

EMERGENCY ROOM PATIENT QUEUE SYSTEM USING DOUBLY LINKED LIST

Muhammad Anis

PROBLEM STATEMENT

In an emergency room, patients arrive in different conditions → are normal, while others are critical and need immediate attention.

A simple queue cannot handle such priority cases efficiently. The goal is to create a flexible ER queue system that allows adding and removing patients easily from any position in the queue.



Step 1: InsertAtEnd(101)



Step 3: insertAtBeginning(200)



Step 4: insertAtBeginning(200)

PROPOSED SOLUTION

The system is implemented using a Doubly Linked List, where each node represents a patient with

- marzile
- next pointer → points to the next patient.
- insertAtPosition(id, pos) → inserts a patient at a desired position

Functions Used:

- deleteFromBeginning()
- Removes the treated (first) patient from the queue

Step 5: deleteFromBeginning()



Step 6: insertAtEnd(300)



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