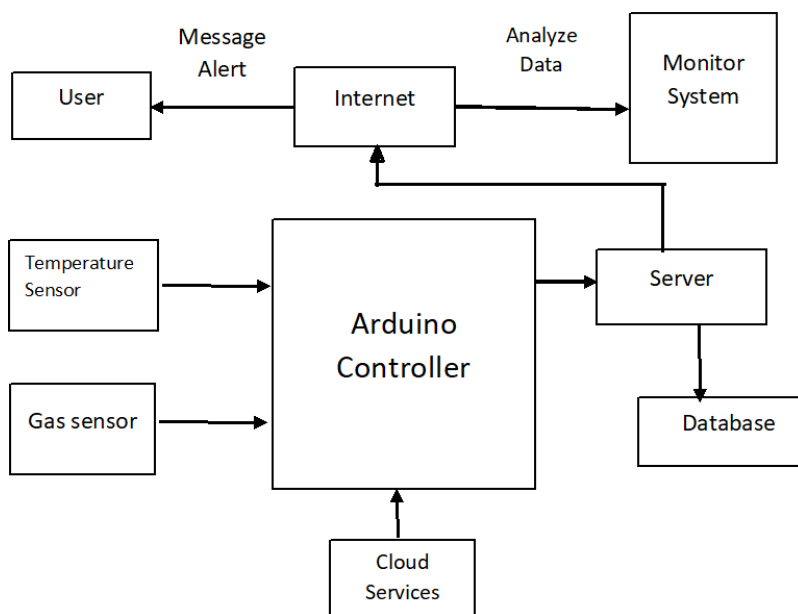


## Project Design Phase-II

### Data Flow Diagram

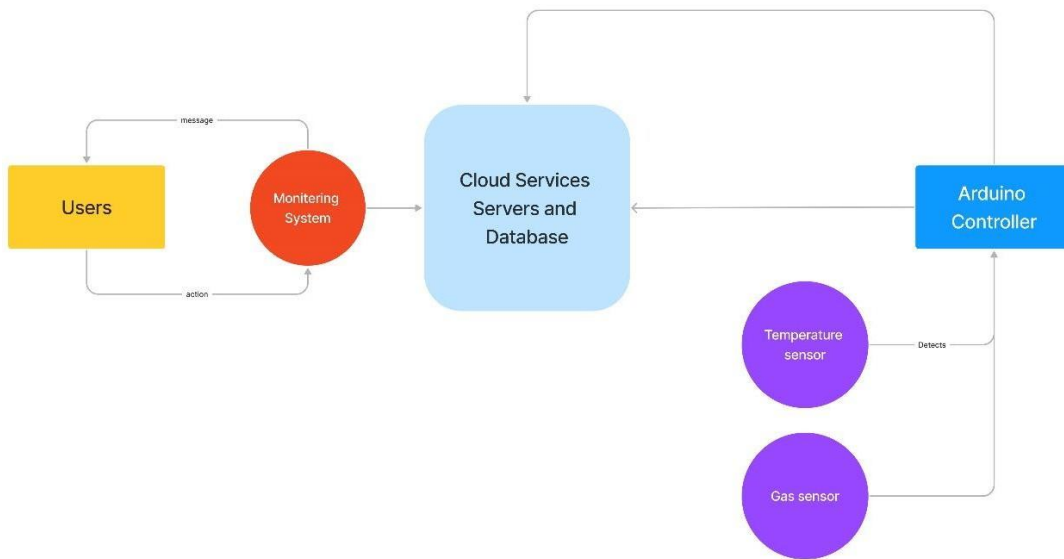
Team ID	PNT2022TMID01194
Project Name	Hazardous Area Monitoring for Industrial plant powered by IoT

### Simplified Data Flow:



1. Gas sensors which detects the presence of hazardous gases and Temperature sensor which measures the temperature are used.
2. Arduino controller which reads input and turns into an output.
3. Cloud services supports IoT devices and applications and used to store IoT data.
4. Servers and Database is used in data management functions.
5. The user is given the message alerts with the help of the internet and data is analyzed and area is monitored.

## DFD Level 0:



## USER STORIES:

User Type	Functional Requirement (Epic)	User Story Number	User Story/ Task	Acceptance criteria	Priority	Release
Technician	Installation	USN-1	As a User, I need to install an application for monitoring the hazards.	Through this application I can able to get the alert message.	High	Sprint- 1
Mobile User	Registration	USN-2	As a User, I can register for the application by entering my email, password and confirming my password.	I can access my account/ dashboard.	High	Sprint- 1
		USN-3	As a User, I will receive confirmation email once I have registered for the application.	I can receive confirmation email & click confirm	High	Sprint-1
		USN-4	As a User, I can register for the application through Facebook.	I can register & access the dashboard with Facebook login	Low	Sprint- 2
		USN-5	As a User, I can register for the application through Gmail.	I can access my account /dashboard.	Medium	Sprint- 1
	Login	USN-6	As a User, I can login to the application by entering email & password	I can register and access my account.	High	Sprint- 1
	Dashboard	USN-7	I can monitor the temperature and humidity.	I can access the account for monitoring the hazardous area.	Medium	Sprint- 2
End User	Alerting through message	USN-8	I can receive message in the form of visual notification and voice message.	I can detect the hazard and receive notification.	High	Sprint- 1

	SMS Notification	USN-9	I can get the alert message if the area has any Hazards.	I can be alerted through the SMS notification.	Medium	Sprint- 2
	Monitoring	USN-10	I can able to monitor the harmful gases, high temperature through mobile application.	I can identify harmful gases, temperature in the field.	Medium	Sprint- 2
Web User	Monitoring	USN-11	As a Web User, I can detect the hazard through the website.	I can monitor the hazards like temperature, humidity, toxic gases.	High	Sprint- 1
Customer Care Executive	Maintenance	USN-12	As an executive, I manage a team of representatives offering customer support.	I need a team of workers to manage the data.	Low	Sprint- 3
Administrator	Administration Work	USN-13	As an Administrator, I can able to access the data through the cloud.	I can access the data sent by the beacon sensor.	High	Sprint- 2