Introduction to Decentralized Finance

Homework 0

1 Announcement

- The assignment contains only 1 problem.

- In case you encounter technical issues with Homework 0, kindly consult online resources initially, as most problems are likely related to your local environment. If challenges persist, reach out to `2b@csie.ntu.edu.tw` following these guidelines:

  1. Title your email `[DeFi-HW0][Summary-Of-Your-Issue]`. Please note that we will **NOT** receive emails in other formats as we have applied filters to our email system.
  2. Provide detailed information about your computer, including the operating system.
  3. Outline the methods you attempted previously, the resources you consulted, the steps you followed, and the results of your efforts.
  4. Note that ambiguous requests, such as attaching screenshots without proper descriptions, will not be answered. **Such emailing will lower your priority.**

2 Preliminaries

- Git

- GitHub

- Foundry

  1. Install Foundry: `curl -L https://foundry.paradigm.xyz | bash`
  2. Install or update Foundry: `foundryup`
  3. Related Resource: foundry book, cheat sheet 1, cheat sheet 2

- Check forge version: `forge --version`

  1. The result will be similar to `forge 0.2.0 (c312c0d 2023-12-22T00:20:29.297186000Z)`

3 Problem 1

In this problem, we will download our homework template for HW0, and introduce Foundry project layout, Please follow the instruction below:

1. Click this link and create a repository.

2. Download this repository to your local environment.

3. Enter the project directory `cd hw` and run `forge install`

4. Attempt to run all the tests: `forge test`, the result should look like Figure 1

5. Change the license from `UNLICENSE` to `MIT` in the `hw/src/Counter.sol` file, commit the changes, and push the updated code to GitHub.

6. Check the Git Action section and click one of the workflows, and you will see Figure 2 and Figure 3.

7. Check the workflow information, make sure the `Autograding Reporter` section passes. The result resembles Figure 4

8. Finish the application form to enroll for the course.

Figure 1: Forge Test Result
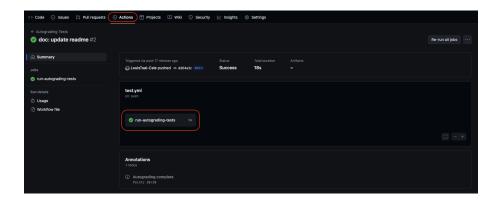

Figure 2: Check Git Action Section

Figure 3: Check Workflow Information

Figure 4: Grading Result