Milestone 1
Computer Science
B351 Spring 2017
Prof. M.M. Dalkilic

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1. Group members : Ari Korin, Adam Hurm
2. Responsibilities:
   (a) Adam : Modeling classes
   (b) Ari : Matrix class / calculations
3. Strategy
   - Our strategy is going to be focused on probabilities
   - Create a matrix of hands and the probabilities of success given those hands (we can just look up online)
   - Update success probability given the three cards that are dealt, continue to do so everytime a new card is placed on the table. So throughout the game we're maintaing matrices of probabilities given certain "hand". In essence maintaing a "belief net"
   - Keep a history of all cards that have been on the table and then adjust probabilities given the cards that are in the history. This history will affect our "Base Matrix" of probabilities
   - Regarding bluffing, if we are dealt a hand that has a low percentage of success intiailly, there will be a pre-determined percent chance that the agent will bluff. If it chooses to bluff, there will be a cap as to the percentage of availble money its allowed to bet.
   - Play aggressively, try to force people to fold early. Bully people with fewer chips than us
   - Classes:
     (a) Card
        i. Number
        ii. Suit
        iii. Boolean originalHand : whether it was dealt to us or on the table
     (b) Hand
        i. Array of cards
        ii. Probability of success
     (c) Table
        i. Array of cards on the table
        ii. Pot of chips
     (d) Matrix
        i. A matrix of Hands

ii. include legal moves
iii. update() : updates all probabilities in the matrix.
iv. add() : adds a hand to the matrix
v. remove() : removes a hand from the matrix

(e) Chips
i. integer demonstrating the available funds for the agent to use
ii. add()
iii. remove()
iv. history() : stores our chip histroy to see if we have a success streak