

# Card game

## 1. Objective

Build a card game. The rules are as follows:

- ◇ It plays with 6 players, and a deck of cards where each card is a number from 1 to 60.
- ◇ Each player is given 10 cards.
- ◇ The game has 10 rounds. Each round goes as follows:
  - Each player secretly selects a card from their hand.
  - Once all players have chosen, all cards are revealed. The player with the highest number takes all revealed cards and set them aside.
- ◇ At the end of the 10 rounds, each player adds the number of every card they collected during the game. The player with the highest total wins.

## 2. Features

The following must be implemented in your system:

- Any user can register to participate in a game. Once 6 players have registered, the game starts.
- There can be multiple games going at the same time.
- At any time, I should be able to check if my game started.
- I should also be able to see my own hand, see how many points I have collected and if I should select a card or not (waiting for other players to select).
- I should also have a little history of my performances: how many games I won, what is my average point each game, etc...

## 3. Hints

- The more is handled procedurally on your contract, the better
- The trickiest part is about randomness: how can you handle randomness in a decentralized system?
- I shouldn't be able to see the cards in other player's hands.

- You can take great inspiration from what we already did in our blockchain. There are a lot of processes in this project that are similar to the ones we've implemented already.