Linked Stack - Card Game

Delaware Technical Community College

Program Specifications:

We have already used the stack ADT to design a simple game. Since ADT's are not concerned about HOW the inner workings are designed and implemented, we should be able to use the same exact code for the game we have already programmed even if we re-declare all the decks of cards to use a different implementation of the stack ADT that uses linked nodes instead.

The first part of this program is to implement the stack ADT using linked nodes.

The second part is identical to the previous assignment. Program a simple game that shuffles a deck of 52 cards and hands them out to two players randomly (26 each). Write a simulation of the card game, where, at each turn, both players take the card from the top of their pile and the player with the higher card wins that round. The winner of that round takes both cards and adds it to a stack of won cards.

In essence, there are four stacks. Each player has one stack of cards they are playing with and one stack of cards they have won.

There are 26 rounds, since each player has a full stack of cards.

At the end of the game, the player with the most cards in their "won" pile wins.

Notes:

- The deck of cards can simply hold an integer between 0 and 51. The higher number wins. Don't worry about implementing suits like spades, hearts, etc.

To Do:

- In LinkedStack.java
    - Implement push(), pop(), peek(), and toString() methods