TABLE-1: Components & Technologies

S.NO	COMPONENT	DESCRIPTION	TECHNOLOGY
1.	USER INTERFACE/USER DISPLAY	Hardware Output display to the user by means of Web UI, SMS and LCD Display	Embedded C++
2.	(Application logic-1) Connection of Hardware between Arduino with required sensor.	Integrating the MQ sensor, Pressure sensor along with the Ardunio Uno and Node Red.	Arduino IDE, language=Embedded C++
3.	Database	Connecting Hardware Application with Internet of Things through IBM cloud, configurations	IBM cloudant source, My SQL
4.	Cloud Database	Integrating with the Webhooks. (e.g) Select if the alert to be sent which condition exist or does not exist in the case (Database Service on cloud)	IBM DB2,IBM Watson STT service
5.	Integrating with the IBM cloud Monitoring	Configuring monitoring instance detail. Specifying the API Key with the function call.	CRUD operation, JSON file format , API function call
6.	SMS Sending application	Communication AT, IMEI in the mobile and Network	IBM Cloudant DB, Node RED service

7.	Buzzer indicating and LCD display	Integrating the arduino with BUZZER with specified Delay mode and LCD display through GSM module	Arduino software IDE
8.	Node MCU	Node MCU is an open source software and hardware development environment built around the inexpensive system on a chip using GSM module	Arduino software IDE

Table-2 : Application Characteristics:

S.NO	CHARACTERISTICS	DESCRIPTION	TECHNOLOGY
1	OPEN SOURCE FRAMEWORKS	Django, which is an open source framework under python, has been used.	Technology used is python(Open source network)
2	SECURITY IMPLEMENTATION	As a cloud-hosted service the IBM Watson IoT Platform service embeds security as an important aspect of its architecture	IBM Watson
3	SCALABLE ARCHITECTURE	Justify the scalability of architecture(3-tier)	Technology used
4	AVAILABILITY	system uses GSM technique to send alert message to respective person if no one is there in the house and then gas leaks occurs, GSM module is there to send immediate messages to the respective person regarding the gas leak (GSM MODULE)	GSM MODULE TECH STACK
5	PERFORMANCE	Design consideration for the performance of the application (number of requests per sec, use of Technology used Cache, use of CDN's) etc.	Technology used