

FOOP HW3

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(1) your design of class structures and their reasons

PlayGame: for demo all kind of Old Main.

Package abby.poker:

OldMain/Jackpass/Donkey/DonkeyWithoutJoker:

To construct the steps of game, and hold the information the game need, for example the list of Player.

Player:

hold the information that a player need and perform what player should do after game start in order to allow code more readable and manageable.

Cars:

Represent the cards in deck in order to print and compare card more conveniently.

Enum Stage in OldMain:

To represent the stage of game (e.g. basic/bonus/over) in order to allow code more readable and manageable

Enum Suit in Card:

To represent the suit of card (e.g. basic/bonus/over) in order to allow code more readable and manageable and print and compare card more conveniently.

(2) how a human player should play with your program for the two variants

```
abby@~/Documents/school/NTUCSIE_7/foop/foop15_137/hw3$ make run
java -classpath src PlayGame
Welcome to OldMain playground.
How many player you want to play with?
4
Do you want to play with bonus game?(y/n)
(till the latest player finished)
please enter 'y' or 'n'.
y
Do you want to play Interactive?(y/n)
y
What kind of the game you want to play?
[a]Regular oldMain with two jokers
[b]OldMain with one joker
[c]OldMain with unknown joker
[d]OldMain with unknown joker and two jokers
a
Deal cards
10 02 03 04 05 06 07 08 09 10
```

How many player you want to play with?

0

Please enter an Integer which is bigger than 1.

a. choose which kind of game you want to play by instruction, and there is more detail alarm when you input something wrong.

b. If you enter 'n' to question 'Do you want to play interactively, the out put of game just like hw1 with small different (displaying 'T' instead of displaying '10' to have neater output)

c. Otherwise, you can play like the picture below. Player would render a non-repeat random before you choose to make choosing more realistic because the hands are sorted.

Player1 have 4 cards.

Pick which you want to draw.

5

Please enter an Integer between 1~4.

1

You draw a card from Player1 S5

d. After the game is over, you can choose whether you want to play again or not. If you choose yes, the game back to the step of choose type.

Bonus game over

Do you want to play again?(y)

(3) how you tested the correctness of your program

Payer would remember cards he/she drops. And OldMain would update cards which be drop when any player win by remove cards from the copy of deck. At the End of game, OldMain would remove the hand and drops card of remain players. If the copy of deck is empty, I assume the program is correct.

(4) the sample output from each variant of your program

a. with one joker(the middle part is cut cause they are too similar)

