TECHNOLOGY ARCHITECTURE

Team ID	**PNT2022TMID31382**
Project Name	**Gas Leakage Monitoring and Alerting System**

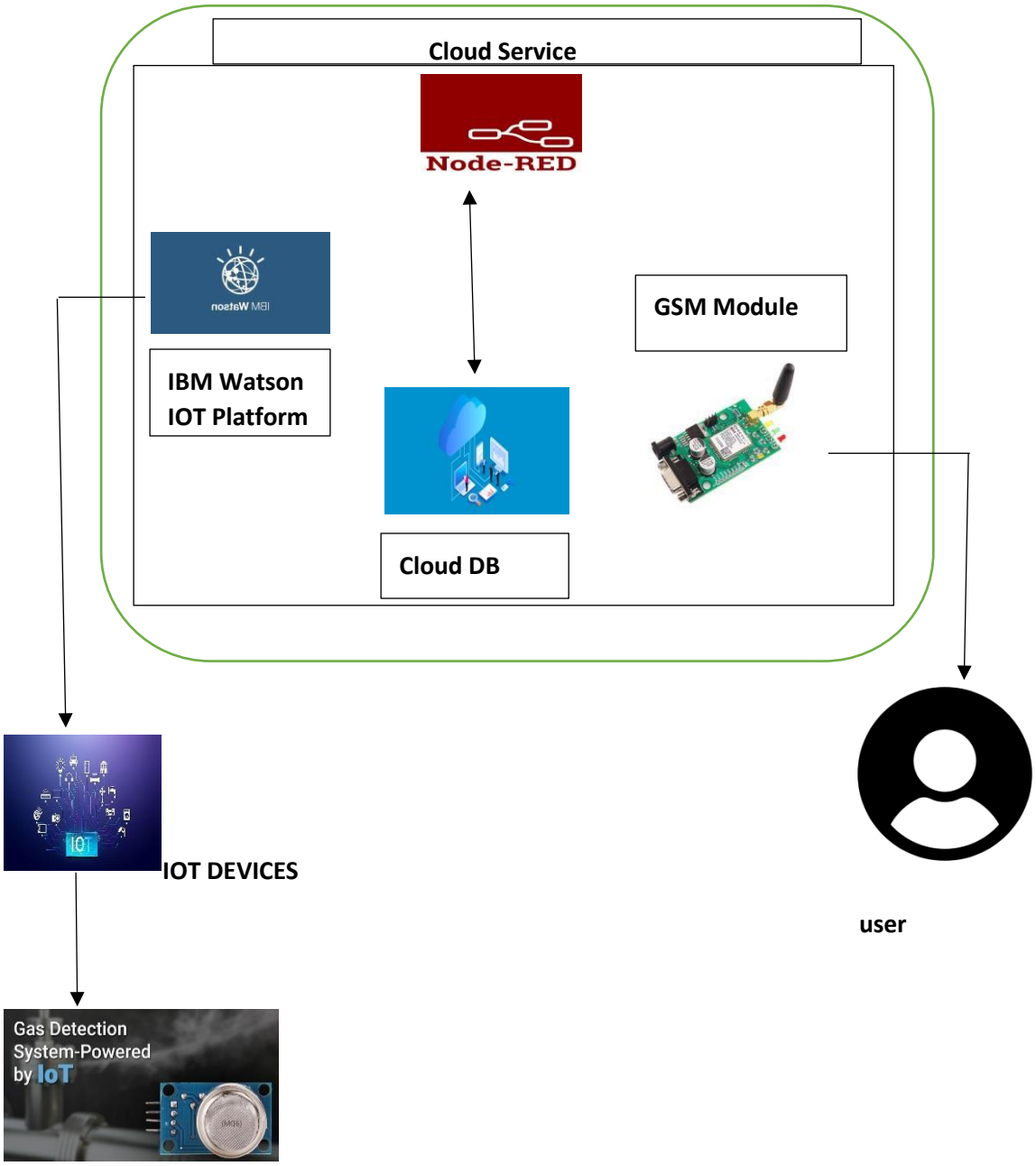

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Logic for a process in the application	Java / Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
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 Filesystem
8.	External API-1	Purpose of External API used in the application	IBM Watson IoT Platform, etc.
9.	External API-2	Purpose of External API used in the application	Fast SMS API, etc.
10.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Cloudant DB, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Python, Node RED Dashboard, MIT App Inventor, Fast SMS

2.	**Security Implementations**	**List all the security / access controls implemented, use of firewalls etc.**	**e.g. SHA-256, Encryptions, IAM Controls etc.**
3.	**Scalable Architecture**	**The user can also increase the range of the gas leakage monitoring system by increasing the number of sensors installed in the industry. Thus, making the system highly scalable.**	
4.	**Availability**	**It allows realtime monitoring of gas leakage system anywhere even in remote areas.**	
5.	**Performance**	**Fast SMS, Node RED provides realtime monitoring of sensor status.**	