



This UML-diagram depicts connections between how the incoming health data is collected, analyzed and in case of atypical indicators of a patient the alert is triggered and routed to the medical staff.

Health data for each patient is stored in a list with his own unique ID, it uses PatientRecord class to analyse all the medical records of a person, especially paying attention to health indicators (heart rate, temperature and etc). In ThresholdRule it helps to define a normal and abnormal condition of a patient.

AlertGenerator is a starting point of triggering and alert as it uses patient record to analyse the “normal” state of a certain patient also referring to data storage. Threshold class defines “limits” of indicators for a patient, so then if health indicators are out of the normal bounds the alert is triggered.

Each alert stores patient ID, information about the condition at a certain timestamp.

AlertManager is a “decision-making” component which evaluates the condition of a patient. It analyzes and finds a probable reason for alert and requests a specialised medical staff for the patient. All the information about alerts is protected.

For each request for a specialised doctor StaffDirectory finds the most suitable for this request medical staff.