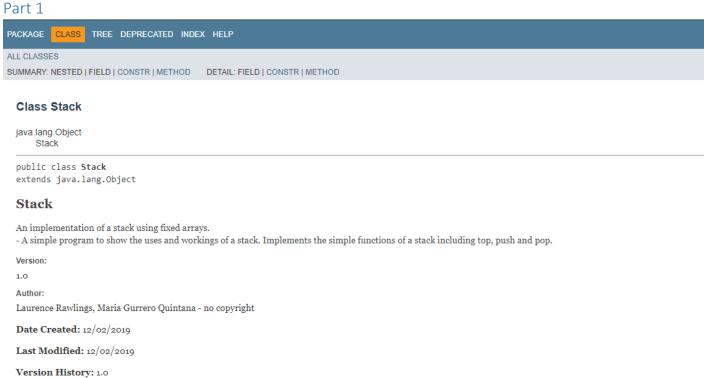
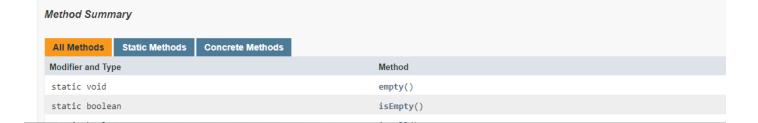
Task 1.1

```
--- Begin Experiment 4 ---
 --- Empty ---
Build up a stack of two entries:
  push 25
  push 31
Pop the top value.
  pop
  top: 25
 --- End Experiment 4 ---
 --- Begin Experiment 5 ---
 --- Empty ---
Start with an empty stack and push one entry:
   stack is empty
  push 42
  stack is not empty
Pop a value.
  pop
  stack is empty
 --- End Experiment 5 ---
Process finished with exit code 0
```

Task 1.2



Constructor Summary Constructors Constructor Description Stack()



Part 2

Method Summary All Methods Static Methods Concrete Methods Modifier and Type Method static void empty() empty resets the stack moving the stack pointer topOfStack back to -1 and resets errorFree back to true empty is NOT referentially transparent static boolean isEmpty() is Empty checks if the stack is empty or not is Empty is NOT referentially transparen static boolean isFull() isFull checks if the stack is full or not isFull is NOT referentially transparent static void main(java.lang.String[] args) static void pop() pop takes 1 away from the top of stack pointer topOfStack changoing the value at the top of the stack this only happens if the stack is not empty and there are currently no errors top is NOT referentially transparent static void push(int value) push add 1 to the top of stack pointer topOfStack and sets that position to the value passed in via the patrameter value push is NOT referentially transparent static int top() top gets the item that is currently at the top of the stack and returns it top is NOT referentially transparent

Method Detail

isEmpty

public static boolean isEmpty()

isEmpty checks if the stack is empty or not isEmpty is NOT referentially transparent

Returns

returns true if the stack pointer topOfStack is -1 which means the stack is empty, otherwise returns false

isFull

public static boolean isFull()

is Full checks if the stack is full or not is Full is NOT referentially transparent

Returns

returns true if the stack pointer topOfStack is the stack size minus 1 which means the stack is full, otherwise returns false

empty

public static void empty()

empty resets the stack moving the stack pointer topOfStack back to -1 and resets errorFree back to true empty is NOT referentially transparent

top

public static int top()

top gets the item that is currently at the top of the stack and returns it top is NOT referentially transparent

Returns:

if the stack is not empty and there are currenty no errors then the item at the top of the stack is returned. Otherwise o is returned

push

public static void push(int value)

push add 1 to the top of stack pointer topOfStack and sets that position to the value passed in via the patrameter value push is NOT referentially transparent

Parameters:

value - is the integer that is to be added to the top of the stack

pop

public static void pop()

pop takes 1 away from the top of stack pointer topOfStack changoing the value at the top of the stack this only happens if the stack is not empty and there are currently no errors top is NOT referentially transparent

main

public static void main(java.lang.String[] args)