

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

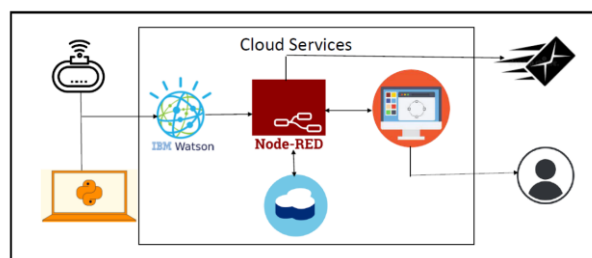
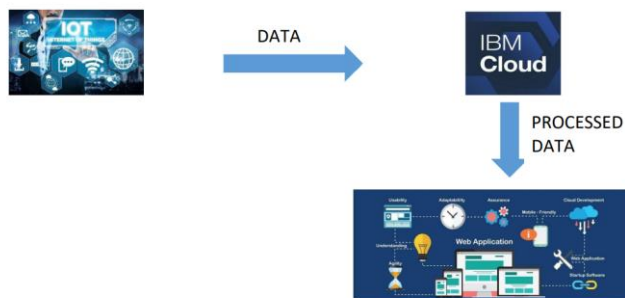
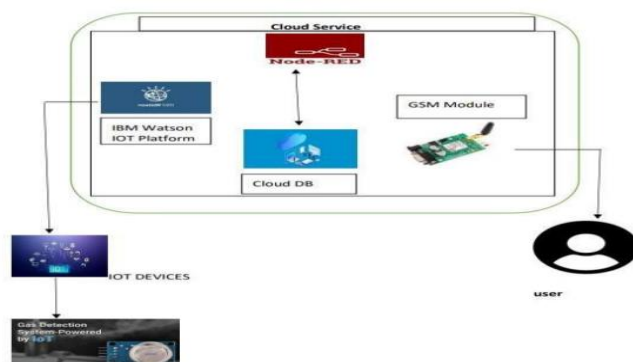
Team ID	PNT2022TMID43411
Project Name	Gas Leakage Monitoring And Alerting System For Industries
Maximum Marks	4 Marks

### Technical Architecture: Gas Leakage Monitoring And Alerting System For Industries

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

**Example: The IoT - enabled Gas Leakage Monitoring And Alerting System For Industries**

#### TECHNICAL ARCHITECTURE



**Table-1 : Components & Technologies:**

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application	Node-Red
2.	Application Logic-1	Logic for a process in the application	PYTHON
3.	Application Logic-2	Logic for a process in the application	IBM WATSON services
4.	Application Logic-3	Logic for a process in the application	IBM WATSON Assistant
5.	Database	Data Type, Configurations etc	Cloudant(IBM services)
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local File system
8.	External API-1	Purpose of External API used in the application	IBM Watson API, etc
9.	External API-2	Purpose of External API used in the application	Node-Red, etc
10.	External API-3	Purpose of External API used in the application	Cloudant DB
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local	Local, Cloud Foundry, etc.
		Server Configuration: Cloud	
		Server Configuration:	

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Wokwi, Node Red, IBM Watson

2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc	e.g., SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Multiple Data Store Technologies
4.	Availability	Justify the availability of application	IBM Cloud database
5.	Performance	Design consideration for the performance of the application	Node-red