Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID21380
Project Name	Project – Gas leakage Monitoring and Alerting System
Maximum Marks	4 Marks
Team Members	1. Mahalakshmi C - 19D047 2. Laila B G - 19D043 3. Raji Santhoshi T G - 19D070 4. Durga Devi G - 19D117

Technical Architecture:

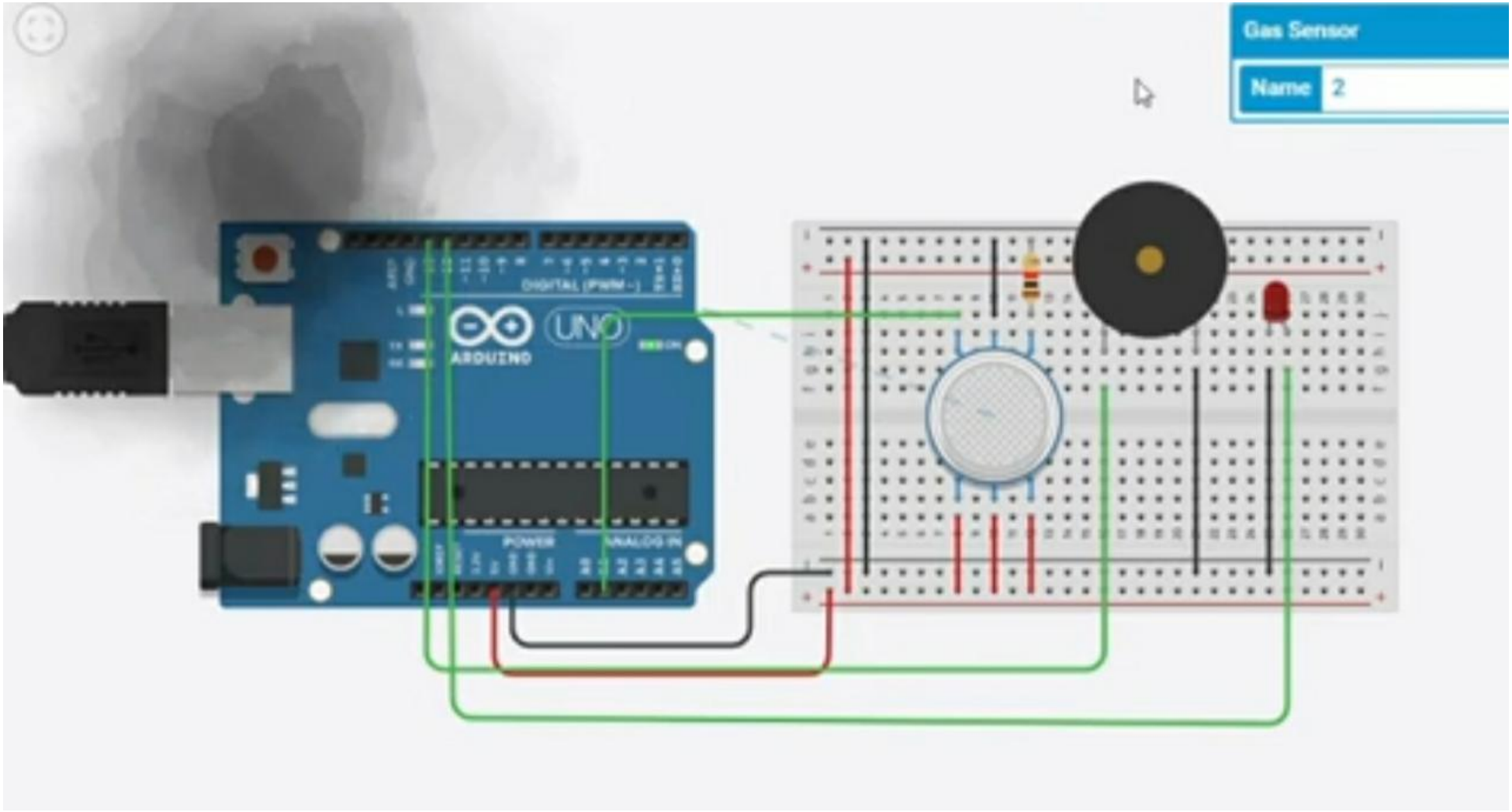

Table-1 : Components & Technologies:

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.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Scalable Architecture	Implement in Industries, House, Hotel, etc.	Internet of Things (IOT)
2.	Availability	Implemented in distributed servers. The gas detectors can be used for the detection of combustible, flammable and poisonous gases and for the loss of oxygen, and also to detected the gas leak or other pollutants. It makes the area where the leak occurs an warning sound and instructs operators to leave the area.	IBM Cloud
3.	Performance	If the gases can be leaked in industries or home, then it will detect by using gas sensor after that it gives alert sound to the people by using buzzer. In this way we avoid the huge explosion.	Internet of Things (IOT) and IBM Cloud