Data Structures

Lab 6: Stack

Stack as you know is an ordered collection of items of the same type. There is one end you can insert into it and delete from it which called top.

Note:

- All access is restricted to the most recently inserted elements.
- Stacks exhibit a Last In First Out (*LIFO*) property.
- Basic operations are *push* and *pop*.



In this lab we are going to use Stack data structure, which is a predefined Java class exists. And these are Stack class methods:

Pop

Push

Stack()

Creates an empty Stack.

Method Summary	
boolean	empty () Tests if this stack is empty.
E	Looks at the object at the top of this stack without removing it from the stack.
E	Removes the object at the top of this stack and returns that object as the value of this function.
<u>E</u>	Pushes an item onto the top of this stack.
int	Returns the 1-based position where an object is on this stack.

Also we are going to create Stack class and build each method of it as this chart:

Stack int top boolean isEmpty() boolean isFull() int top() int pop() int push(int x)

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