

Package: liqueuR (via r-universe)

August 30, 2024

Type Package

Title Implements Queue, PriorityQueue and Stack Classes

Version 0.0.4

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/liqueuR>

BugReports <https://github.com/DataWookie/liqueuR/issues>

License GPL-3

Encoding UTF-8

LazyData true

Imports itertools, methods

Suggests testthat, iterators

RoxygenNote 5.0.1

Repository <https://datawookie.r-universe.dev>

RemoteUrl <https://github.com/datawookie/liqueuR>

RemoteRef HEAD

RemoteSha 91a217f5bee9fd005403e3fcb219f9d5cc1d7e1b

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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.
`prioritise` Function to calculate priorities from items.

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.

Examples

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

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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