The node that the tail pointer points to will not be destroyed in this destructor. A std::shared\_ptr will only destroy the object it points to when all shared\_ptr to the object is destroyed or assigned to another object.

In the implementation shown, only the head pointer is assigned to nullptr, while the tail pointer still points to the last node in the linked list. Which means that the first to the second-to-last nodes in the linked list (if the list have more than one node) should be destroyed, but the last node is still "owned" by the tail pointer and will not be destroyed in this destructor.