## ffk221 src/main/java/versions/Version3.java

```
package versions;
     import java.util.List;
     import cardManagement.Card;
     import cardManagement.Deck;
     import cardManagement.Player;
    public class Version3
10
         public int seed = 10;
          public int deckSize = 52;
11
          public void initializeGame()
12
               Player ply1 = new Player();
13
               Player ply2 = new Player();
14
               Player ply3 = new Player();
15
16
               ply1.setPlayerNumber(1);
               ply2.setPlayerNumber(2);
17
               ply3.setPlayerNumber(3);
18
19
               Deck deck = new Deck();
20
2.1
               deck.shuffleDeck(seed);
2.2
23
               int cardsToRemove = 52 - deckSize;
               if(cardsToRemove > 0) {
2.4
                    deck.setSize(cardsToRemove);
25
26
2.7
28
               int splitdeck = deck.deckSize() / 3;
               for(int i = 0; i <= splitdeck-1; i++)</pre>
29
30
                    ply1.addCardtoHand(deck.dealCard());
31
32
               for(int i = 0; i <= splitdeck-1; i++)
33
                    ply2.addCardtoHand(deck.dealCard());
34
               for(int i = 0; i <= splitdeck-1; i++)
36
                    ply3.addCardtoHand(deck.dealCard());
37
38
               startGame(ply1, ply2, ply3);
39
          public void startGame(Player ply1, Player ply2, Player ply3) {
40
41
               int currRound = 0;
42
               loop: while(ply1.handSize() != 0 && ply2.handSize() != 0 && ply3.handSize() != 0) {
                    Card ply1Card, ply2Card, ply3Card;
43
                    ply1Card = ply1.playFromHand();
ply2Card = ply2.playFromHand();
44
45
46
                    ply3Card = ply3.playFromHand();
                    int player1Value = ply1Card.getValue();
47
48
                    int player2Value = ply2Card.getValue();
                    int player2Value = ply3Card.getValue();
int player3Value = ply3Card.getValue();
System.out.println("Player 1 plays " + ply1Card.toString());
System.out.println("Player 2 plays " + ply2Card.toString());
System.out.println("Player 3 plays " + ply3Card.toString());
49
50
51
52
                    if(player1Value > player2Value && player1Value > player3Value) {
53
54
                         ply1.addCardtoPoints(ply2Card);
55
                         ply1.addCardtoPoints(ply1Card);
                         ply1.addCardtoPoints(ply3Card);
System.out.println("Player 1 wins the round.");
56
57
                         System.out.println("Player 1 has a score of " + ply1.points());
System.out.println("Player 2 has a score of " + ply2.points());
System.out.println("Player 3 has a score of " + ply3.points());
58
59
60
61
                    } else if (player2Value > player1Value && player2Value > player3Value) {
62
                         ply2.addCardtoPoints(ply2Card);
63
                         ply2.addCardtoPoints(ply1Card);
64
                         ply2.addCardtoPoints(ply3Card);
                         System.out.println("Player 2 wins the round.");
System.out.println("Player 1 has a score of " + ply1.points());
System.out.println("Player 2 has a score of " + ply2.points());
System.out.println("Player 2 has a score of " + ply2.points());
65
66
67
69
                    } else if (player3Value > player1Value && player3Value > player2Value) {
70
                         ply3.addCardtoPoints(ply2Card);
71
                         ply3.addCardtoPoints(ply1Card);
72
                         ply3.addCardtoPoints(ply3Card);
73
                         System.out.println("Player 2 wins the round.");
74
                         System.out.println("Player 1 has a score of " + ply1.points());
                         System.out.println("Player 2 has a score of " + ply2.points());
System.out.println("Player 3 has a score of " + ply3.points());
75
76
77
                    } else if (ply1Card.getValue() == ply2Card.getValue()) {
78
                         War war = new War();
79
                         String outcome = war.beginWar3Players(ply1, ply2, ply3);
80
                         switch(outcome) {
81
                              case "playerlwin":
                                   ply1.addCardtoPoints(ply1Card);
82
                                   ply1.addCardtoPoints(ply2Card);
83
84
                                   ply1.addCardtoPoints(ply3Card);
                                   System.out.println("Player 1 wins the round.");
85
86
                                   break;
87
                              case "player2win":
                                   ply2.addCardtoPoints(ply1Card);
88
89
                                   ply2.addCardtoPoints(ply2Card);
90
                                   ply2.addCardtoPoints(ply3Card);
```

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```
91
                               System.out.println("Player 2 wins the round.");
                               break;
 93
                           case "player3win":
 94
                               ply3.addCardtoPoints(ply1Card);
 95
                               ply3.addCardtoPoints(ply2Card);
 96
                               ply3.addCardtoPoints(ply3Card);
 97
                               System.out.println("Player 3 wins the round.");
 98
                               break;
 99
                          case "GameOver":
100
                              break loop;
101
                          case "GameOverPlayer1":
                               System.out.println("Player 1 does not have enough cards for WAR.");
102
103
                               Version2 game2v3 = new Version2();
                               game2v3.startGame(ply3, ply2);
104
105
                               System.exit(0);
                               break loop;
106
                          case "GameOverPlayer2":
107
                               System.out.println("Player 2 does not have enough cards for WAR.");
108
109
                               Version2 game1v3 = new Version2();
110
                               game1v3.startGame(ply1, ply3);
111
                               System.exit(0);
112
                               break loop;
113
                          case "GameOverPlayer3":
                               System.out.println("Player 3 does not have enough cards for WAR.");
114
115
                               Version2 game1v2 = new Version2();
116
                               game1v2.startGame(ply1, ply2);
117
                               System.exit(0);
118
                               break loop;
119
                      System.out.println("Player 1 has a score of " + ply1.points());
System.out.println("Player 2 has a score of " + ply2.points());
120
121
122
                      System.out.println("Player 3 has a score of " + ply3.points());
123
124
                  currRound = currRound + 1;
125
126
              if(ply1.points() > ply2.points() && ply1.points() > ply3.points()) {
127
                  System.out.println("Player 1 wins the game.");
128
                  return;
129
              } else if (ply2.points() > ply1.points() && ply2.points() > ply3.points()){
                  System.out.println("Player 2 wins the game.");
130
131
                  return;
              } else if(ply3.points() > ply1.points() && ply3.points() > ply2.points()) {
132
133
                  System.out.println("Player 2 wins the game.");
134
                  return;
135
136
         public void setSeed(int input) {
137
138
              seed = input;
139
140
         public void setDeckSize(int input) {
141
             deckSize = input;
142
143 }
```