

The Problem Spec:

Create a client server hearts server that allows that allows 4 clients to connect and play hearts with the following rules:

- 1) Shuffle and deal in a clockwise direction a standard deck of 52 playing cards with no jokers.
- 2) Deal out all the cards until each player has 13.
- 3) Take three cards from your hand and lay them facedown on the table before the first hand is played. Pass them to the player on your left.
- 4) Pick up the three cards that were passed to you by the person on your right.
- 5) Lead the 2 of clubs if you're holding it. Otherwise, play a club when it's your turn, going clockwise around the table.
- 6) Pick up the trick if your card was the highest-numbered card in the suit that was led - which means that you won the trick.
- 7) Lead the next trick if you won the first one. This time, you can lead with any suit.
- 8) Follow suit if you didn't win the first trick. That is, play the suit that someone else leads.
- 9) Play a heart (or another card of a different suit) only if a player leads a suit that you don't have.
- 10) Lead with a heart only after someone plays a heart because he or she couldn't follow suit.
- 11) Continue playing until all 13 tricks have been played.
- 12) Count up the points - 1 for each heart and 13 for the queen of spades - from the tricks you took.
- 13) Write your score and the other players' scores on a notepad.
- 14) Let the person to your left deal the next hand.
- 15) Repeat Steps 3) through 13).
- 16) End the game when one person has reached or exceeded 100 points. The player with the lowest score at that point wins.

Brief Algorithm:

I created a web server which sends javascript code to a browser which acts as the client.

Messages were passed between the client and server using the socketIO library. The server keeps track of the cards played and sends them to each client to keep the view up to date.

How to Run:

1. cd to this folder
2. run npm install
3. node --harmony app.js
4. open localhost:3000 in browser