abby@~/Documents/school/NTUCSIE_7/foop/ java -classpath src PlayGame Welcome to OldMain playground. How many player you want to play with? 4 Do you want to play with bonus game?(y/ (till the latest player finished) please enter 'y' or 'n'. y Do you want to play Interactive?(y/n) n What kind of the game you want to play? [a]Regular oldMain with two jokers [b]OldMain with one joker [c]OldMain with unknown joker [d]OldMain with unknown joker and two j b Deal cards Player0: D2 H4 D5 C6 D7 H8 CT DT HK HA SA Player1: H3 S3 S6 S7 C8 H9 HT ST HQ SQ DA Player2: C2 H2 C5 H5 S5 H6 D8 S8 DJ CQ CA Player3: R0 S2 D3 C4 C7 H7 CJ HJ SJ SK Player4: C3 D4 S4 D6 C9 D9 S9 DQ CK DK Drop cards Player0: D2 H4 D5 C6 D7 H8 HK Player1: S6 S7 C8 H9 DA Player2: S5 H6 DJ CQ CA Player3: R0 S2 D3 C4 SJ SK Player4: C3 D6 S9 DQ Game start Player0 draws a card from Player1 S6 Player0: D2 H4 D5 D7 H8 HK Player1: S7 C8 H9 DA Player1 draws a card from Player2 CA Player1: S7 C8 H9 Player2: S5 H6 DJ CQ Player2 draws a card from Player3 R0 Player2: R0 S5 H6 DJ CQ Player3: S2 D3 C4 SJ SK Player3 draws a card from Player4 C3 Player3: S2 C4 SJ SK Player4: Player4: D6 S9 DQ Player4 draws a card from Player0 D5 Player4: D5 D6 S9 DQ Player0: D2 H4 D7 H8 HK Player0 draws a card from Player1 C8 Player0: D2 H4 D7 HK Player1: S7 H9 Player1 draws a card from Player2 R0 Player1: R0 S7 H9 Player2: S5 H6 DJ CQ Player2 draws a card from Player3 C4 Player2: C4 S5 H6 DJ CQ Player3: S2 SJ SK Player3 draws a card from Player4 D5 Player3: S2 D5 SJ SK Player4: D6 S9 DQ Player4 draws a card from Player0 H4 Player4: H4 D6 S9 DQ Player0: D2 D7 HK Player0 draws a card from Player1 R0 Player0: R0 D2 D7 HK Player1: S7 H9 Player1 draws a card from Player2 S5 Player1: S5 S7 H9 Player2: C4 H6 DJ CQ Player2 draws a card from Player3 SK Player2: C4 H6 DJ CQ SK Player3: S2 D5 SJ Player3 draws a card from Player4 S9 Player3: S2 D5 S9 SJ Player4: H4 D6 DQ Player4 draws a card from Player0 HK Player4: H4 D6 DQ HK Player0: R0 D2 D7 Player0 draws a card from Player1 S5 Player0: Player2: R0 H4 Player4: HK Player4 draws a card from Player0 SK Player4: Player0: H4 Player4 wins Player0 draws a card from Player2 R0 Player0: R0 H4 Player2: C4 Player2 draws a card from Player0 R0 Player2: R0 C4 Player0: H4 Player0 draws a card from Player2 R0 Player0: R0 H4 Player2: C4 Player2 draws a card from Player0 R0 Player2: R0 C4 Player0: H4 Player0 draws a card from Player2 R0 Player0: R0 H4 Player2: C4 Player2 draws a card from Player0 H4 Player2: Player0: R0 Player2 wins Bonus game over Do you want to play again?(y)	Player4: D6 S9 DQ Player4 draws a card from Player0 D5 Player4: D5 D6 S9 DQ Player0: D2 H4 D7 H8 HK Player0 draws a card from Player1 C8 Player0: D2 H4 D7 HK Player1: S7 H9 Player1 draws a card from Player2 R0 Player1: R0 S7 H9 Player2: S5 H6 DJ CQ Player2 draws a card from Player3 C4 Player2: C4 S5 H6 DJ CQ Player3: S2 SJ SK Player3 draws a card from Player4 D5 Player3: S2 D5 SJ SK Player4: D6 S9 DQ Player4 draws a card from Player0 H4 Player4: H4 D6 S9 DQ Player0: D2 D7 HK Player0 draws a card from Player1 R0 Player0: R0 D2 D7 HK Player1: S7 H9 Player1 draws a card from Player2 S5 Player1: S5 S7 H9 Player2: C4 H6 DJ CQ Player2 draws a card from Player3 SK Player2: C4 H6 DJ CQ SK Player3: S2 D5 SJ Player3 draws a card from Player4 S9 Player3: S2 D5 S9 SJ Player4: H4 D6 DQ Player4 draws a card from Player0 HK Player4: H4 D6 DQ HK Player0: R0 D2 D7 Player0 draws a card from Player1 S5 Player0: Player2: R0 H4 Player4: HK Player4 draws a card from Player0 SK Player4: Player0: H4 Player4 wins Player0 draws a card from Player2 R0 Player0: R0 H4 Player2: C4 Player2 draws a card from Player0 R0 Player2: R0 C4 Player0: H4 Player0 draws a card from Player2 R0 Player0: R0 H4 Player2: C4 Player2 draws a card from Player0 H4 Player2: Player0: R0 Player2 wins Bonus game over Do you want to play again?(y)
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b. without joker and knowing which card left.

Welcome to OldMain playground. How many player you want to play with? 1 Do you want to play Interactive?(y/n) please enter 'y' or 'n'. y What kind of the game you want to play? [a]Regular oldMain with two jokers [b]OldMain with one joker [c]OldMain with unknown joker [d]OldMain with unknown joker and two jokers c Deal cards You: C2 H2 C3 D3 H3 S3 C4 H4 D5 H5 D6 S6 D7 H7 D8 H8 S9 DT CJ DJ HJ DQ HQ CK HK SK Player1 has 25 cards Drop cards You: S9 DT HJ SK Player1 has 3 cards Game start Player1 have 3 cards. Pick which you want to draw. 1	You draw a card from Player1 H9 You drop a pair of card of 9 You: DT HJ SK Player1 has 2 cards Player1 draws a card from you SK Player1 drop card13 Player1 drop card13 Player1 has 1 cards You: DT HJ Player1 have 1 cards. Pick which you want to draw. 3 Please enter an Integer between 1~1. 1 You draw a card from Player1 SJ You drop a pair of card of J You: DT Player1 has 0 cards Player1 wins Basic game over Donkey is ST Do you want to play again?(y)
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c. with jokers which can matched and drop and unknowing which card left

