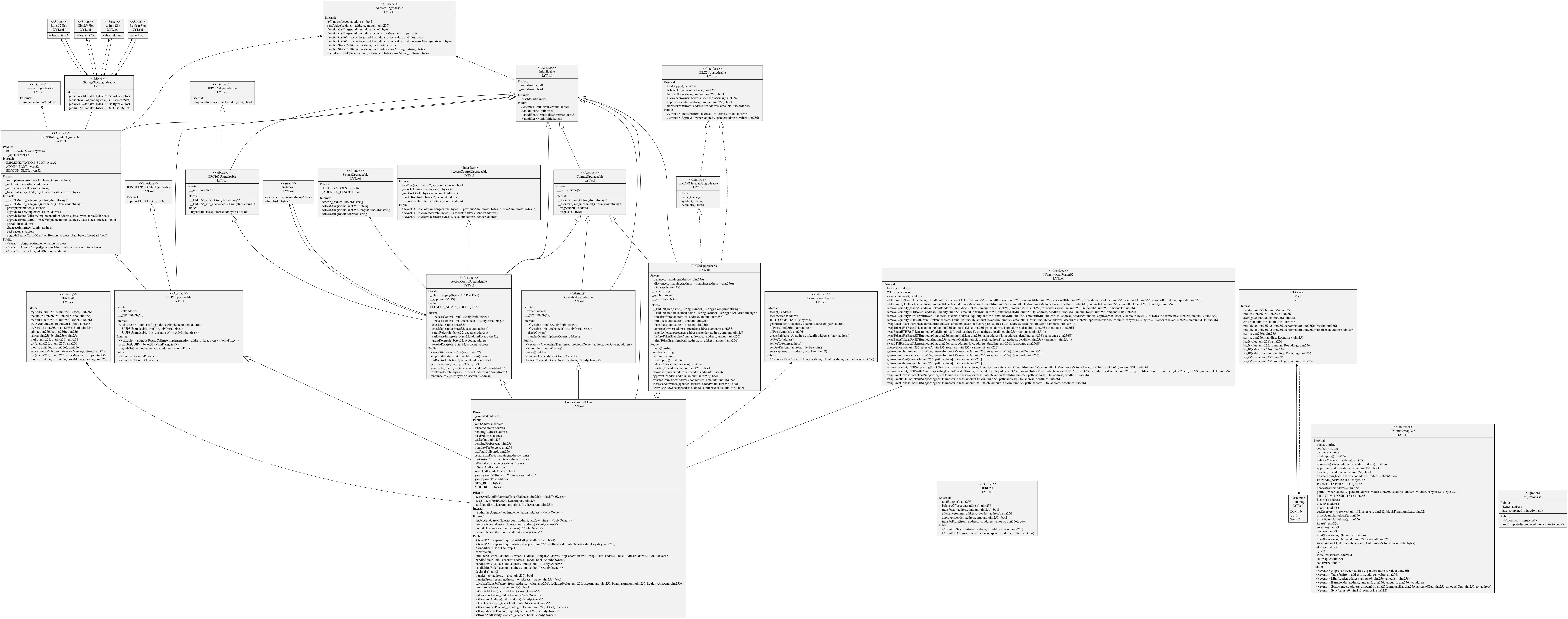
removeAccountCustomTax	write/external	PASS
setAccountCustomTax	write/external	PASS
setBondingAddress	write/public	PASS
setBondingFeePercent	write/public	PASS
setFaucetAddress	write/public	PASS
setLiquidityFeePercent	write/public	PASS
setSwapAndLiquifyEnabled	write/public	PASS
setTaxFeePercent	write/public	PASS
setVaultAddress	write/public	PASS
swapAndLiquify	private	PASS
swapTokensForBUSD	private	PASS
transfer	write/public	PASS
transferFrom	write/public	PASS

#### **Omitted Results**

Note: Any issues that have been omitted from this report have been deemed by the reviewing team as irrelevant, inapplicable, and/or negligible to the proper functioning of this contract. Thus, any omitted issues can be safely ignored.

# **Automated Review**





### **Conclusion**

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

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