

24. Collections in Java - Part 3 | Deque and List in Depth.

Deque is an interface, using which we can push elements both at the start and at the end of the queue.

Deque (I) $\xrightarrow{\text{implements}}$ ArrayDeque (C).

If the ArrayDeque is full, then a new ArrayDeque is created, and all the contents are copied and saved and we use the new reference $\rightarrow O(N)$ operation.

Not Thread-Safe Version:

PriorityQueue

ArrayDeque

Deque [Not Thread Safe]

Thread-Safe version:

PriorityBlockingQueue


ConcurrentLinkedDeque

list

the List Iterator lets us have forward traversal,

① hasNext() → forward traversal

② hasPrevious() → backward traversal,

• replaceAll( this method accepts functional interface and replaces all the value, with the value that we have provided

list.replaceAll((Integer val) → val+100);
Similarly For each

list.forEach((Integer val) → val-100);
list.forEach((Integer val) → sqrt(val));

~~LinkedList~~

LinkedList ~~and~~
non-thread Safe Version.

LinkedList
Thread Safe Version.

LinkedList

CopyOnWriteArrayList

Vector → Thread Safe

extends

Stack → Thread Safe

↳ every method inside it is
synchronised, so it uses
monitor locks.

Because it's child of
Vector.

Hence we don't use
implementation of Deque.