## Final Project Proposal Texas Hold 'Em

We plan to first replicate the gameplay of Texas Hold 'Em with 1 player against the dealer (which will be the computer). The player has a certain amount of money that can be bet through the gameplay. We plan to create a class Card, which has 2 variables depending on which card it is, one variable being the card's suit and the other being the card's number/letter value. Each player will have their own array of 7 different Cards (a "hand"), which will be sorted depending on number/letter values and suits. The players will have 3 common cards (these are the cards on the table) and 2 unique cards (the player's hand). After each round, for 2 rounds, a common card will be added to the array and sorted. We will also incorporate the gambling aspect, where the player can choose to call, raise, or fold, while the computer will be programmed (through conditionals looking at its sorted array) to respond accordingly. The computer will look for 10 different types of hands (Royal Flush, Straight Flush, 3 of a Kind, Full House, etc.) Through sorting the hand, the player can determine if they have a good or bad hand and bet with that in mind. The game ends when the player or computer runs out of money.