# **Activity: Hospital Appointment List Management**

### Context

You have been hired to develop a simple appointment list management system for a hospital.

The hospital has two types of appointments: regular and priority. Priority patients include the elderly, pregnant women, and people with special needs, who should be given priority in service.

## The system must be able to:

- Add patients to either the regular or priority appointment list.
- Call the next patient for service, always prioritizing the priority list.
- If there are no patients in the priority list, the next patient from the regular list should be called.
- Display the current status of the lists (how many patients are in each).

### Requirements

- 1. Classes and Structure:
- Create a Patient class with the following attributes:
- name (String)
- appointmentType (enum: REGULAR, PRIORITY)
- Create a HospitalList class to manage two lists:
- One list for priority patients
- Another for regular patients

Use the ArrayList data structure (from the 'java.util' package) to implement these lists.

- 2. System Functionalities:
- Add Patient:

The system must allow adding patients to the correct list based on their appointment type.

- Call Next Patient:
- If there are patients in the priority list, the first patient from this list should be called.
- If there are no priority patients, the first patient from the regular list should be called.
- If both lists are empty, the system should notify that there are no patients to call.
- Display Current List:

The system must display the current status of the lists, showing how many patients are in each list and the names of patients waiting for service.

### **Business Rules**

- Whenever there are patients in the priority list, they must be served before patients from the regular list.
- The system must allow patients to be added in any order but always respect service priority.
- The next patient will be removed from the list after being called.