CE Symbol Graph CODE   MISSING 10 Possible Points

| 11/21/2022

| Attempt 1 ⌄ | **IN PROGRESS** Next Up: Submit Assignment | 💬 Add Comment |

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Graphs

CE: Symbol Graph CODE

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Learning Objectives

- Familiarize yourself with class SymbolGraph.
- Use class SymbolGraph to implement a simple application.

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Overview

This CE consists of two parts.

Part A provides an opportunity to familiarize yourself with class SymbolGraph.

Part B uses class SymbolGraph to implement a simple application.

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Instruction

Part A

- Create a package called **graphSymbol**
- Copy **SymbolGraph.java** **(http://algs4.cs.princeton.edu/41graph/SymbolGraph.java.html)** into the package and add import statements as necessary.
- Change the main method so that it uses hard-coded values instead of command line arguments.
- Use **routes.txt** **(http://algs4.cs.princeton.edu/41graph/routes.txt)** to create the SymbolGraph.
- Run it (execute the main method of SymbolGraph)
  You'll see the output Done reading src/graphDirected/routes.txt
  There is no prompt. (We'll fix that in a moment)
  For now, enter JFK and press enter.
  Then enter LAX and again, press enter.
- When you are this far, compare your output with the ***expected output***

- What does it mean that ORD, ATL, and MCO are listed when entering JFK?
  Improve the program by adding a prompt so the user knows what to expect.
- Take a moment to familiarize yourself with class SymbolGraph.
  What public methods does does it provide?

Part B:

Create a class called **RouteFinder** that includes the main method.
It should allow the user to specify a departure airport.
If the specified airport is not listed in routes.txt, a message should be printed that the airport could not be found. (see Expected Output) Otherwise, list the shortest paths to all the destinations that can be reached from the departure airport.
In this context, the shortest path means the route with the least amount of stops between departure and destination.

Format the output to match the samples below.

numbers?

This CE is based on an algs4 exercise.

Expected Output

Sample Output 1:
```
Departure: ABC
The departure ABC could not be found.
```

Sample Output 2:
```
Departure: JFK
The following destinations can be reached from JFK:

JFK: JFK
MCO: JFK MCO
ORD: JFK ORD
DEN: JFK ORD DEN
HOU: JFK ORD HOU
DFW: JFK ORD DFW
PHX: JFK ORD PHX
ATL: JFK ATL
LAX: JFK ORD PHX LAX
LAS: JFK ORD PHX LAS
```

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