AlertGenerator

-dataStorage: DataStorage

+evaluateData(patient: Patient): void
-triggerAlert(alert: Alert): void

AlertThreshold

-patientId: String
-vitalType: String
-lowerLimit: double
-upperLimit: double

+isExceeded(value: double): boolean

AlertManager

-activeAlerts: List<Alert>

+sendAlert(alert: Alert): void
+getActiveAlerts(): List<Alert>

DataStorage

-patientMap: Map<Integer, Patient>

+addPatientData(patientId: int, measurementValue: double, recordType: String, timestamp: long): void
+getRecords(patientId: int, startTime: long, endTime: long): List<PatientRecord>
+getAllPatients(): List<Patient>

Alert

-patientId: String
-condition: String
-timestamp: long

+getPatientId(): String
+getCondition(): String
+getTimestamp(): long

Patient

-patientId: int
-patientRecords: List<PatientRecord>

+addRecord(measurementValue: double, recordType: String, timestamp: long): void
+getRecords(startTime: long, endTime: long): List<PatientRecord>

PatientRecord

-patientId: int
-recordType: String
-measurementValue: double
-timestamp: long

+getPatientId(): int
+getMeasurementValue(): double
+getTimestamp(): long
+getRecordType(): String