Assignment 2

Online Quiz App

Your assignment if you choose to attempt is to make a quiz app where up to *N* number of people can participate in a single game of 4 questions.

Rules of the game:

1. *N* number of people participate in a single game of 4 questions.
2. Each person pays a participation fee (*pFee*) before entering the game.
3. Let *tFee* denote the aggregated some of all the participants' fee in the game.
4. For each correct answer a participant gets 3/16**tFee* reward. That is, the contract earns a quarter of *tFee* in each game.

Apart from these basic rules, students are free to end more sophistication as long as it remains a fair and justifiable game.

Also, based on what you studied so far, figure out all the security measures required to implement such a system. It's a very simple problem, but you are expected to come with your own complex versions. The more unique and complex system you build, the higher marks you get.

Please don't ask and discuss the security measures and new sophistications on moodle, it's a part of the assignment to get to the details and think of various aspects, you are suppose to get them on your own as you develop the system.

Testing

You are also required to design and write test cases in truffle for the contract.
The test cases must be exhaustive i.e., all possible cases, including the boundary cases, must be covered

Scoring

The scoring will be based on the following:

1. Security, privacy and cost efficiency of smart contracts.
2. Uniqueness and added sophistication.
3. Test cases covered.

Other Details

- Programming Language : Solidity
- Testing Platform : Truffle
- Assignment Deadline : 31 October, 8:29 AM

- Plagiarism: All the submissions will be checked for copy cases. If caught, 0 mark will be awarded to all the members