



Charity Games

Github: <https://github.com/gfauchart/Ethdev-RPS>

Charity Games is a Rock-Paper-Scissors tournament with a twist in that the winnings go to a recognised charity. Two players compete, winner picks which charity to donate the full prize to.

The game itself uses a commit reveal mechanism to allow users to place their donations and an encrypted message as the commit and later reveal their sequences. In terms of gameplay, the player starts by picking a charity from a given list then selecting the sequence with which to play.

Once an even number of sequences have been committed, the reveal phase can begin and the last (ie, second in a 2 player game) player to reveal triggers the scoring and ending of the tournament.

As a reward to the winning donnor, a sticker token is created and will be visible under the “my stickers” page.

Challenges and Improvements

- The commit/reveal might not be ideal for this type of game but we wanted to limit the possibilities of “cheating”, but there is still a weakness if player one reveals before player one submits a second sequence.
- The sticker tokens could comply to ERC721;

- The web3 hashing function was challenging and we added a preHashTest function to the contract to facilitate testing;
- Some inconsistencies with the tooling made for plenty of stress relieving rants :-)
- We will continue working on this concept and release it as a Dapp in the near future

Deployment

We used Ganache during development and the truffle configuration file should be edited if using a standard node on port 8545.

Installation can be done with the following sequence:

- git clone
- npm install
- ensure ganache is running
- truffle deploy
- npm run start
- open <http://localhost:4200/>

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