Comparing Two Blackjack Java Programs

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This document will be comparing the differences between the textbook’s version of blackjack and Kevin’s Console Blackjack Project. Links to websites containing the code of both versions will be included on the final page.

The first major difference between the two files is how they go about creating the cards to go into the deck. Kevin’s code opts to create two enum’s for rank and suit, so that a card can grab the rankName and rankValue when it refers to its own rank. While the textbook instead opts to use an final int for the suit, and a list of constants which correspond to each suit, and another list of constants for values. The list of constants is included below. Both programs can calculate the suits and values for a card, but Kevin’s code is much easier to read due to the rank of the card being the way you obtain the value, instead of the textbooks method of having a integer value, which is then used to determine the cards rank name.

CONSTANTS used in Textbook Black Jack

SUITS VALUES

public final static int SPADES = 0; public final static int ACE = 1;

public final static int HEARTS = 1; public final static int JACK = 11;

public final static int DIAMONDS = 2; public final static int QUEEN = 12;

public final static int CLUBS = 3; public final static int KING = 13;

public final static int JOKER = 4;

Another key difference is that Kevin’s blackjack keeps track of the current deck being drawn from and a discarded deck, actually removing the cards from the deck when drawn. The discarded deck is only reshuffled into the current deck if it were to run out of cards when a player or dealer attempts to draw from an empty deck, or if the deck has less then 3 cards in it when the round begins. The textbook blackjack never removes cards from the deck, it just keeps track of what position the last card draw from the deck was. Additionally index of the deck is reset at the start of each round so it will never run out of cards with only 2 participants in a game of blackjack.

Despite their differences in approach, both Kevin’s and the textbook’s blackjack programs have hand be an ArrayList<Card> named hand, which is a great way of keeping track of all cards in a hand. However the textbook just makes two hands with different names for the dealer and the player, while Kevin’s makes two objects named dealer and player which both contain variables called hand of the Hand class. Overall Kevin’s code is better, it is more modular and to break apart to reuse the code for other projects, while the textbooks version requires more work to do that same.

**Links to the Code for both Projects**

The code for both projects can be found via the following links.

TEXTBOOK: <https://math.hws.edu/javanotes/c5/s4.html>  
KEVIN’s BLACKJACK: [https://kevinsguides.com/guides/code/java/javaprojs/consoleblackjack#cards](https://kevinsguides.com/guides/code/java/javaprojs/consoleblackjack" \l "cards)