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Do you want to play again?(y)
y
Welcome to OldMain playground.
How many player you want to play with?
2
Do you want to play with bonus game?(y/n)
(till the latest player finished)
please enter 'y' or 'n'.
n
Do you want to play Interactive?(y/n)
n
What kind of the game you want to play?
[a]Regular oldMain with two jokers
[b]OldMain with one joker
[c]OldMain with unknown joker
[d]OldMain with unknown joker and two jokers
d
Deal cards
Player0:
C2 C3 D3 H3 D4 S5 C6 D6 H6 S8 CT DT DJ HJ DQ HQ SQ CK
Player1:
R0 B0 D2 H2 S3 C4 S4 D7 C8 D8 C9 D9 HT ST CJ HK SK SA
Player2:
S2 H4 C5 D5 H5 S6 C7 H7 S7 H8 H9 S9 CQ DK CA DA HA
Drop cards
Player0:
C2 H3 D4 S5 H6 S8 SQ CK
Player1:
S3 D7 CJ SA
Player2:
S2 H4 H5 S6 S7 H8 CQ DK HA
Game start
Player0 draws a card from Player1 SA
Player0:
C2 H3 D4 S5 H6 S8 SQ CK SA
Player1:
S3 D7 CJ
Player1 draws a card from Player2 S7
Player1:
S3 CJ
Player2:
S2 H4 H5 S6 H8 CQ DK HA
Player2 draws a card from Player0 D4
Player2:
S2 H5 S6 H8 CQ DK HA
Player0:
C2 H3 S5 H6 S8 SQ CK SA
Player0 draws a card from Player1 CJ
Player0:
C2 H3 S5 H6 S8 CJ SQ CK SA
Player1:
S3
Player1 draws a card from Player2 HA
Player1:
S3 HA
Player2:
S2 H5 S6 H8 CQ DK
Player2 draws a card from Player0 H3
Player2:
S2 H3 H5 S6 H8 CQ DK
Player0:
C2 S5 H6 S8 CJ SQ CK SA
Player0 draws a card from Player1 S3
Player0:
C2 S3 S5 H6 S8 CJ SQ CK SA
Player1:
HA
Player1 draws a card from Player2 H8
Player1:
H8 HA
Player2:
S2 H3 H5 S6 CQ DK
Player2 draws a card from Player0 CK
Player2:
S2 H3 H5 S6 CQ
Player0:
C2 S3 S5 H6 S8 CJ SQ SA
Player0 draws a card from Player1 H8
Player0:
C2 S3 S5 H6 CJ SQ SA
Player1:
HA
Player1 draws a card from Player2 H3
Player1:
H3 HA
Player2:
S2 H5 S6 CQ
Player2 draws a card from Player0 S3
Player2:
S2 S3 H5 S6 CQ
Player0:
C2 S5 H6 CJ SQ SA
Player0 draws a card from Player1 H3
Player0:
C2 H3 S5 H6 CJ S0 SA
Player1:
HA
Player1 draws a card from Player2 S6
Player1:
S6 HA
Player2:
S2 S3 H5 CQ
Player2 draws a card from Player0 SQ
Player2:
S2 S3 H5
Player0:
C2 H3 S5 H6 CJ SA
Player0 draws a card from Player1 S6
Player0:
C2 H3 S5 CJ SA
Player1:
HA
Player1 draws a card from Player2 S3
Player1:
S3 HA
Player2:
S2 H5
Player2 draws a card from Player0 SA
Player2:
S2 H5 SA
Player0:
C2 H3 S5 CJ
Player0 draws a card from Player1 S3
Player0:
C2 S5 CJ
Player1:
HA
Player1 draws a card from Player2 SA
Player1:
Player2:
S2 H5
Player1 wins
Basic game over
Donkey is SJ
Do you want to play again?(y)

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- (5) any part that you implemented that is worth getting “bonus” points
- You can play with any number of players, and choose if you want to play with bonus game, interactive mode or not and which type of game by simple input.
 - You can play with interactive way without knowing the others hand and draw card with reality.
 - There are three variants.