Project Design Phase-II
Data Flow Diagram & User Stories
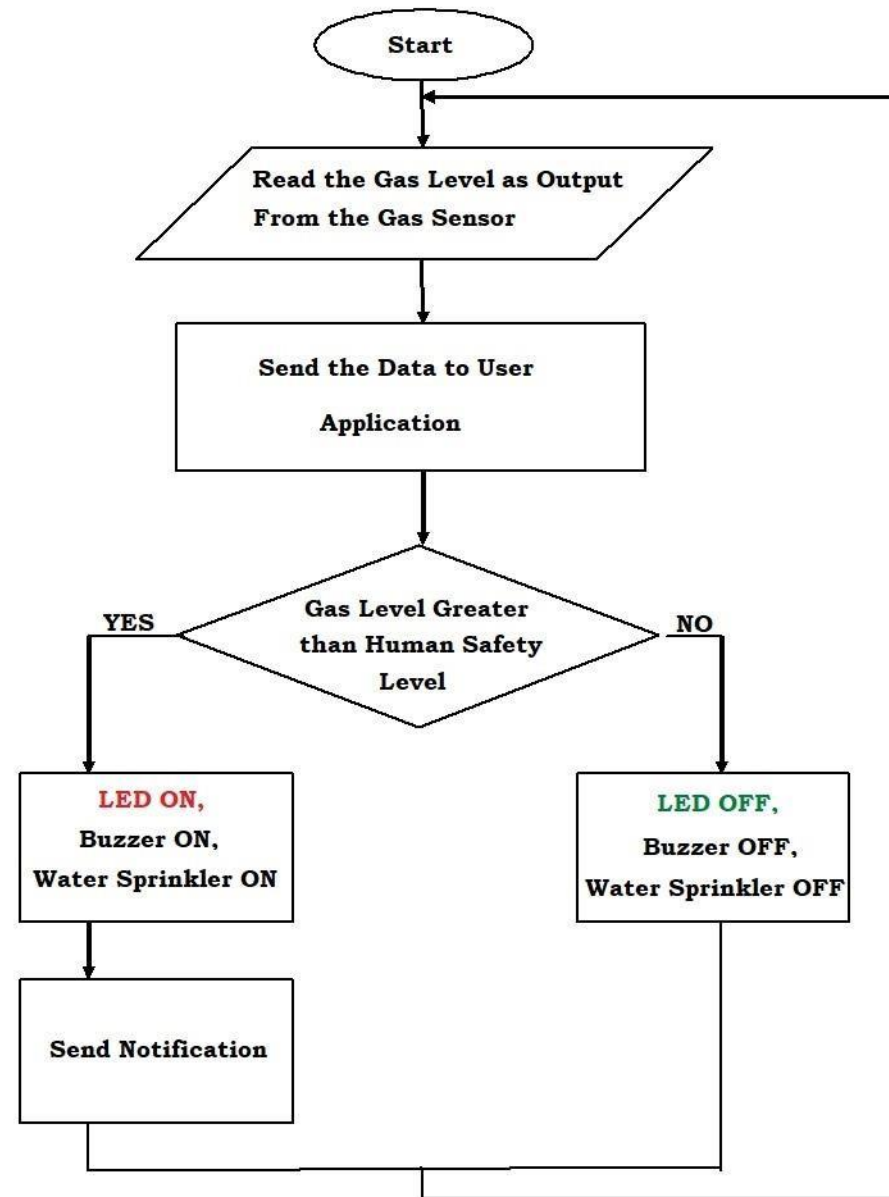
Date	15 October2022
Team ID	PNT2022TMID04007
Project Name	Gas Leakage Monitoring & Alerting System
Maximum Marks	4 Marks

