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

Date	03 October 2022
Team ID	PNT2022TMID37200
Project Name	IoT Based Smart Crop Protection System for Agriculture
Maximum Marks	4 Marks

Technical Architecture:

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

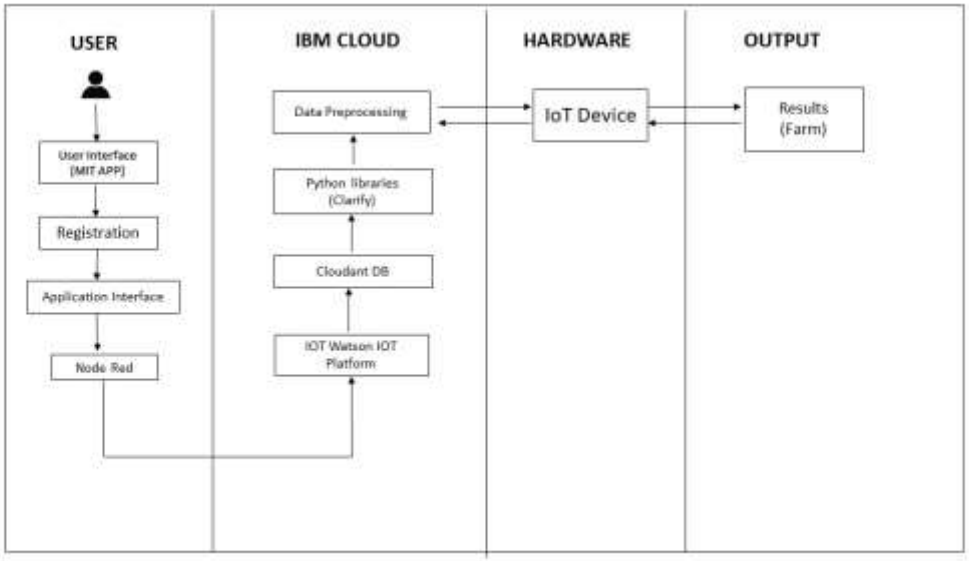

Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User interface through the Web UI	MIT APP
2.	User Registration	User can register in the UI application through email and phone number	HTML forms
3.	Application Interface	Conformation of the user security through API	IBM Watson STT service
4.	Database	Information of the respective users are stored in object storage.	MySQL
5.	Cloud Database	Database Service on Cloud	IBM Cloudant
6.	File Storage	Previous and already assigned standard data	Object storage, Clarifi
7.	IOT Model	The hardware setup of the system in the field.	Object Recognition Model
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System	IBM Cloud

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	IBM Watson Cloud is used to build the backend of the system.	IBM Watson Cloud
2.	Security Implementations	Mechanism like password setting should be used.	Encryptions
3.	Scalable Architecture	The 3 – tier architecture used with each user application tier, cloud tier, hardware tier.	3 – tier architecture
4.	Availability	Application is highly available and cloud accessing is easy.	IBM Cloud
5.	Performance	The app security of the app is ensured and much number of users can access at a time.	Node red, Web UI