Coinsult

Advanced Manual Smart Contract Audit

Project: Get Schiffy Token

Website: https://www.getschiffy.com/en

Low-Risk	Medium-Risk	High-Risk
6 low-risk code issues found	3 medium-risk code issues found	0 high-risk code issues found

Contract Address

0x4aa6027De5acf37eF2221Af51c5a8930E44e52F6

Disclaimer

Coinsult is not responsible if a project turns out to be a scam, rug-pull or honeypot. We only provide a detailed analysis for your own research.

Coinsult is not responsible for any financial losses. Nothing in this contract audit is financial advice, please do your own research.

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Tokenomics

Rank	Address	Quantity (Token)	Percentage
1	0x407993575c91ce7643a4d4ccacc9a98c36ee1bbe	746,205,963,000	74.6206%
2	0xc00b613698ba19f82a6e4f47bc2ddae2dcfe4a7b	96,152,856,420.563205638160876875	9.6153%
3	0xd25a3afcec7ff51fa194e09788277918df263ef4	46,957,530,000	4.6958%
4	0xfe64d9b21bc114e6f1ccaef73ba519b327732713	8,364,030,112.2928361424099	0.8364%
5	0x12d0704441bc04c6b661685f70c51993716d9dbc	7,793,611,164.55380353149965	0.7794%

Source Code

Coinsult was comissioned by Get Schiffy Token to perform an audit based on the following smart contract:

https://bscscan.com/address/0x4aa6027De5acf37eF2221Af51c5a8930E44e52F6#code

Manual Code Review

In this audit report we will highlight all these issues:

🟢 Low-Risk

6 low-risk code
issues found

🟡 Medium-Risk

3 medium-risk code
issues found

🔴 High-Risk

0 high-risk code
issues found

The detailed report continues on the next page...

🟢 **Low-Risk:** Could be fixed, will not bring problems.

Contract contains Reentrancy vulnerabilities

Additional information: This combination increases risk of malicious intent. While it may be justified by some complex mechanics (e.g. rebase, reflections, buyback).

More information: Slither

```
External calls:
- uniswapV2Pair = IUniswapV2Factory(_uniswapV2Router.factory()).createPair(address(this),_uniswapV2R
State variables written after the call(s):
- setExcludes() (#687)
- _isExcludedFromFee[owner()] = true (#693)
- _isExcludedFromFee[address(this)] = true (#694)
- _isExcludedFromFee[_playToEarnWallet] = true (#695)
- setExcludes() (#687)
- _isExcludedFromMaxTx[owner()] = true (#697)
- _isExcludedFromMaxTx[address(this)] = true (#698)
- _isExcludedFromMaxTx[_playToEarnWallet] = true (#699)
- uniswapV2Router = _uniswapV2Router (#685)
```

Recommendation

Apply the check-effects-interactions pattern.

Exploit scenario

```
function withdrawBalance(){
    // send userBalance[msg.sender] Ether to msg.sender
    // if mgs.sender is a contract, it will call its fallback function
    if( ! (msg.sender.call.value(userBalance[msg.sender])() ) ){
        throw;
    }
    userBalance[msg.sender] = 0;
}
```

Bob uses the re-entrancy bug to call withdrawBalance two times, and withdraw more than its initial deposit to the contract.

🟢 **Low-Risk:** Could be fixed, will not bring problems.

Avoid relying on block.timestamp

block.timestamp can be manipulated by miners.

```
//Locks the contract for owner for the amount of time provided
function lock(uint256 time) public virtual onlyOwner {
    _previousOwner = _owner;
    _owner = address(0);
    _lockTime = block.timestamp + time;
    emit OwnershipTransferred(_owner, address(0));
}

//Unlocks the contract for owner when _lockTime is exceeds
function unlock() public virtual {
    require(_previousOwner == msg.sender, "You don't have permission to unlock");
    require(block.timestamp &gt; _lockTime , "Contract is locked until 7 days");
    emit OwnershipTransferred(_owner, _previousOwner);
    _owner = _previousOwner;
}
```

Recommendation

Do not use `block.timestamp`, now or `blockhash` as a source of randomness

Exploit scenario

```
contract Game {

    uint reward_determining_number;

    function guessing() external{
      reward_determining_number = uint256(block.blockhash(10000)) % 10;
    }
}
```

Eve is a miner. Eve calls `guessing` and re-orders the block containing the transaction. As a result, Eve wins the game.

🟢 **Low-Risk:** Could be fixed, will not bring problems.

Too many digits

Literals with many digits are difficult to read and review.

```
uint256 public swapThreshold = (_tTotal * 10) / 100000; // 0.01% of supply
```

Recommendation

Use: Ether suffix, Time suffix, or The scientific notation

Exploit scenario

```
contract MyContract{
    uint 1_ether = 10000000000000000000;
}
```

While `1_ether` looks like `1 ether`, it is `10 ether`. As a result, it's likely to be used incorrectly.

🟢 **Low-Risk:** Could be fixed, will not bring problems.

