README.md 2/28/2023

# sch-solutions-part-1

JohnnyTime's smart contract hacking course part 1 exercises WITH the solutions.

## **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

#### Infura

- Sign up to Infura and get an Ethereum Mainnet URL for free.
- Copy the <u>env-example</u> file and call it <u>env</u> 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.

README.md 2/28/2023

### Hardhat Basic Commands

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