# Body Temperature Monitor Software Architecture

The patient's body temperature will be monitored using a temperature sensors. The body temperature data will be then posted from the device to the cloud computing system. The device will use the HTTP post protocols to communicate with the cloud microservice. Once the data is received at the computing endpoint the raw data will be processed in real time. The will be analysed and the alerting system will be set to notify the respective doctors those who will be monitoring the patient. This communication will be happening over a SMS notification or a push notification in a smart device.

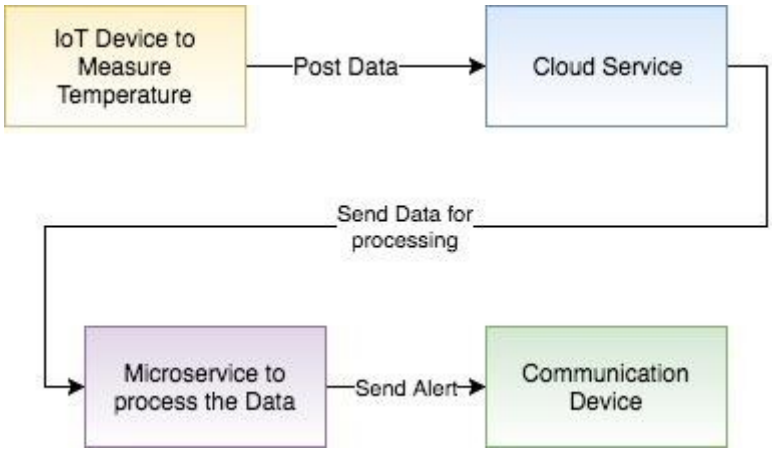


Fig-1:Block Diagram

Fig -1 shows the overall block diagram of the system where the data collected using the sensors are transmitted over an IoT devices using the HTTP protocols and received at the computational server end. The computational system takes care of analysing the data and sending alerts to the respective persons. The alerts can be transmitted as SMS or a push notifications. This enables the doctors to pay attention to the patient in the emergency situations.

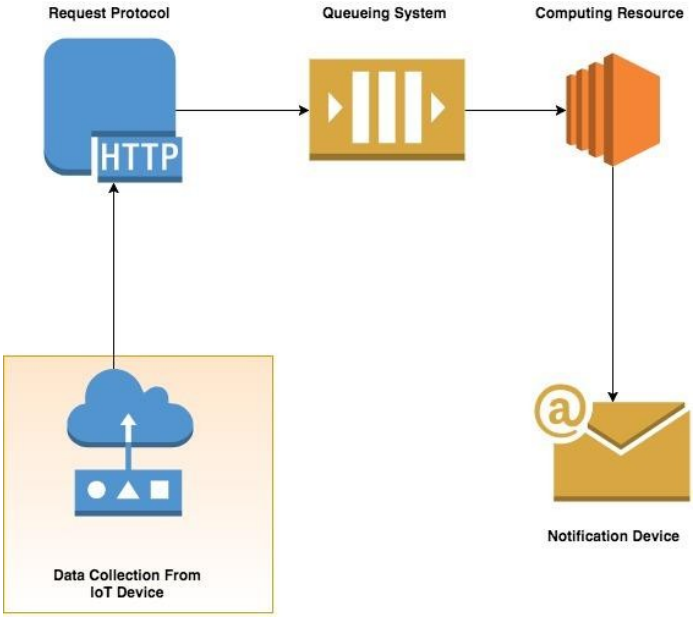


Fig -2: Microservice System Architecture

Fig -2 shows the architecture of the microservice. The data received through the HTTP request are stored on a processing queue. The queue will be listened continuouslyby an ever-running process which will take the data and process it for the anomaly detection. These instances can be scaled horizontally if there is huge data incoming. Once the anomaly is detected the notifications are sent to the respective persons through SMS/ Push notifications. The given architecture is capable of adapting the various interfaces on demand by plug-in approach. As we read the data from the persistent queuing system various computation logics can be applied simultaneously on the data and take make various decision based on it.