No zero address validation for some functions

Detect missing zero address validation.

```
event UpdateFeeReceiver(address newwallet);
function updateAdminFeeReceirver(address newwallet) external onlyOwner {
    adminFeeReceiver = newwallet;
    emit UpdateFeeReceiver(newwallet);
}
```

Recommendation

Check that the new address is not zero.

Exploit scenario

```
contract C {

  modifier onlyAdmin {
    if (msg.sender != owner) throw;
    _;
  }

  function updateOwner(address newOwner) onlyAdmin external {
    owner = newOwner;
  }
}
```

Bob calls `updateOwner` without specifying the `newOwner`, soBob loses ownership of the contract.

🟢 **Low-Risk:** Could be fixed, will not bring problems.

Conformance to Solidity naming conventions

Allow _ at the beginning of the mixed_case match for private variables and unused parameters.

```
Function IUniswapV2Pair.DOMAIN_SEPARATOR() (#469) is not in mixedCase
Function IUniswapV2Pair.PERMIT_TYPEHASH() (#470) is not in mixedCase
Function IUniswapV2Pair.MINIMUM_LIQUIDITY() (#487) is not in mixedCase
Function IUniswapV2Router01.WETH() (#507) is not in mixedCase
Variable GetSchiffyGold.SWAPTOKEN (#667) is not in mixedCase
```

Recommendation

Follow the Solidity naming convention.

Rule exceptions

- Allow constant variable name/symbol/decimals to be lowercase (`ERC20`).
- Allow _ at the beginning of the `mixed_case` match for private variables and unused parameters.

🟢 **Low-Risk:** Could be fixed, will not bring problems.

Costly operations inside a loop

Costly operations inside a loop might waste gas, so optimizations are justified.

```
function includeInReward(address account) external onlyOwner() {
    require(_isExcluded[account], "Account is already excluded");
    for (uint256 i = 0; i &lt; _excluded.length; i++) {
        if (_excluded[i] == account) {
            _excluded[i] = _excluded[_excluded.length - 1];
            _tOwned[account] = 0;
            _isExcluded[account] = false;
            _excluded.pop();
            break;
        }
    }
}
```

Recommendation

Use a local variable to hold the loop computation result.

Exploit scenario

```
contract CostlyOperationsInLoop{

    function bad() external{
        for (uint i=0; i < loop_count; i++){
            state_variable++;
        }
    }

    function good() external{
      uint local_variable = state_variable;
      for (uint i=0; i < loop_count; i++){
        local_variable++;
      }
      state_variable = local_variable;
    }
}
```

Incrementing `state_variable` in a loop incurs a lot of gas because of expensive `SSTORE`s, which might lead to an `out-of-gas`.

🟡 **Medium-Risk:** Should be fixed, could bring problems.

No check on lock time

```
//Locks the contract for owner for the amount of time provided
function lock(uint256 time) public virtual onlyOwner {
    _previousOwner = _owner;
    _owner = address(0);
    _lockTime = block.timestamp + time;
    emit OwnershipTransferred(_owner, address(0));
}
```

Recommendation

Since you rennounce the ownership of the contract for an X amount of time, you should check this value (x) to be sure you won't unintentionally lock it for too long / infinity and you won't be able to get ownership of the contract back.

✅ Acknowledged by Get Schiffy

🟡 **Medium-Risk:** Should be fixed, could bring problems.

Wrong event emitted

```
event ExcludeFromReward(address indexed account);
function excludeFromReward(address account) external onlyOwner() {
    require(!_isExcluded[account], "Account is already excluded");
    if(_rOwned[account] &gt; 0) {
        _tOwned[account] = tokenFromReflection(_rOwned[account]);
    }
    _isExcluded[account] = true;
    _excluded.push(account);
    emit ExcludeFromMaxTx(account);
}
```

Recommendation

When you exclude from rewards, you emitted an excluded from max transaction event. Which is not correct.

✅ Comment by Get Schiffy:
This poses no risk to token holders at all.

🟡 **Medium-Risk:** Should be fixed, could bring problems.

Unchecked transfer, but event emitted

```
event ClaimedBUSD(address indexed to, uint256 amount);
function claimBusd() external onlyOwner {
    emit ClaimedBUSD(_msgSender(), SWAPTOKEN.balanceOf(address(this)));
    SWAPTOKEN.transfer(_msgSender(), SWAPTOKEN.balanceOf(address(this)));
}
```

Recommendation

First perform the transfer, then check successful transfer, then emit event.

✅ Comment by Get Schiffy

This poses no risk to token holders at all.

