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

DATE	9 November 2022
TEAM ID	PNT2022TMID43363
PROJECT NAME	Project- Hazardous Area Monitoring for Industrial Plant powered by IoT
MAXIMUM MARKS	4 Marks

Technical Architecture:

Example: Hazardous Area Monitoring for Industrial Plant powered by IoT

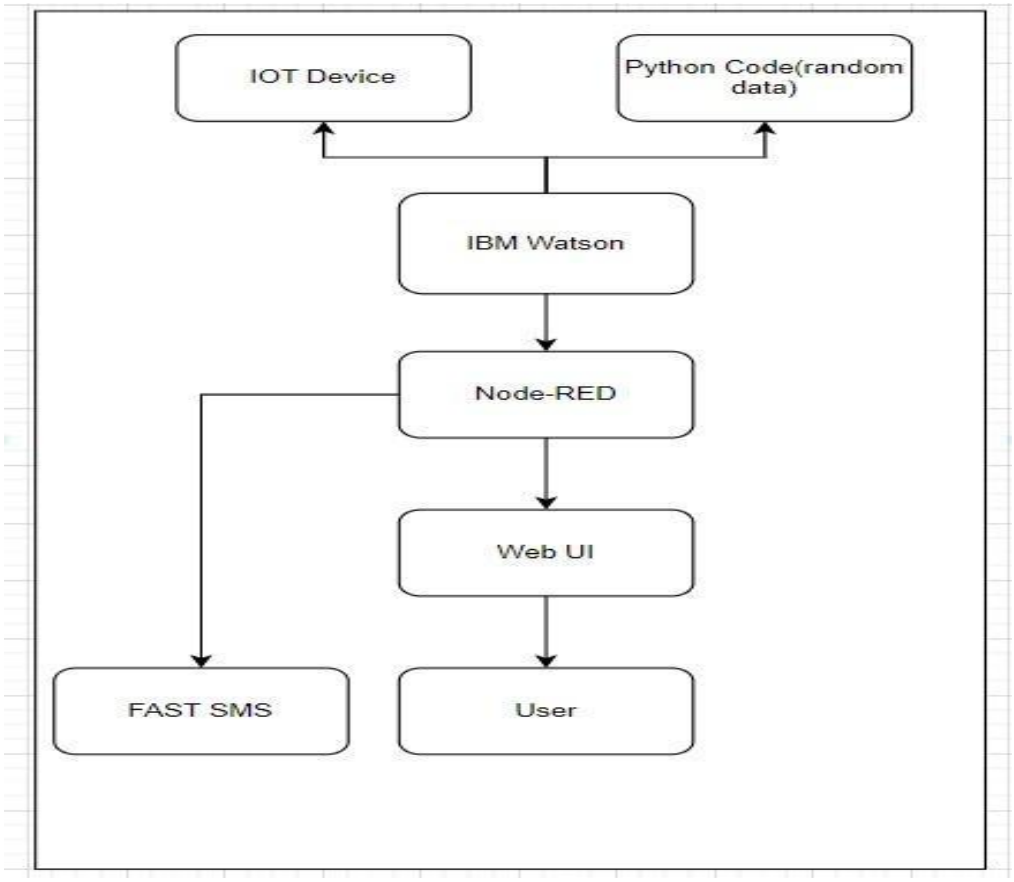

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web UI, Mobile App	HTML, CSS, JavaScript / Angular Js / React Js etc.
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 STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type	MySQL, NoSQL
6.	Cloud Database	Database Service on Cloud	IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage
8.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
9.	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	The open-source frameworks used	Chrome
2.	Security Implementations	The security / access controls implemented, use of firewalls etc.	IBM cloud Encryptions
3.	Scalable Architecture	The scalability of architecture (3 – tier, Micro-services)	IBM cloud architecture
4.	Availability	The availability of application (e.g. use of load balancers, distributed servers etc.)	Web application can even be used by the workers in the industry
5.	Performance	The performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Since the web application is high efficient, it can be used by the workers irrespective of time.