Robert Horrace
CS410P/Rust
5/8/2018

Rust Project Proposal

For the Rust project, I would like to do a Texas Hold'em game, which some parts will be easy and some parts will be a bit tricky. Overall, I have already complete a card module, a deck module, a dealer module, a player module, a table module, and a main. Possibly, there will be a module that will calculate the value of the hand of the player with the flop, turn, and river of the table, but this still requires a bit more thinking. So far, roughly half of the program is completed, but they might need more or less of what they have. Overall, it will be a one player game, where the player receives two cards for their hand and will have their hand's value calculate before the flop and after each of the three stages of the table. When this is complete, a player called computer will be generated, so the player can play against the computer. As of now, dealing with how to calculate the value of the player's hand will be a little tricky, especially for straights, flushes, royal flushes, straight flushes, etc.

The card will hold a numerical value for the name of the card and a static str for the suit. The deck will be an array of cards with a head and tail that are just index values, which makes calculating the size of the array a simple subtract operation and the removing a card from the deck is actually not being removed, but no longer being accessed, by adding 1 to head. The dealer will handle the deck by dealing the cards to the player(s). The table will hold the the flop, turn, and river, which is crucial for texas hold 'em. There will possibly be a calc (or will be on in table) that will determine the value of the player's hand is and/or determine who is the winner,by comparing the combo (the hand value) and determine the hand(s) if one has a higher value of the other. For example, a flush beats a straight, a royal flush can't be beaten. If there are ties, the highest hand value or the highest card will determine the winner.