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

Date	20 October 2022
Team ID	PNT2022TMID42571
Project Name	Project - Industry specific intelligent fire management system
Maximum Marks	4 Marks

Technical Architecture:
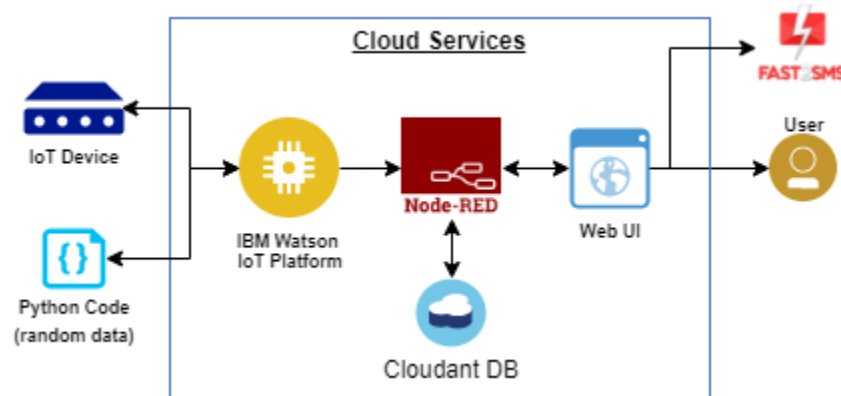
Guidelines:

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	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS.
2.	Application Logic-1	Logic for a process in the application	Java / Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson IOT service
4.	Application Logic-3	Logic for a process in the application	SQL
5.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
6.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service
7.	External API-1	Purpose of External API used in the application	Fast SMS
8.	Cloud Model	Cloud Model	Cloud Model

9.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud	IBM cloud

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Web UI using Node-RED	NODE-RED
2.	Security Implementations	IBM Services	User Authentication ,Device Authentication using authentication tokens
3.	Scalable Architecture	Sensor Cloud Based Architecture	IOT Watson platform ,IBM cloudant
4.	Availability	Laptops and mobile phones	Node-RED
5.	Performance	Monitors the temperature, gas leaks and flames continuously	Sensors