C++ in Technical Interviews

### Who am I

- Ben
- Y2 (soon) CS at NUS

## Agenda

- Recap
- Standard Template Library
- Custom Classes / Templates

#### Github Link

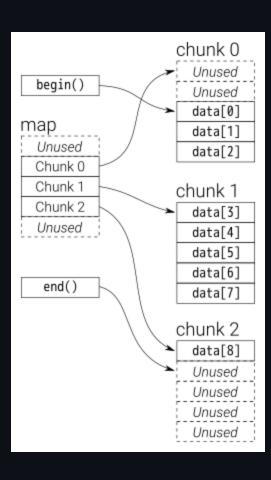
# STL stuff

- Containers
- Algorithm
- Iterators

### Containers

- Sequence Containers
  - deque
  - vector
  - list
- Map
  - o map, unordered map
- Set
  - o set, multiset, unordered\_set, unordered\_multiset

# Deque Implementation



## Other useful containers

- priority queue (i.e default is max heap)
- stack
- queue

## Algorithm

- Sort (i.e hybrid of insertion, quick and heapsort)
  - Custom Sorting
- lower\_bound (i.e finds first x >= target)
- upper bound (i.e finds first x > target)
- nth element (i.e quickselect)
- next\_permutation

# Structs / Classes

- Members of structs are public while those of classes are private by default
- A less toy, more practical example

# Templates

• Work with generic types

#### **Iterators**

• Forward iterators and reverse iterators