

Alert Generator System – UML class diagram explanation

The class diagram for the Alert Generator System illustrates the working of the three classes present in the System: AlertGenerator, Alert and AlertManager. AlertGenerator is used to check whether an ongoing flow of data is within the predetermined threshold of each patient with the method `inTreshold()`, and if it is, it generates an alert with `generateAlert()`. Because of this last method, the AlertGenerator is unidirectionally associated with our next class, Alert. Alert contains all the important information that needs to be relegated to the medical staff, that is, `patientId`, `timeStamp` of the alert and other details. That alert is then handled by the AlertManager, which is dependent on Alert to manage where the alert should be sent to. That happens with the help of the function `sendAlert`, that takes Alert as an input, as it is important to know the details of the alert in order to better predict who should be notified, showing once again that the connection between the two classes is of dependence.