

Magpie's Fate

Objectives

1. To demonstrate your understanding of objects and functions
2. To demonstrate your understanding of controlling execution
3. To demonstrate your understanding of access control

Overview

Magpie's Fate is a simple version of multi-player card game. A player randomly picks cards from a deck until an Ace is found. A score is calculated by adding the values of the cards drawn based on the following scoring guide:

Jack of Clubs, Jack of Spades 10 points Jack of Diamonds, Jack of Hearts 15 points Queen of Clubs, Queen of Spades 14 points Queen of Diamonds, Queen of Hearts 18 points King of Clubs, King of Spades 20 points King of Diamonds, King of Hearts 22 points Even non-face cards 0 points Odd non-face cards value of card Aces 0 points

The goal is to get as high a score as possible. This game is pure luck, there is no skill involved.

The computer version must keep score for up to four human players. The computer deals random cards until an Ace is found then calculates that player's score. After all player's have had a turn, the computer determines who has the high score. (In the case where two or more players have the same score, the winner is the lowest numbered player.

Unit Test

UML is required Unit test in place before proceeding with code

Instructions

1. Program must have objects for game logic and human players at minimum
2. Program must use access controllers encapsulate game objects
3. Print score and winner every round
4. Print final winner at end of each game

