Project Design Phase-II Technology Architecture

| Date | 20 October 2022 |
|---------------|--------------------------------------------|
| Team ID | PNT2022TMID15784 |
| Project Name | Gas leakage Monitoring and Alerting System |
| Maximum Marks | 4 Marks |

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. | Cloud Database | Database Service on Cloud | IBM DB2, IBM Cloudant etc. |
| 6. | Infrastructure (Server / Cloud) | Application Deployment on Cloud | Local, Cloud Foundry, Kubernetes, etc. |

Table-2: Application Characteristics:

| S.No | Characteristics | Description | Technology |
|------|-----------------------|------------------------------------------------------------------------------------------------------|--------------------------|
| 1. | Scalable Architecture | We can implement in Industries, Hotels, Public places | IOT (Internet of Things) |
| 2. | Availability | To detect leakage 24/7 for uninterrupted services we have implemented in distributed servers (cloud) | IBM cloud |
| 3. | Performance | If we implemented in industries, it needs many gas sensors to detect | |