

Advanced Manual Smart Contract Audit



Project: Dragon Fist

Website: https://www.dragonfist.xyz/



8 low-risk code issues found

Medium-Risk

0 medium-risk code issues found



0 high-risk code issues found

Contract Address

0xbCA393547bD1EF1a1007C1916eC02Cc28B45Ce1D

Disclaimer: 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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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.

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Tokenomics

Rank	Address	Quantity (Token)	Percentage
1	0xd01623490aedc15334ab447d5875d96f1856bd89	100,000,000,000,000	100.0000%

Source Code

Coinsult was comissioned by Dragon Fist to perform an audit based on the following smart contract:

https://bscscan.com/address/0xbca393547bd1ef1a1007c1916ec02cc28b45ce1d#code

Manual Code Review

In this audit report we will highlight all these issues:



8 low-risk code issues found



0 medium-risk code issues found



0 high-risk code issues found

The detailed report continues on the next page...

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

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.

Avoid relying on block.timestamp

block.timestamp can be manipulated by miners.

```
function getUnlockTime() public view returns (uint256) {
   return _lockTime;
}
```

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.

Too many digits

Literals with many digits are difficult to read and review.

Recommendation

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

Exploit scenario

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

No zero address validation for some functions

Detect missing zero address validation.

```
function setdTokenTracker(address newAddress) external onlyOwner() {
    dividendTokenTracker = newAddress;
}
```

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.

Functions that send Ether to arbitrary destinations

Unprotected call to a function sending Ether to an arbitrary address.

```
function addLiquidity(uint256 tokenAmount, uint256 ethAmount) private {
    // approve token transfer to cover all possible scenarios
    _approve(address(this), address(uniswapV2Router), tokenAmount);

    // add the liquidity
    uniswapV2Router.addLiquidityETH{value: ethAmount}(
        address(this),
        tokenAmount,
        0, // slippage is unavoidable
        0, // slippage is unavoidable
        dividendTokenTracker,
        block.timestamp
    );
}
```

Recommendation

Ensure that an arbitrary user cannot withdraw unauthorized funds.

Exploit scenario

```
contract ArbitrarySend{
   address destination;
   function setDestination(){
      destination = msg.sender;
   }

   function withdraw() public{
      destination.transfer(this.balance);
   }
}
```

Bob calls setDestination and withdraw. As a result he withdraws the contract's balance.

Missing events arithmetic

Detect missing events for critical arithmetic parameters.

```
function setBuyTaxes(uint256 newLiquidityTax, uint256 newMarketingTax, uint256 newTeamTax) external
    _buyLiquidityFee = newLiquidityTax;
    _buyMarketingFee = newMarketingTax;
    _buyTeamFee = newTeamTax;

_totalTaxIfBuying = _buyLiquidityFee.add(_buyMarketingFee).add(_buyTeamFee);
}
```

Recommendation

Emit an event for critical parameter changes.

Exploit scenario

```
contract C {

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

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

updateOwner() has no event, so it is difficult to track off-chain changes in the buy price.

Conformance to Solidity naming conventions

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

```
uint256 public _sellTeamFee = 2;
```

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.

Redundant Statements

Detect the usage of redundant statements that have no effect.

```
function _msgData() internal view virtual returns (bytes memory) {
   this; // silence state mutability warning without generating bytecode - see https://github.com/erreturn msg.data;
}
```

Recommendation

Remove redundant statements if they congest code but offer no value.

Exploit scenario

```
contract RedundantStatementsContract {
    constructor() public {
        uint; // Elementary Type Name
        bool; // Elementary Type Name
        RedundantStatementsContract; // Identifier
    }
    function test() public returns (uint) {
        uint; // Elementary Type Name
        assert; // Identifier
        test; // Identifier
        return 777;
    }
}
```

Each commented line references types/identifiers, but performs no action with them, so no code will be generated for such statements and they can be removed.

Owner privileges

- Owner can change max transaction amount
- Owner can set fees higher than 25%
- Owner can exclude from fees
- Owner can pause the contract
- Owner can blacklist addresses
- ⚠ Owner can enable/ disable wallet limit

Extra notes by the team

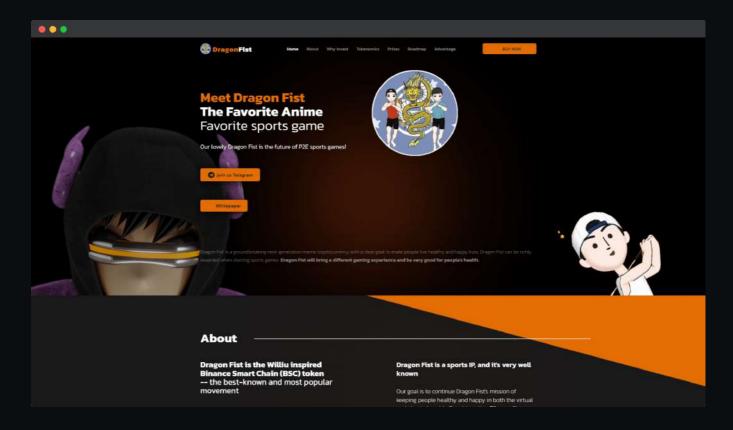
No notes

Contract Snapshot

```
contract DragonFist is Context, IERC20, Ownable {
   using SafeMath for uint256;
   using Address for address;
   string private _name = "Dragon Fist";
   string private _symbol = "Dragon Fist";
   uint8 private _decimals = 9;
   address payable public marketingWalletAddress; // Marketing Address
   address payable public teamWalletAddress; // Team Address
   mapping (address => uint256) _balances;
   mapping (address => mapping (address => uint256)) private _allowances;
   mapping (address => bool) public isExcludedFromFee;
   mapping (address => bool) public isWalletLimitExempt;
   mapping (address => bool) public isTxLimitExempt;
   mapping (address => bool) public isMarketPair;
mapping (address => bool) public isbotBlockList;
mapping (address => bool) public isPair;
```

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

