C++ in Technical Interviews

Who am I

- Ben
- Y2 (soon) CS at NUS
- Tele handle: @bbnbbnb123 (any questions feel free to ask)

Agenda

- Recap
- Standard Template Library
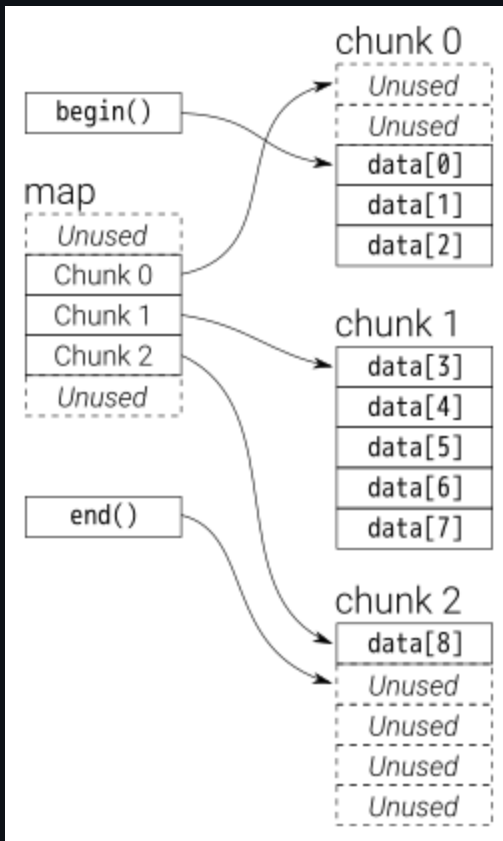- Custom Classes / Templates

Github Link

STL stuff

- Containers

- Algorithm

- Iterators

Containers

- Sequence Containers
  - deque
  - vector
  - list
- Map
  - map, unordered_map
- Set
  - 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