Bidcent: A Peer To Peer Blockchain Game

https://bidcent.org

1. Introduction
Online financial games on the internet requires a centralized server to store and create data, as such they require a high level of trust. While these games may be entertaining to play, what is important at the end is that the data provided in the game can be trusted and the game is what people think to be. Also there is the problem of lost access to websites, withdrawals withheld or account blocked which pose serious risk to users.

What is needed in online financial gaming is a game that stores and create data in a decentralized server and thus require no trust.

2. Transactions
We use smart contract to store and create data that decides the outcome of the game. All game data that decides the outcome of the game can be verified by any user with a smart contract call.

Deposits, withdrawals and bidding can only be made by the wallet owner with the key and no one else can make such transactions. This thus makes the game very safe, as even without access to the website, owners can still withdraw their deposits with a smart contract call.

Game payout is still processed centrally to provide convenience and minimize fees for everyone. However in case there is an outage, players can call the payout function themselves if they win the game.

3. Variables
Game variables such as countdown, fees, minimum bid and minimum bid total can be changed, however these will only take effect in the next game to ensure consistency throughout the game. Countdown and fees have a maximum limit to ensure safety to players. Variables can be verified by players with a smart contract call anytime of the game.

4. Gameplay
Game involves a player bidding on Left or Right. After the player has bid, the next player can bid also on Left or Right. If both sides have bid and the total bid value is more than the minimum bid total set by the game, the countdown will start. Any subsequent bid will reset the countdown. A draw value will reset the countdown indefinitely. When the countdown goes to 0, any new bids are rejected and payout will be processed. The side with the highest bid shall win the game and get all the bid value of the opposite side. The winning amount shall be divided in proportion of how much players bid in the winning team.

5. Capital
Game requires capital to win and the side with the highest bid value wins the game. However this does not excludes players with minimum capital from playing the game. Players with a large capital does not win much when they group together to bid on one side. They will have to take opposite side to win optimally. Players with a small capital thus can utilize this to participate in the game.

6. Conclusion
We have shown how many online financial games pose serious risk to users and require a high level of trust. The solution we bring is a peer to peer blockchain game that is decentralized and does not require trust. Data which decides the outcome of the game is stored in smart contract and can be verified. When players lose access to the website, they can still carry out withdrawals and execute payout using smart contract calls.