President

Game Rule

I. Objective

• The aim is to get rid of all your cards as soon as possible. The first player who get rid of all their card is the winner and classify as the president.

II. Players and Cards

• This game can be play with a group of 2, 4 or 13 people using standard 52 cards deck.

• A card is larger when the card rank is higher. If the card rank are the same then which card have higher suit will be larger.

• The card rank from low to hight: 3 4 5 6 7 8 9 10 J Q K A 2

• The suit rank from low to hight: Spade   Clubs   Diamonds   Hearts

III. Game Play

• The program will randomly give each player a certain amount of card.

• The program then randomly choose a player to go first and call upon next player in an order.

• The called player starts by enter any single card or any set of cards of equal rank (for example three fives). Each player in turn must then either pass (i.e. not play any cards), or enter a card or set of cards which beats the previous play.

• A single card is beaten by any higher single card. A set of cards can only be beaten by a higher set containing the same number of cards. So for example if the previous player played two 6 next player can beat this with two K, or two 7, but not with a single K, and not with three 7 (though player could play two of them and hang onto the third).

• It is not necessary to beat the previous play just because you can - passing is always allowed. Also passing does not prevent you from playing the next time your turn comes round.

• The play continues as many turns as necessary until a player makes a play which everyone else passes. The player who played last (and highest) to the previous round starts again by leading any card or set of equal cards.

• The game will end once a player have no card left. And that player is the winner of that game.

User Documentation

This program is aim to simulate the card game President

★ Important: if the user use other terminal than MAC OS terminal, the user will need to change macro for CLEAR, RESIZE, TAB_SIZE and OPEN_DOCS in macro_lib.h to work with their terminal.

I. Run The Program

• To run the program, the user must compile and call it.

• To compile the program, simply direct your terminal to the program folder and enter "make".

• To call the program, enter "./card_game" - no further argument or input need.

II. Program Input

• Enter number of player: Enter 2, 4 or 13 otherwise the program will complain. This number is the number of player will be play with the user in this game.

```
                Initialize A Deck Of Card:
                3S  4S  5S  6S  7S  8S  9S  10S  JS  QS  KS  AS  2S
                3C  4C  5C  6C  7C  8C  9C  10C  JC  QC  KC  AC  2C
                3D  4D  5D  6D  7D  8D  9D  10D  JD  QD  KD  AD  2D
                3H  4H  5H  6H  7H  8H  9H  10H  JH  QH  KH  AH  2H

Choose the number of player (2 / 4 / 13): 0
You can't play the game without You.
Please choose between 2, 4, or 13 players only.

Choose the number of player (2 / 4 / 13): 1
This game hasn't support P vs. AI yet.
Please choose between 2, 4, or 13 players only.

Choose the number of player (2 / 4 / 13): 3
52 cards can't devide equally among 3 players.
Please choose between 2, 4, or 13 players only.

Choose the number of player (2 / 4 / 13): 14
Too many players will result in less fun.
Please choose between 2, 4, or 13 players only.

Choose the number of player (2 / 4 / 13): 2.2
Please enter interger only (expecting 2, 4, or 13).

Choose the number of player (2 / 4 / 13): 2
Sucessfull create 2 players...

Please assign each player with a number from 1 to 2 in counter-clockwise.
And that will be player in game name.

Press "Enter" to continue...|
```

- Enter a card or a set of card:
  - To enter a card, the player must follow this format: <card_rank><card_suit>. Where card_suit is the first character of Spades, Clubs, Diamonds, Hearts. For example: 3S, 6H, 10D, QC, etc.
  - To enter a set of card, the player can put a space, a comma, a dot or even not separate them at all but make sure each card will need to follow <card_rank><card_suit> format.
  - For a card to be valid, the card that the player enter must belong to the current player and bigger than the played card in the previous turn (unless the player is the first to go in the current round).
  - A set of card will be valid when each card in the set belong to the current player and have the same rank. Additionally, the number of played card in this turn must be the same with number of played card in the previous turn and each card in this set will need to bigger than once of the played card from previous turn.
  - For card A larger than card B, card A have to have higher rank, if rank of these 2 cards are equal then the suit of card A must larger where S < C < D < H. For example: 4C < JC, 9S < 9H

```
Previous played card:  p1 (25): 3C  |

Player 2 go next... Player 2, press "Enter" to see your card...

 Player 2:   3S   3H   4S   4D   5S   5C   5D   6S   6C   6D   7C   7H   8S
             9D   10C  10D  JS   JC   JD   QD   KH   AS   AC   AH   2C   2D

Enter "p" for pass or "i" for input card instruction
Enter a card or a set of cards: 3d
You don't have the card 3D

Enter a card or a set of cards: 4S 5S
Cards must have the same rank to be in set.

Enter a card or a set of cards: 5S 5C
Can only play 1 card.

Enter a card or a set of cards: asac
Can only play 1 card.

Enter a card or a set of cards: 3h
Sucessfull played your card...

 Player 2:   3S   4S   4D   5S   5C   5D   6S   6C   6D   7C   7H   8S   9D
             10C  10D  JS   JC   JD   QD   KH   AS   AC   AH   2C   2D

Press "Enter" to call the next player...|
```

- Note: the player can also pass the turn by enter "p" or see input card instruction by enter "i".

III. Program Interpretation

• In each turn, the first few line of the terminal window display the played card from previous turn where p1, p2, … is the player name. The (25) next to p1 in the above example is the number of remain card that player 1 has. Next to it is the card played in the previous turn by player 1.