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

Date	15 October 2022
Team ID	PNT2022TMID13566
Project Name	Project - Industry-Specific Intelligent Fire Management System
Maximum Marks	4 Marks

Technical Architecture:

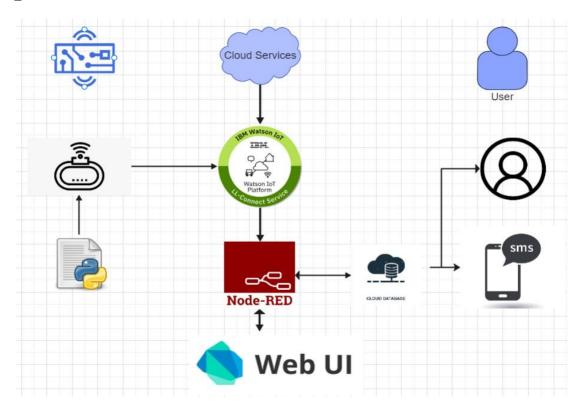The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with the Web UI	App development
2.	Application Logic	Logic for a process in the application	appinventor.mit.edu
3.	Database	Data Type, Configurations etc.	Cloud database
4.	Cloud Database	Database Service on Cloud	IBM Cloudant
5.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
6.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Cloud Foundry
7.	Protocol	How data exchanged on web	HTTP

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Security Implementations	List all the security / access controls implemented.	As we are using IBM cloud, there is continuous edge-to-cloud protection for data and applications with regulatory compliance..
2.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	As we are using IBM cloud, there will be seamless and automatic scaling up of instances when more resources are required due to demand.
3.	Availability	Justify the availability of applications (e.g. use of load balancers, distributed servers etc.)	This system has end-user experience monitoring, analytics and log monitoring.
4.	Performance	Design consideration for the performance of the application	As we are using HTTP, for every second the data about temperature, level of gas content, flame detection are received.