Project Design Phase-I
Solution Architecture

Date	19 September 2022
Team ID	PNT2022TMID21380
Project Name	Project – Gas Leakage and Monitoring System
Maximum Marks	4 Marks
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Solution Architecture:

- Here we use Gas sensor to detect the gas leakage and it compares the detection level with the given Python code and stores it.
- Then the stored data is processed and send to the IBM Watson Cloud platform in that analysis is done.
- Then the processed data is send to Node Red in this the processed data is synthesised and stored the information in cloud, the user can view this data with the help of Web application.
- If suppose any blast or emergency situation occurs, the user can immediately get the SMS.

Features:

- This system uses two sensors - gas and temperature - to keep the gas levels in check and monitor the temperature in an area accurately.
- This also has a buzzer, which will start buzzing if there is a leakage or fire.
- An web application will show the status of the environment.

Solution Specifications:

- Temperature Sensor
- Gas sensor
- IBM cloud
- Node-Red
- Cloudant DB
- Web application
- SMS Sending device (GSM module)
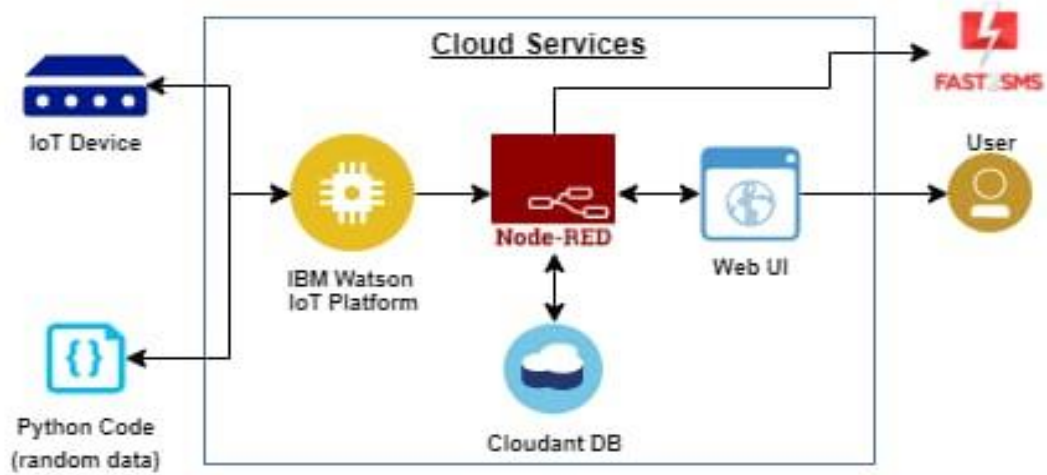
Solution Architecture Diagram:

Figure 1: Architecture and data flow of the voice patient diary sample application