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GROUP 14 – OOPL 20182

SLB

GETTING STARTED GUILD

A visualization of data structures and algorithms including

Stack - Linked List - Balanced Tree

Using JDK 11.0.3 and e(fx)clipse 3.3.0

IDE: Eclipse 2019-03



Preface

The SLB application includes 3 parts for visualize Stack, Linked List and Balanced Tree data structures relatively.

The SLB application can be used by anyone who is interested in data structures and algorithms in computer science.

For further information, please contact Pham Vu Minh, group 14, course Oriented-Object Programming Language 20182

REFERENCE INFORMATION

Functions in use

|  |  |  |
| --- | --- | --- |
| Data Structure | Function | Meaning |
| Stack | Push | Push a value in a stack |
|  | Pop | Pop a value out of stack |
| Linked List | Insert at first | Insert an value at the starting point of the list |
|  | Insert at last | Insert a value at the end of the list |
|  | Insert at a position | Insert a value at an exact point of the list |
|  | Delete at first | Delete an existed value at the starting point of the list |
|  | Delete at last | Delete an existed value at the end of the list |
|  | Delete at a position | Delete an existed value at an exact point of the list |
| Balanced Tree | Insert | Insert a node into the tree |
|  | Delete | Delete an existed node in the tree |

\*Detailed functions described in the SLB application

Technical background

The SLB application is built based on JDK 11.0.3 for core functions and e(fx)clipse for GUI.

The SLB application ver 1.0 is completed on 10/05/2019.

INSTRUCTIONS

OPEN THE SLB APPLICATION

A screenshot of a social media post

Description automatically generated

MAIN INTERFACE

A close up of a mountain

Description automatically generated

GETTING STARTED

A close up of a mountain

Description automatically generated

Menu

App

Name

Click on a button of your choice

STACK GUILDLINE

A sign on the side of a mountain

Description automatically generated

Visuali-zation

Review Theory

A screenshot of a cell phone

Description automatically generatedREVIEW THEORY

Exit

Previouspage

Next page

Back to first page

A close up of a sign

Description automatically generated

Button to push value into stack

Button to pop value out of stack

Display result

Enter a value

VISUALIZATION

LINKED LIST GUILDLINE

A sign on the side of a mountain

Description automatically generated

Visuali-zation

Review Theory

A screenshot of a cell phone

Description automatically generated

REVIEW THEORY

Exit

Previouspage

Next page

Back to first page

Display result

VISUALIZATION

Functions

Enter a value

A close up of a sign

Description automatically generated

BALANCED TREE

Functions

Enter a value

VISUALIZATION

A screenshot of a cell phone

Description automatically generated

*Special thank to Dr. Nguyen Thi Thu Trang for instructing us to complete the application*

Hanoi, 10 May 2019