

# 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/DataWookiee/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>

**Repository** CRAN

**Date/Publication** 2016-08-22 19:53:24

## R topics documented:

PriorityQueue-class . . . . .	2
Queue-class . . . . .	2
Stack-class . . . . .	3
<b>Index</b>	<b>4</b>

---

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.

**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.

# Index

PriorityQueue (PriorityQueue-class), [2](#)  
PriorityQueue-class, [2](#)

Queue (Queue-class), [2](#)  
Queue-class, [2](#)

Stack (Stack-class), [3](#)  
Stack-class, [3](#)