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Java Programming

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**Project 8-1 Deck of Cards**

**Source Code:**

// @author Maddison Kiefer

public class Cards {

private final String suit;

private final String faceValue;

// Constructor for the class

public Cards(String suit, String faceValue) {

this.suit = suit;

this.faceValue = faceValue;

}

// Getter for the suit

public String getSuit() {

return suit;

}

// Getter for the faceValue

public String getFaceValue() {

return faceValue;

}

@Override

public String toString() {

return faceValue + " of " + suit;

}

}

// @Maddison Kiefer

import java.util.ArrayList;

import java.util.Collections;

import java.util.List;

public class Deck {

private final List<Cards> cards;

// Constructor for the class

public Deck() {

cards = new ArrayList<>();

// Creating the arrays

String[] suits = {"Clubs", "Diamonds", "Hearts", "Spades"};

String[] faceValues = {"1", "2", "3", "4", "5", "6", "7", "8", "9", "10", "Jack", "Queen", "King"};

// Creates a deck for all possible combinations of the suits and faceValues

for (String suit : suits) {

for (String faceValue : faceValues) {

cards.add(new Cards(suit, faceValue));

}

}

}

// Displays all of the cards in the deck

public void displayDeck() {

for (Cards card : cards) {

System.out.println(card);

}

}

// Shuffles the deck using Collections.shuffle

public void shuffleDeck() {

Collections.shuffle(cards);

}

// Getter method to get the list of cards in the deck

public List<Cards> getCards() {

return cards;

}

}

// @Maddison Kiefer

public class Main {

public static void main(String[] args) {

Deck deck = new Deck();

// Displays the unshuffled deck

System.out.println("Unshuffled Deck:");

deck.displayDeck();

// Calls the function to shuffle the deck

deck.shuffleDeck();

// Displays the shuffled deck

System.out.println("\nShuffled Deck:");

deck.displayDeck();

}

}

**Executing the Application:**







