

JackAce Programming Language For Card Games

Project Overview and Proposal

Abstract:

Currently there does not exist any language that enables the end-user to program their own card games with their own rules and regulations, so the absence of such a language lessens the introduction of new card games which can be very entertaining once created. The goal of this project is to have a suitable implementation of such a language which is self consistent and covers most of the actions that are used in the card games found today.

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Proposal:

The sole aim of the project is to provide a language with basic functionalities of a card game. The end-user can use the language to program various card games suiting his needs and idea of the game. An brief overview of the language and the methods that will be implemented are given below.

- cards - Data type to define cards
- deck - a collection of 52 cards
- draw(n) - method that draws n random cards from the deck
- shuffle - shuffles the current order
- arrays and sorting of cards
- display method to display cards

Code Snippet:

Code for a game in which the one which has the 2 of Diamonds among two players WINS.

```
# use hash for commenting

card T = [diamond, 2] #create new variable T, whose value is 2 of
                      diamonds

users.max(2)          #Maximum users can be two for this game

user A = new user()   #Name one of the user 'A'

A.cards[] = deck.random[26] #Give him 26 random cards.

display A.cards[]     #Display his cards

user B = new user()   #Name one of the user 'B'

B.cards[] = deck      #Give him 26 left cards or the deck.

display B.cards[]     #Display his cards

for(1 to 26){         # Start a loop of 26 iterations
    card x = A.deal(1) # Deal one card from A's deck
    card y = B.deal(1) # Deal one card from B's deck
    if(match(x,T))     # if A has card T, then he/she wins.
    {
        display "A Wins" # printing in the output stream'
        loop.exit       # exit the nearest loop
    }
    else if(match(y,T))
    {
        display "B Wins"
        loop.exit
    }
    #End else if
}
# End the loop
```