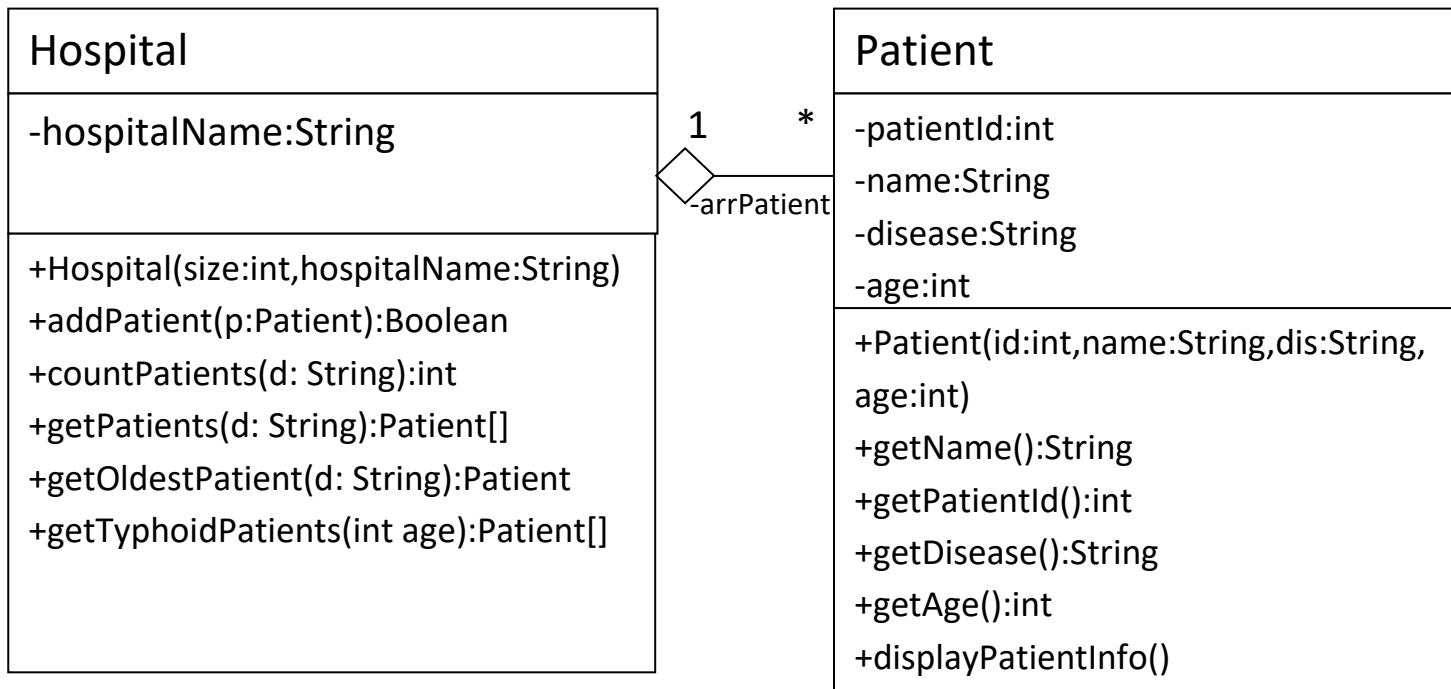




Tutorial: **Relationship between Classes (Aggregation)**

Create the classes along with the functionality given in the following UML Diagram. To understand the problem, please refer to the description given after the diagram.



Patient Class:

○ Attributes:

- patientId: unique id of the patient.
- **name**: the name of the patient.
- **disease**: The disease of the patient.

○ Methods:

- **Patient(id:int,name: string, disease: String, age: int)**: constructor
- **displayPatientInfo()**: this method displays all the attributes of the patient.
- **Getters**



King Saud University
College of Computer and Information Systems
Department of Computer Science
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Tutorial: Relationship between Classes (Aggregation)

Hospital Class:

○ Attributes:

- ***hospitalName***: name of the hospital.

○ Methods:

- ***Hospital(size:int, name:String)***: constructor
- ***addPatient(p:Patient)***: this method adds a patient to the hospital. It returns true if the *Patient p* is added; false otherwise.
- ***countPatient(d:String)***: this method returns the number of patients in the hospital with disease *d*.
- ***getPatients(d:String)***: this method returns an array containing all patients in the hospital with disease *d*.
- ***getOldestPatient(d:String)***: this method returns the oldest patient of the hospital with disease *d*.
- ***getTyphoidPatients(age:int)***: this method returns an array containing all patients in the hospital with disease “Typhoid” and age greater than *age*.

Write java code for classes Patient and Hospital.