

ER Queue Management System

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Problem Statement

A hospital needs a system to efficiently manage an emergency (ER) queue where patient priority can quickly be implemented in a flexible structure that allows to add, remove, or reposition patients dynamically.

Proposed Solution

The ER Queue System is implemented using a Doubly Linked List in C++:
Each node represents a patient and contains a previous and next patient.

The ER Queue System implements a Doubly Linked List and stores:

1. patientID, End, 2. Pointer to previous and next
- The system has the following operations:

1. insertAtBeginning(patientID).
2. insertAtEnd, 2) insertAtPosition(patientID),
3. insertAtPosition(patientID, pos).
4. deleteFromBeginning().

Graphical Representation of Linked List After Performing Each Step