Owner privileges

- Owner cannot set fees higher than 25%
- Owner cannot pause trading
- Owner can change max transaction amount
- Owner can exclude from fees

Extra notes by the team

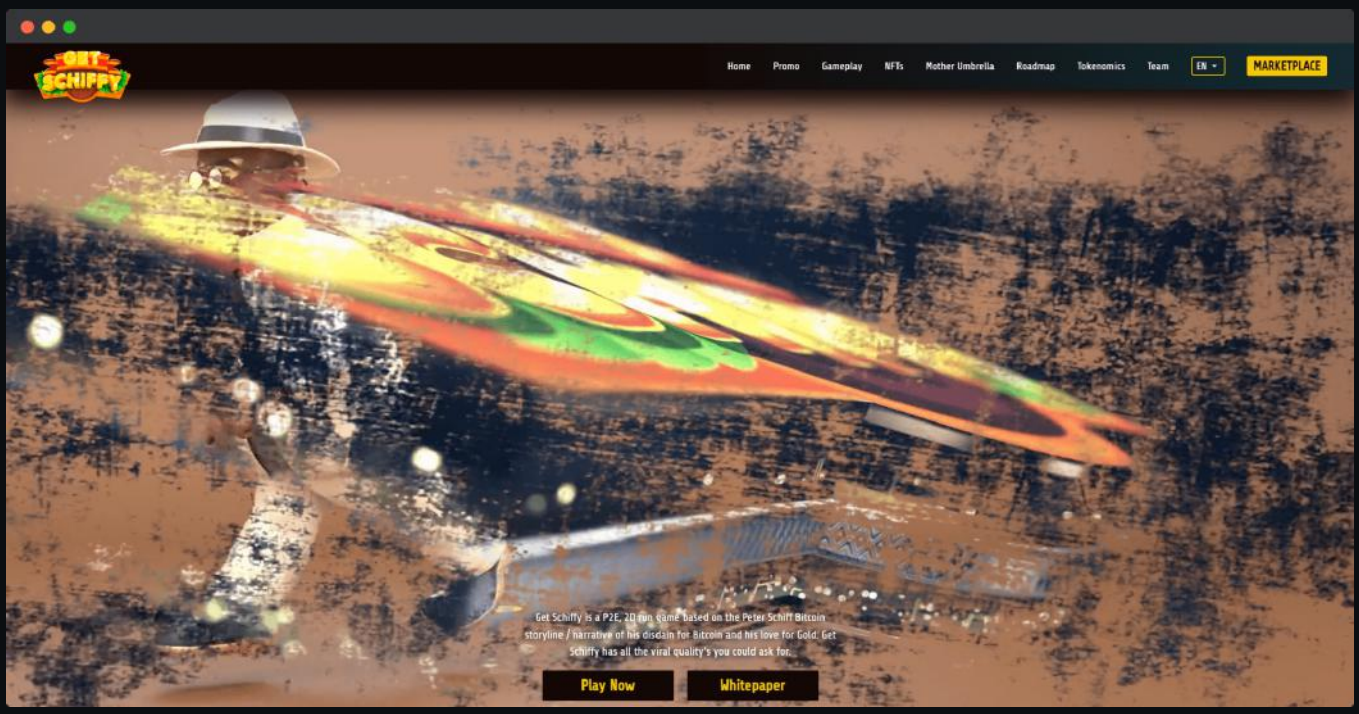
No notes

Contract Snapshot

```
contract GetSchiffyGold is Context, IGOLD, Ownable {
using SafeMath for uint256;
using Address for address;

mapping (address =&gt; uint256) private _rOwned;
mapping (address =&gt; uint256) private _tOwned;
mapping (address =&gt; mapping (address =&gt; uint256)) private _allowances;
mapping (address =&gt; bool) private _isExcludedFromFee;
mapping (address =&gt; bool) private _isExcluded;
mapping (address =&gt; bool) private _isExcludedFromMaxTx;

address[] private _excluded;
uint256 private constant MAX = ~uint256(0);
uint256 private _tTotal = 1 * 10**12 * 10**18;
uint256 private _rTotal = (MAX - (MAX % _tTotal));
string private _name;
string private _symbol;
uint8 private _decimals = 18;

uint256 private _playToEarn = 50;
uint256 private _previousPlayToEarn = _playToEarn;
uint256 private _taxFee = 25;
uint256 private _previousTaxFee = _taxFee;
uint256 private _tFeeTotal;

IUniswapV2Router02 public uniswapV2Router;
address public uniswapV2Pair;
IGOLD public SWAPTOKEN = IGOLD(0xe9e7CEA3DedcA5984780Bafc599bD69ADd087D56);
uint256 public _maxTxAmount;
uint256 public swapThreshold = (_tTotal * 10) / 100000; // 0.01% of supply
address public adminFeeReceiver;

constructor() {
    _name = "Get Schiffy Gold";
    _symbol = "GOLD";
    _maxTxAmount = _tTotal.mul(5).div(10**3);
    _rOwned[_msgSender()] = _rTotal;
```

Website Review

Coinsult checks the website completely manually and looks for visual, technical and textual errors. We also look at the security, speed and accessibility of the website. In short, a complete check to see if the website meets the current standard of the web development industry.



- Mobile Friendly
- Does not contain jQuery errors
- SSL Secured
- No major spelling errors

Project Overview

Not KYC verified by Coinsult

Get Schiffy Token

Audited by Coinsult.net

Date: 25 June 2022

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