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

Date	03 October 2022
Team ID	PNT2022TMID40473
Project Name	Gas leakage Alerting & monitoring system for Industries
Maximum Marks	4 Marks

Technical Architecture:

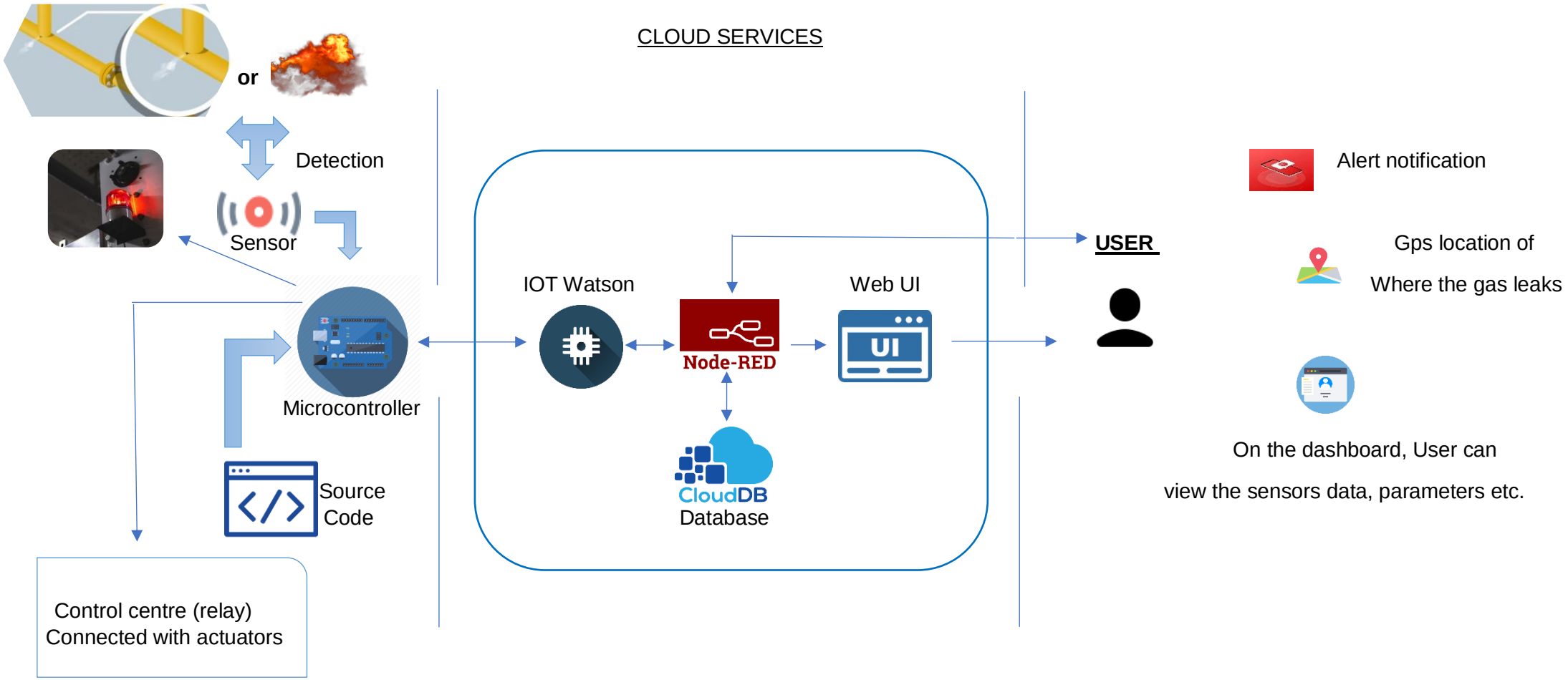

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web browser, Mobile App.	HTML, CSS, JavaScript
2.	Application Logic-1	Logic for a process in the application	Python
3.	Application Logic-2	Logic for a process in the Watson IOT platform	IBM Watson IOT service
4.	Application Logic-3	Logic for a process in the Node red & Web UI	IBM Node Red
5.	Database	Data Type, Configurations etc.	NoSQL database
6.	Cloud Database	Database Service on Cloud	IBM Cloudant
7.	File Storage	File storage requirement is needed for Data Reports	IBM Block Storage or Other Storage Service
8.	External API	Purpose of External API used in the application	No external API
9.	Infrastructure (Server / Cloud)	Cloud Local Server Configuration: Cloud Server Configuration :	Cloud Foundry

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	MIT App inventor, IBM cloud services.
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	Confirmation OTP, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Microcontroller, Task paralysation.
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Cloud database Server
5.	Performance	Design consideration for the performance of the application (Multiple inputs at one time) etc.	Internet of Things