Package ‘liqueueR’

August 29, 2016

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

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

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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