

Project Design Phase-II Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID47529
Project Name	Project - Gas Leakage Monitoring and Alerting System
Maximum Marks	4 Marks
Team Members	
Team Head	AJAY KUMAR K – 910419106001
Team Member 1	SNEHA R M – 910419106301
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Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

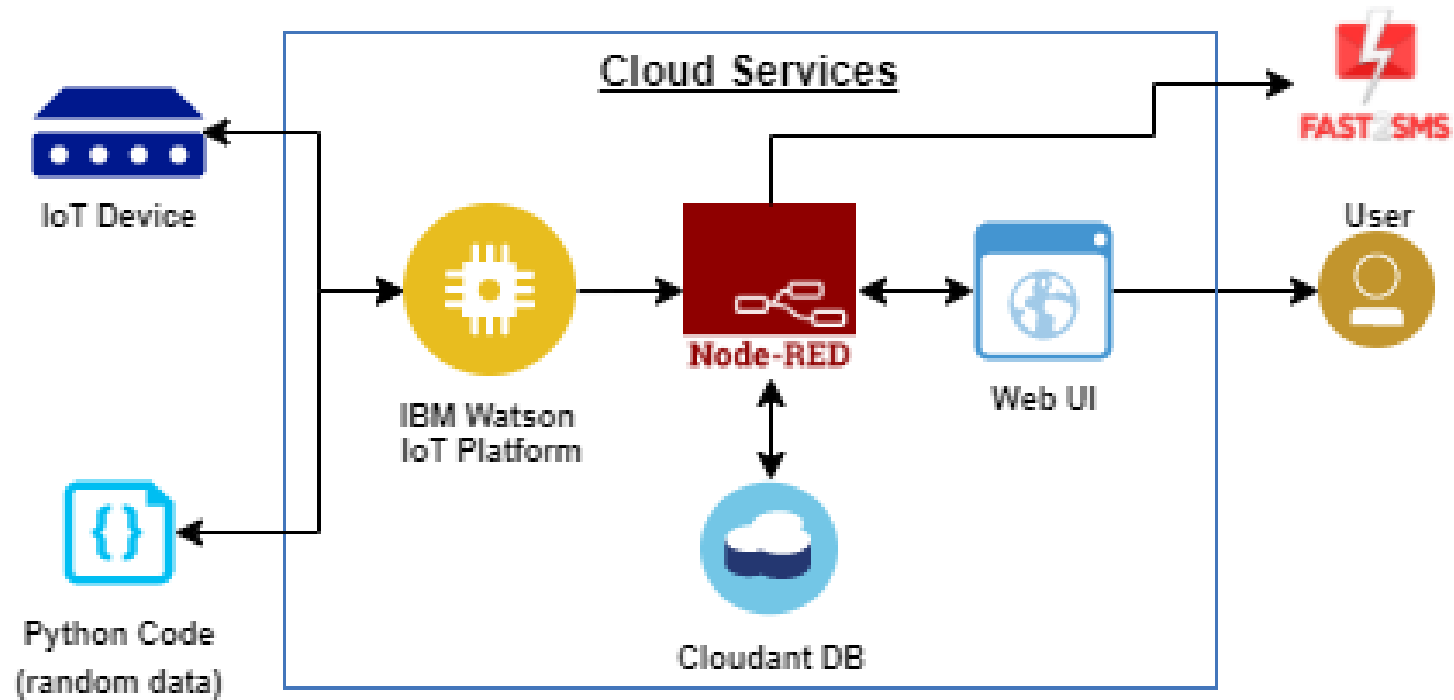


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User has to register and we can able to view the devise.	HTML, CSS, JavaScript
2.	Application Logic-1	Owner devise should be connected to the system	Python
3.	Application Logic-2	Owner devise should be in ON condition	IBM Watson STT service

4.	Application Logic-3	If gas leakage is detected the notification should be sent	IBM Watson STT
5.	Database	Data type can be in any form	SQ lite
6.	File Storage	File will be labelled with what they contain	IBM Block Storage or Local Filesystem
7.	External API-1	Purpose of External API used in the device to use internet for communication	API
8.	Machine Learning Model	IOT and machine learning delivers insights.	Object Recognition Model, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	MIT app, Node-Red	Software
2.	Scalable Architecture	Application can also be developed in future by integrating more number of equipment to measure various parameters,	Hardware(arduino, sensors)
3.	Performance	Measure or monitor that depletion of combustible gases, toxic gases within an area as part of a safety system	Hardware