

Casino - Prolog

TECHNICAL MANUAL

December 15, 2018

Abish Jha
Ramapo College of New Jersey

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Bug Report

The give loose cards to player who captured last at the end of round is not working for multi-dimensional lists, so it is commented out of the function execution.

Description of data structures/classes

The only data structure used in the game is the inbuilt prolog list.

How to Run

The program can be run by consulting the Casino.pl file in the prolog terminal. Once the database is loaded, query 'casino(_).'

Screen Shots

New game ::

```
?- casino(_).
Welcome to Casino!
Would you like to load a game?(y/n) n.

coin toss...
choose head (1) or tail (0) : |: 1.
sorry the guess was wrong. computer is the first player...

Would you like to save and quit? (y/n) |: n.

=====
starting round...
=====

-----
Table: [s8,d3,s6,hx]
Build Owner: []
-----
Computer Hand: [s2,c6,h7,s9]
Human Hand: [cj,sq,sk,c9]
Turn: computer
-----
Computer File: []
Human File: []
Deck: [cq,h4,s3,h9,dx,hq,c8,d6,h2,c4,d8,sj,ca,h8,h5,da,h6,c5,dk,dj,d5,d9,d4,ha,s5,sa,s4,dq,hk,cx,s7,c7,d2,c3,d7,hj,c2,sx,ck,h3]
Tournament Score => Human : 0      Computer : 0
-----
```

Load Game ::

```
?- casino(_).
Welcome to Casino!
Would you like to load a game?(y/n) y.
Enter the filename to load: |: case1.txt.
tournament loaded from ./case1.txt

Would you like to save and quit? (y/n) |: n.

=====
starting round...
=====

-----
Table: [h3,d4,ck]
Build Owner: []
-----
Computer Hand: [s7,d5,cq]
Human Hand: [h6,c5,d9]
Turn: human
-----
Computer File: [hk,c4,d7,h9,c9,s9,sk,sa,c3,sq,c8,ha,h4,h5,s8,dk,da,s4,s5,dx,dj,s3,d6,cx]
Human File: [sx,c7,h8,cj,hx,h2,s6,c6,d8,sj,hq,dq,ca,c2,d3,h7,hj,d2,s2]
Deck: []
Tournament Score => Human : 10      Computer : 10
-----
```

Human Move Menu ::

Please select one of the following options:

1. Make a move
 2. Ask for help
 3. Exit the game
-

|: 1.

what action do you want to perform? (only type the character in the brackets)

- (b) build
 - (e) extend build
 - (m) multi build
 - (c) capture
 - (t) trail
- |: b.

hand cards: [h6,c5,d9]

choose hand card (type as is displayed): |: hd.
Invalid hand card choice, try again!

hand cards: [h6,c5,d9]

choose hand card (type as is displayed): |: h6.

choose loose cards (type as is on new line for each)

loose cards: [h3,d4,ck]

enter loose card (s to stop): |: h3.

enter loose card (s to stop): |: d4.

enter loose card (s to stop): |: s.

=====

since trail is the only thing working, trailing the selected hand card :: h6

=====

Would you like to save and quit? (y/n) |: █

Computer Move ::

Would you like to save and quit? (y/n) |: n.

Table: [h3,d4,ck,h6]

Build Owner: []

Computer Hand: [s7,d5,cq]

Human Hand: [c5,d9]

Turn: computer

Computer Pile: [hk,c4,d7,h9,c9,s9,sk,sa,c3,sq,c8,ha,h4,h5,s8,dk,da,s4,s5,dx,dj,s3,d6,cx]

Human Pile: [sx,c7,h8,cj,hx,h2,s6,c6,d8,sj,hq,dq,ca,c2,d3,h7,hj,d2,s2]

Deck: []

Tournament Score => Human : 10 Computer : 10

the computer can trail --> s7

=====

computer is making the above move...

=====

Hint ::

```
=====
Please select one of the following options:
1. Make a move
2. Ask for help
3. Exit the game
=====
```

```
|: 2.
the human can trail --> c5
```

Round and Tournament End Stat ::

```
The round has ended!

last capturer human got the cards remaining on the table
Human File: [dj,sa,c3,c5]
Computer File: [sx,sq,sk,d6,h5,dx,s2]

length of comp pile :: 7
length of human pile :: 4
number of spade in comp pile :: 4
number of spade in human pile :: 1
computer has 10 of diamonds (dx)
computer has 2 of spades (s2)
number of ace in human pile :: 1
number of ace in comp pile :: 0

Human Round Score: 1
Computer Round Score: 7
--- Computer wins the round ---

Computer won the tournament with the score of 22
Human had a score of 15
true .
```

Feature Report

- The only move that can be made, checked or be gotten as hint is trail.