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C library: Containers: <arrav> <deque> <forward_list> t> <map> <queue> <set> <stack> <unordered map> <unordered set> <vector>

<queue> priority_queue

queue queue

Input/Output:

Other:

Multi-threading:

queue::queue member functions: queue::back queue::emplace queue::empty queue::front queue::pop queue::push queue::size queue::swap non-member overloads: relational operators (queue) swap (queue)

non-member specializations:

uses_allocator<queue>

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public member function

std::queue::front

<aueue>

```
C++98 C++11
reference& front();
const_reference& front() const;
```

Access next element

Returns a reference to the *next element* in the queue.

The next element is the "oldest" element in the queue and the same element that is popped out from the queue when queue::pop is

This member function effectively calls member front of the underlying container object.

Parameters

none

Return value

A reference to the next element in the queue.

C++98 C++11

Member types reference and const_reference are aliases of the underlying container's types with the same name.

Example

```
1 // queue::front
 2 #include <iostream>
3 #include <queue>
                                // std::cout
                                // std::queue
 5 int main ()
     std::queue<int> myqueue;
 8
 9
     myqueue.push(77);
10
     myqueue.push(16);
11
                                               // 77-16=61
12
     myqueue.front() -= myqueue.back();
13
14
     std::cout << "myqueue.front() is now " << myqueue.front() << '\n';</pre>
15
16
     return 0;
17 }
```

Output:

myqueue.front() is now 61

Complexity

Constant (calling front on the underlying container).

Data races

The container is accessed (neither the const nor the non-const versions modify the container).

The reference returned can be used to access or modify the next element.

Exception safety

Provides the same level of guarantees as the operation performed on the container (no-throw guarantee for standard non-empty containers).

See also

queue::pop	Remove next element (public member function)
queue::back	Access last element (public member function)

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