A02 Randomized Queues and Deques Part 2

| 10/3/2022

MISSING 50 Possible Points

Attempt 1

IN PROGRESS
Next Up: Submit Assignment

Add Comment

Unlimited Attempts Allowed

Details

Fundamentals

Assignment: Randomized Queues and Deques Part 2

Learning Objectives

- Use Java generics and create generic classes.
- Select the appropriate data structure(s) to solve a problem given a set of programming specifications.
- Determine the performance characteristics of a software application.
- Implement elementary data structures using arrays and linked lists
- Implement iterators.

Overview

Previous

(https://slcc.instructure.com/courses/817632/modules/items/18752966)

Submit Assignment

Next

(https://slcc.instructure.com/courses/817632/modules/items/18752970)

Instruction

Continue the project you started in part 1 of this assignment. Ensure that class RandomizedQueue is complete, implement the class **Deque,** and create a client program called **Subset**.

The instructions of class Subset specify that the client program takes a command-line integer *k and that it* reads in a sequence of strings from standard input using StdIn.readString(). Here we make a change. Don't use the command-line to obtain the input values. Instead, start the client program with two hard-coded variables: an integer variable k and a String array called input. Both variables should be initialized with the input values. The rest of the client program needs to follow the original instructions except that it obtains the input from those two variables.

Assignment Instructions:

The assignment instructions are based on an assignment of Princeton's algorithm course. **http://www.cs.princeton.edu/courses/archive/fall14/cos226/assignments/queues.html (http://www.cs.princeton.edu/courses/archive/fall14/cos226/assignments/queues.html)**
They come with additional resources listed below.

JUnit tests for the class Deque are available on CodePost. Again, you can submit as often as you like up until the deadline. Before you submit via Canvas, create a screenshot as described before. Ensure that it shows your bruinmail, the class that is tested, and the number of passing/failing tests

The JUnit tests on CodePost are only a subset of the tests that are used for grading. Especially: CodePost includes no JUnit tests for class Subset. It is the responsibility of both partners to complete the testing and to ensure that all assignment requirements are met.

Additional Resources:

< Previous

(https://slcc.instructure.com/courses/817632/modules/items/18752966)

Submit Assignment

Next >

(https://slcc.instructure.com/courses/817632/modules/items/18752970)

possible progress steps.
http://www.cs.princeton.edu/courses/archive/fall14/cos226/checklist/queues.html (http://www.cs.princeton.edu/courses/archive/fall14/cos226/checklist/queues.html)

Video:

https://www.youtube.com/watch?v=GNr872PjQMI (https://www.youtube.com/watch?v=GNr872PjQMI)

(https://www.youtube.com/watch?v=GNr872PjQMI)

Sample Output

This sample output should give you a good idea of what is expected. Note though, that the instructions require some random selections. Because of that, the selected strings are likely to be different.

Sample Output 1 with k = 3 and input strings A B C D E F G H I

```
C
G
A
```

Sample Output 2 with k = 3 and input strings A B C D E F G H I

```
E
F
G
```

< Previous (https://slcc.instructure.com/courses/817632/modules/items/18752966)

Submit Assignment

Next > (https://slcc.instructure.com/courses/817632/modules/items/18752970)

One team member embeds the screenshot from CodePost and attaches the required java files(no zip, no JAR). **How to embed images in Canvas (https://community.canvaslms.com/t5/Student-Guide/How-do-I-embed-images-from-Canvas-into-the-Rich-Content-Editor/ta-p/356)**

Both team members submit the name of the partner and the discussed pebble distribution. If the pebble distribution is not 50/50, include a description that explains the difference.

View Rubric

A02- Part 2

Criteria	Ratings	Pts
JUnit tests for class Deque view longer description		/ 26 pts
Class Subset view longer description		/ 7 pts
Functional and Performance Requirements view longer description		/ 13 pts
Style | Best Practices view longer description		/ 4 pts
		Total Points: 0

Keep in mind, this submission will count for everyone in your Project Groups group.

C

Previous (https://slcc.instructure.com/courses/817632/modules/items/18752966)

Submit Assignment

Next (https://slcc.instructure.com/courses/817632/modules/items/18752970)

Previous

(https://slcc.instructure.com/courses/817632/modules/items/18752966)

Submit Assignment

Next

(https://slcc.instructure.com/courses/817632/modules/items/18752970)