

海大資工 Java程式設計課程

Exercise 3

Spring 2023



Lab Goals

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- ❑ Object Arrays
- ❑ Constructors
- ❑ Basic Exception Handling

Lab Instructions₁

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- Please create a mini poker game based on the provided code.
- Modify Card.java and add a new method:
public int getPoint()
 - This method will return the points of a card using the following rules of points:
 - Cards 2~10: its points is the face on the card
 - Ace: 20 points; Jack: 11 points; Queen: 12 points; King: 13 points
 - To determine points, please use the public field *FACES* of *DeckOfCards*
 - Equal determination for Strings:
<https://docs.oracle.com/javase/9/docs/api/java/lang/String.html#equals-java.lang.Object->

Lab Instructions₂

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- Please develop the PokerGame class
 - ▣ In the constructor without parameters, please shuffle the cards.
 - ▣ Please design *public void dealFiveCards()*:
 - Five cards should be dealt, and the individual cards, points, and total points of the five cards should be displayed (please refer to ex3-result.txt).
 - Please catch *NullPointerException* in this method to deal with the situation that the entire deck has been dealt (please refer to ex3-result.txt).

Lab Instructions₃

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- ▣ Please provide another constructor to copy *myDeckOfCards* of the given *PokerGame* object parameter (Shallow Copy is enough, Deep Copy is not required), and reset *currentCard* to zero.

Lab Instructions₄

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- Please develop the PokerGameTest class
 - ▣ Design a while loop to allow users to continuously input options to play the game
 - ▣ Users can choose
 - 0: end the while loop (0 is the sentinel)
 - 1: deal five cards (call *dealFiveCards()*)
 - 2: create a new deck of cards, and deal another five cards
 - 3: clone the previous deck of cards, and restart the deal
 - ▣ Please refer to ex3-result.txt to check the expected game history.

Expected Results

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- Please check ex3-result.txt

結果繳交

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- The naming should conform to the **CamelCase** style.
- “Package” is required: ntou.cs.java2023.
- Please submit .java files and .class files (upload them to TronClass).
- Code that fails to compile or execute is not accepted.