unchecked-returns-1.md 3/2/2023

# **Unchecked Returns Exercise 1**

## Intro

DonationMaster is a charity dapp that allows user to create fundraising projects for good causes.

DonationMaster. sol is a contract for creating "fundraising Projects", and allowing donators to donate for these projects.

A test file (tests.js) contains some test cases for the DonationMaster.sol contract.

Someone just created a new donation to a multi-sig wallet.

MultiSigSafe.sol is the contract that implements a multi-signature wallet to store ETH in a safely manner, and it supposed to received the eth from the donations.

All the tests should pass if you run npm run unchecked-returns-1.

Can we be sure that the contract works properly and securely? Not necessarily.

# **Accounts**

- 0 Deployer & Owner
- 1 User1
- 2 User2
- 3 User3

# **Tasks**

## Task 1

Find the problem in DonationMaster.sol, and implement THE RIGHT TEST under the Fixed tests section in the tests.js file that will "catch" the bug.

### Task 2

Fix DonationMaster.sol and create a secured version without the bug in the /contracts/unchecked-returns-1/solution folder, name your contract DonationMasterSecured.sol.

#### Task 3

There are also some issues with the MultiSigSafe.sol, find them, and create a secured version without the bug in the /contracts/unchecked-returns-1/solution folder, name your contract MultiSigSafeSecured.sol.

#### Task 4

Change the tests.js file so the tests will work with your secured contracts, and make sure your Fixed tests section pass.

unchecked-returns-1.md 3/2/2023