Package 'rstack'

August 30, 2023

Title Stack Data Type as an 'R6' Class

Version 1.0.1

Author Gábor Csárdi

Maintainer Gábor Csárdi <csardi.gabor@gmail.com>

Description An extremely simple stack data type, implemented with 'R6'
classes. The size of the stack increases as needed, and the amortized
time complexity is O(1). The stack may contain arbitrary objects.

License MIT + file LICENSE

URL <https://github.com/gaborcsardi/rstack#readme>

BugReports <https://github.com/gaborcsardi/rstack/issues>

RoxygenNote 7.2.3

Imports R6

Suggests covr, testthat

Encoding UTF-8

NeedsCompilation no

Repository CRAN

Date/Publication 2023-08-30 17:20:02 UTC

R topics documented:

---

stack *A stack data type, implemented as an R6 class*

Description

Methods:

- `push(elem)` Puts an R object on the top of the stack. This operation might trigger the allocation of memory, if the currently allocated memory cannot hold the new element. Still, the amortized time complexity of the stack is constant. The stack may contain arbitrary R objects.

- `pop()` Removes and returns the top element of the stack. It throws an error if the stack is empty.

- `peek()` Returns the top element of the stack. (Without removing it.) It throws an error if the stack is empty.

- `size()` Returns the number of elements in the stack.

- `is_empty()` Returns wheather the stack is empty.

Examples

```
S <- stack$new()
S$push(1L)
S$peek()
S$pop()
S$size()

S$push(NULL)
S$push(iris)
colnames(S$peek())
```

Index