

Doctor's Appointment Management



CS241D - DATA STRUTURE AND ALGORITHMS

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Doctor's Appointment Management

Mr. James has started a new hospital "Gordon Hospital".

The hospital is new and there is only one doctor who specializes in only three categories.

- Heart patients
- Accident patients
- General patients.

The administration is following the principle of first come first served. But they have a serious problem, they can't prioritize between different types of patients.

For example, if the **General** patient comes first and then the **Heart** patient. They cannot prioritize the heart patient.

Mr. James wants a system where the system automatically prioritizes the critically ill. He wants a system that should be given such priority:

1st Emergency:

- 1st Heart
- 2nd Accident

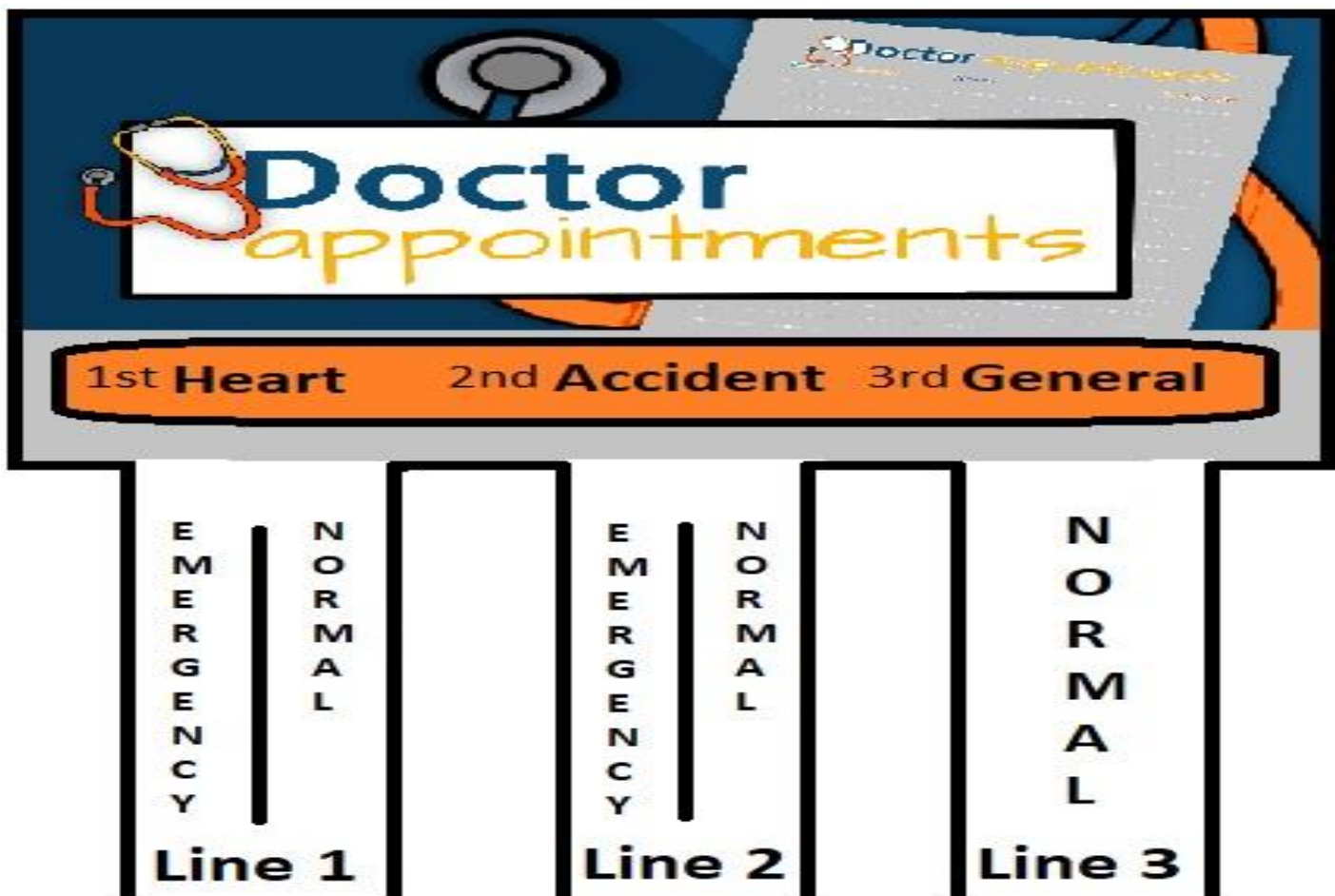
2nd Non-emergency:

- 1st Heart
- 2nd Accident
- 3rd General

After all these conditions are satisfied, the patient will see a doctor for a check-up.

Scope

We have designed the software to perform computerized tasks that take more time if performed manually. Patients that come first will be checked-up first. We have made some priorities to check out the patients depend on their groups. If a patient in serious condition will come, doctors will treat him/her. Patient who will book an appointment will enlisted by using enqueue, and the patients who complete their check-up with the doctor will remove from the list by using the dequeue method. The software will also tell if the list of patients is empty.



DATA STRUCTURES REQUIRED

The data structure that will be used

- Queue
- Linked list

Languages and tools

Language:

- Java

Tools:

- Eclipse