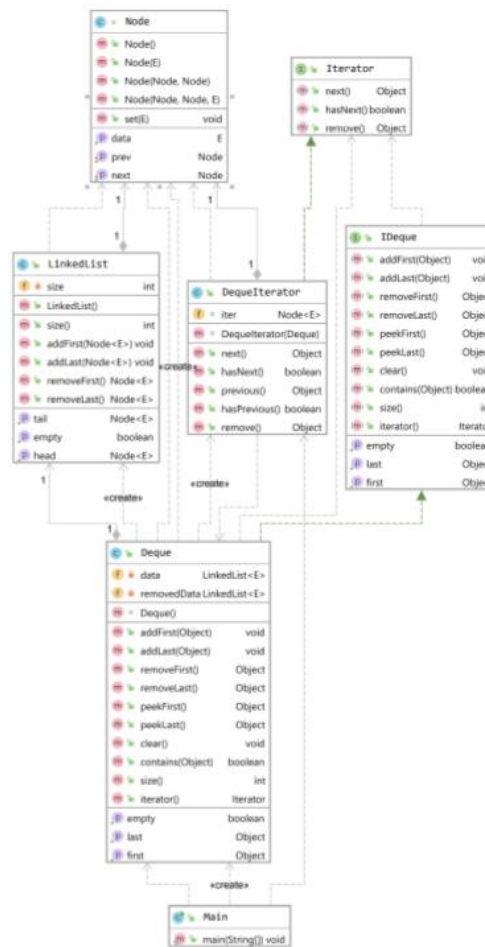


GTU
Department of Computer Engineering
CSE 222/505 - Spring 2020
Homework 4 Report

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1-Class Diagrams:



Pdf exist in part2 directory

2-Problem Solution Approach

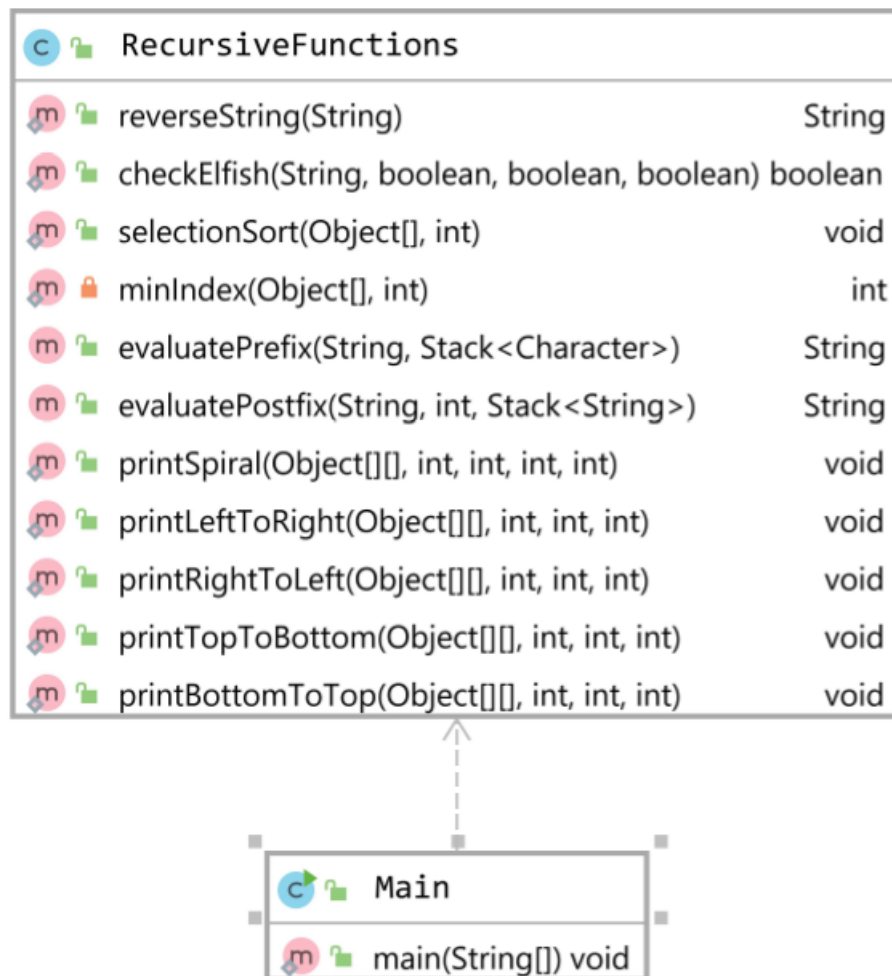
In this part, firstly i implemented a node for double linked list also double linked list class. after that, i created deque class which implements ID deque. Deque class has 2 linked lists, 1 for to keep data, the other one used for collecting removed nodes to reuse them later. Also i created and implemented iterator for deque.

3-Test Cases, Running and Results

Test cases and results in : [part2/ConsoleOutput.pdf](#)

Part 3

1-Class Diagrams:



Pdf exist in part3 directory

2-Problem Solution Approach

1.In the first question i parse the string to substrings then collect them from bottom.

2.i sended 3 boolean parameters for each letter it goes bottom of string and checks all characters.

3.I find the selection sort algorithm and implement it recursively

4.I learned how to evaluate it step by step and implented by it .

5.Same as 4th.

6.I implemented 4 helper method; to go right ,to go left, to go top, to go bottom, then i call the printer with diffrent start and end points.

3-Test Cases, Running and Results

Test cases and results in : [part3/ConsoleOutput.pdf](#)