Data Flow Diagram:
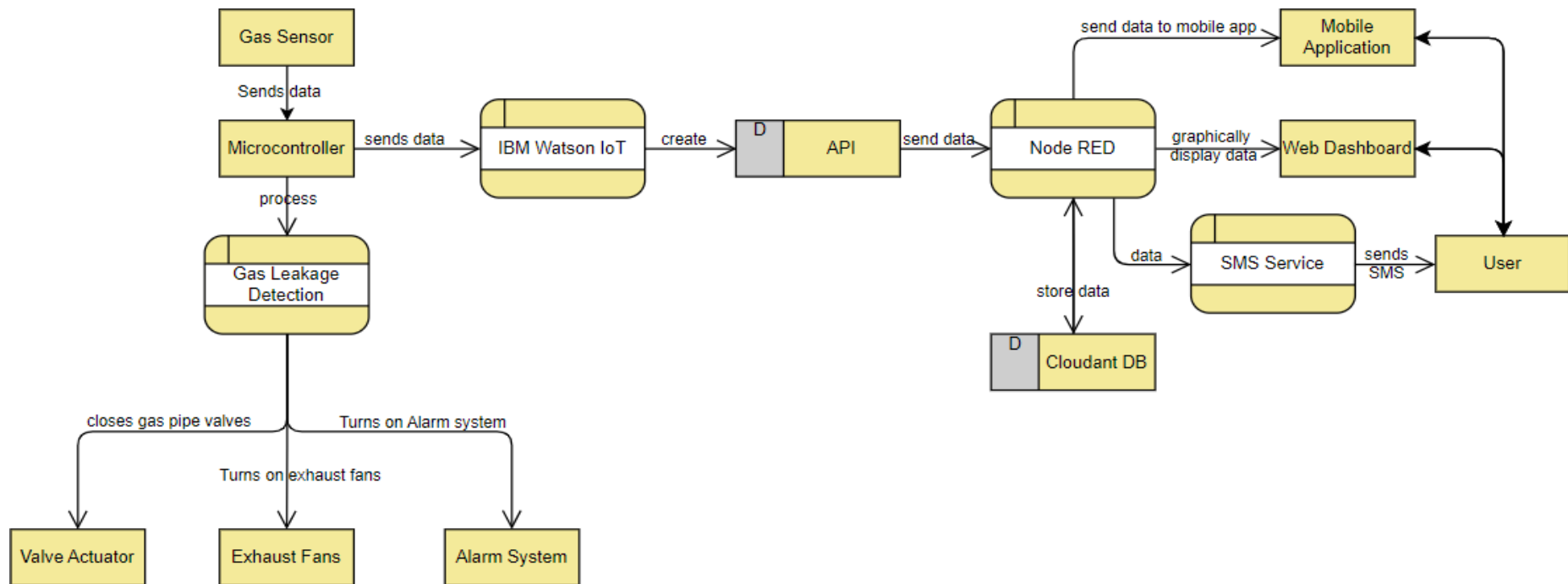
Flow Chart

GAS LEAKAGE DETECTION AND ALERTING SYSTEM

```
                              ┌──────────┐
                              │  Start   │
                              └──────────┘
                                   │
              ┌────────────────────────────────────────┐
              │  Read the Gas Level as Output           │
              │  From the Gas Sensor                    │
              └────────────────────────────────────────┘
                                   │
              ┌────────────────────────────────────────┐
              │  Send the Data to User                  │
              │                                         │
              │  Application                            │
              └────────────────────────────────────────┘
                                   │
                              Gas Level Greater
                    YES        than Human Safety        NO
                                   Level
          │                                                   │
   ┌──────────────────┐                        ┌──────────────────┐
   │  LED ON,         │                        │  LED OFF,        │
   │  Buzzer ON,      │                        │  Buzzer OFF,     │
   │  Water Sprinkler ON │                     │  Water Sprinkler OFF │
   └──────────────────┘                        └──────────────────┘
          │
   ┌──────────────────┐
   │  Send Notification │
   └──────────────────┘
```

User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Industry owner)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	Register to the application by email and password with password confirmation.	High	Sprint-1
Customer (Industry Owner)	Confirmation	USN-2	I will receive confirmation email once Ihave registered for the application	Receive confirmation email & click confirm	High	Sprint-1
Customer (Industry Owner)	Authorize	USN-3	As a user, I will enable the supervisor to monitor the gas leakage system status.	Provide access to supervisor.	High	Sprint-1
Customer (Supervisor)	Login	USN-4	As a user, I can log into the application by entering email & password.	Get access to dashboard.	High	Sprint-1
Customer (Supervisor)	Monitor	USN-5	As a user, I can monitor the status of the gas leakage system.	Status of gas leakage system.	High	Sprint-1
Customer (Line Workers)	Notification	USN-6	As a user, I can get (alarm system) alert about gas leakage.	Get alert about gas leak.	Medium	Sprint-2
Customer (Supervisor)	Notification	USN-7	As a user, I can get SMS notification & alarming alert about gas leakage.	Get alert about gas leakage.	Medium	Sprint-2
Customer (Industry Owner)	Sign-Up	USN-9	As a user, I can sign-up using Facebook login.	I can sign-up with the application using Facebook.	Low	Sprint-3
Customer (Supervisor)	Sign-Up	USN-10	As a user, I can sign-up using Google login.	I can sign-up with the application Google using.	Low	Sprint-3
Administrator	Service Request	USN-11	As a user, I can request for service in case of any issue with gas leakage monitoring system	Get service from provider	Low	Sprint-3
Administrator	Increase dservice	USN-12	As a user, I can request for scaling up the gas leakage monitoring system.	Get service from the provider.	Low	Sprint-4
Customer (Industry Supervisor)	Leakage detection	USN-13	Look for gas leakage in any other container	Access the monitor Display	High	Sprint-1