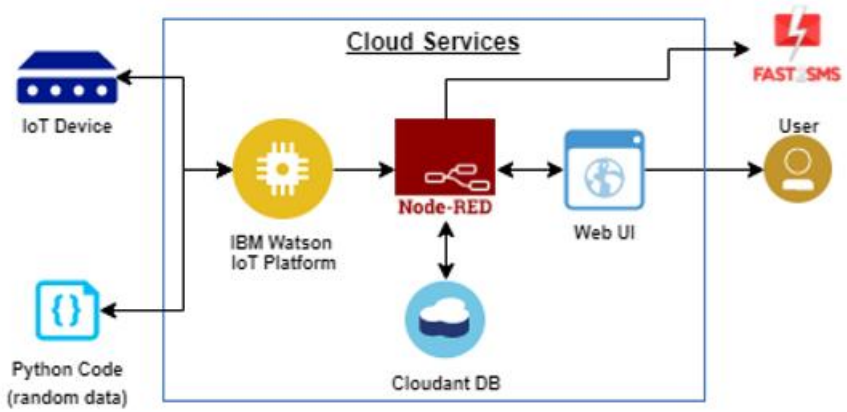
Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	15 October 2022
Team ID	PNT2022TMID46768
Project Name	Gas Leakage and Monitering System for industries
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Example: Order processing during pandemics for offline mode



Guidelines:

1. Include all the processes (As an application logic / Technology Block)
2. Provide infrastructural demarcation (Local / Cloud)
3. Indicate external interfaces (third party API's etc.)
4. Indicate Data Storage components / services
5. Indicate interface to machine learning models (if applicable)

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user can see our company's information , production rate. And the user can get to know about our product and advantages of our product, the disadvantages of the company works without our product. The user can know about every information about our product and also they can know about our regular services ,discounts, and warrenty and gaurenty for our product and replacement policies.And the user can see the profit flowchart of each product . and the user can see how to track their order.	HTML, CSS, JavaScript
2.	Application Logic-1	Logic for a process in the application	Java / Python / C#
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.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
9.	External API-2	Purpose of External API used in the application	Aadhar API, etc.
10.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	“ .Net”	“.Net framework(4.7.2)
2.	Security Implementations	The gas monitering system gives the customer the high level security and high level safety. They moniter the gas pipes whether gas leaks happens or not. When the gas leak occurs it notifies the works and the whole industry. So the workers can turnoff the gas pipe. So they can ignore the gas flow in pipes that stops the spread of gas in industry.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	The gas detection system can detect every types of gases. It can also measure gas in all concentration levels. It can also measure the gas even if it is less in quantity. This provides the industry a high level safety and seecurity. And it is also a kind off prevention.	Technology used
4.	Availability	Our product will be available every day. And the sensors are able to detect every gas leaks. That leads to low cost of our peoduct. The customer don’t need to fix sensors for every single type of gas. The product has embedded with several sensors. And it is available in affordable prizes too.	Technology used
5.	Performance	The performsnce of our product will be great. If it is maintained and serviced properly . The gas leakage monitering system will works for 24/7. It moniters the gas pipe lines and have 99.9% accuracy of gas leakage . The performance will be good if it was maintained and serviced properly.	Technology used