

sch-exercises-part-1

JohnnyTime's smart contract hacking course part 1 exercises.

Smart Contract Hacking Exercises Guidelines

Structure

- The following repository is a hardhat project
- There are 3 main folders:
 - `./instructions` - All the instructions for the exercises
 - `./contracts` - The smart contracts of the exercises
 - `./test` - The test files to execute the exercises and complete them

Setup & Exercise Execution

Dependencies

- From the root folder run: `npm i`

RPC NODE - For Mainnet Forks

- Sign up to [Infura](#) and get an Ethereum Mainnet URL for free.
- Copy the `.env-example` file and call it `.env` then set there your Infura URL for:
 - `MAINNET` - Ethereum Mainnet

Exercise Execution

- To execute and test an exercise, run the command `npm run [exercise-name]` from the root folder
- You can always check all the exercise names in the `./package.json` file

Exercise Execution Example

In case you are working on the exercise "reentrancy-2":

- Feel free to create contracts under `./contracts/reentrancy-2/`
- Feel free to change `./tests/reentrancy-2/tests.js` file

Execute from the root folder: `npm run reentrancy-2` to check if you completed the exercise successfully.

Guidelines

Unless you've been told otherwise in a specific exercise, you may not change the EVM state with special hardhat functionalities (balances, block time, etc...), and you may not change the `before` and `after` sections in the test files.

Hardhat Basic Commands

```
npx hardhat help  
npx hardhat test  
REPORT_GAS=true npx hardhat test  
npx hardhat node  
npx hardhat run scripts/deploy.js
```