Package 'liqueueR'

October 13, 2022

Type Package

Title Implements Queue, PriorityQueue and Stack Classes

Version 0.0.1

Description Provides three classes: Queue, PriorityQueue and Stack. Queue is just a ``plain vanilla" FIFO queue; PriorityQueue orders items according to priority. Stack implements LIFO.

URL https://github.com/DataWookie/liqueueR

License GPL-3 Encoding UTF-8 LazyData true Imports itertools, methods Suggests testthat, iterators RoxygenNote 5.0.1 NeedsCompilation no Author Andrew Collier [aut, cre] Maintainer Andrew Collier <andrew@exegetic.biz>

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PriorityQueue-class A PriorityQueue reference class

Description

Derived from the Queue class.

Fields

data Initial data to populate the queue.

priorities Numeric queue priorities.

Methods

pop(N = 1) Removes and returns head of queue (or raises error if queue is empty). N is number of items to pop.

push(item) Inserts element at back of the queue.

See Also

Queue-class for information on base class.

Queue-class A Queue reference class

Description

A Queue reference class

Fields

data Initial data to populate the queue.

Methods

- peek(pos = c(1), as.list = FALSE) Returns (but does not remove) specified positions in queue
 (or NULL if any one of them is not available). The as.list argument will cause a list to be
 returned even if only one element requested.
- poll() Removes and returns head of queue (or NULL if queue is empty).
- pop(N = 1) Removes and returns head of queue (or raises error if queue is empty). N is number of items to pop.
- push(item) Inserts element at back of the queue.
- size() Returns the number of items in the queue.

Stack-class

Examples

```
queue <- Queue$new()
queue$push("one")
queue$push(2)
queue$push("three")
queue$size()
queue$pop()
queue$poll()</pre>
```

Stack-class A Stack reference class

Description

Derived from the Queue class.

Fields

data Initial data to populate the stack.

Methods

push(item) Inserts element at back of the queue.

See Also

Queue-class for information on base class.

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