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

Date	03 October 2022
Team ID	PNT2022TMID27908
Project Name	Project – Industry-specific intelligent fire management system
Maximum Marks	4 Marks

Technical Architecture:

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

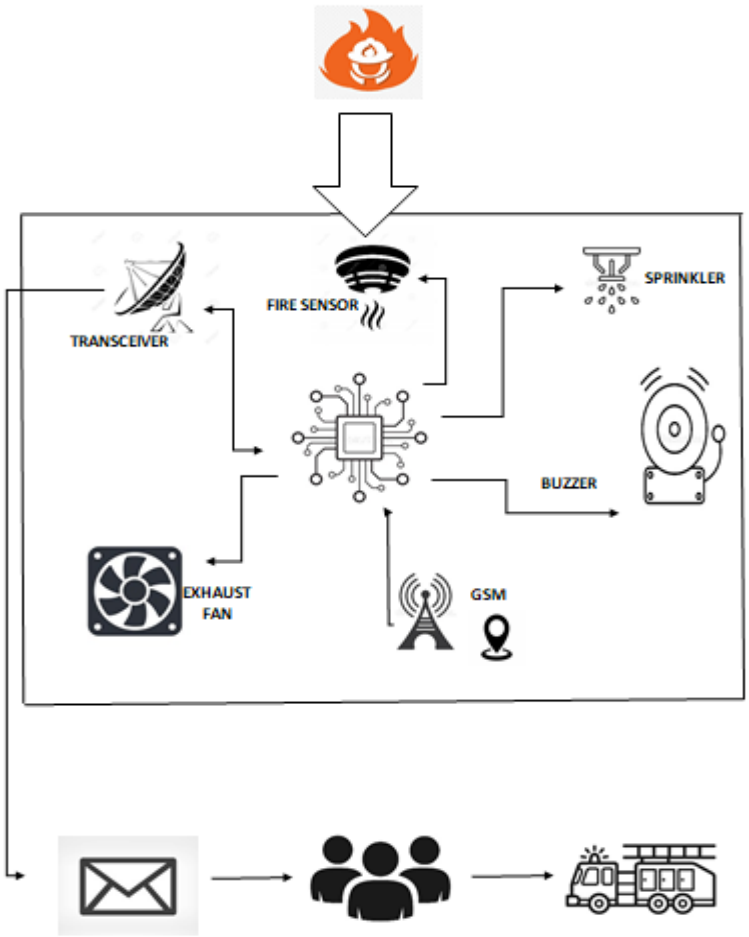

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App.	HTML, CSS, JavaScript / Angular JS / React JS etc.
2.	Application Logic-1	Logic for a process in the application	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.	Protocol	Data transmission and reception.	HTTP
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 File system
8.	Internet Of Things	Purpose of IOT Model	Fire detection and prevention.
9.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration Cloud Server Configuration	Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Security Implementations	List all the security / access controls implemented.	IBM Cloud (Authorized people can only access). Flash Encryption and Secured Boot (Features of ESP32).
2.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Internet Of Things, Scaling up IBM Cloud.
3.	Availability	Justify the availability of application.	Available for the authorized people.
4.	Performance	Design consideration for the performance of the system.	In order to send the information at every instant, the setup is connected to the cloud. HTTP protocol is used to send the notification.