

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

Date	21 October 2022
Team ID	PNT2022TMID38376
Project Name	IOT Based Smart Crop Protection System for Agriculture
Maximum Marks	4 Marks

Technical Architecture:

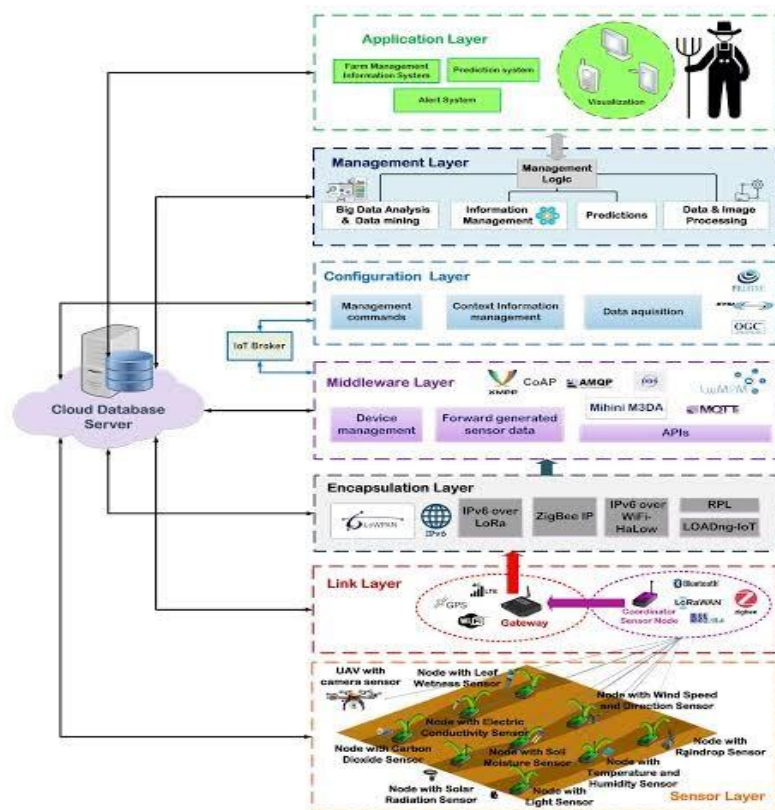


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Mobile App	MIT App Inventor
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.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
6.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
7.	External API-1	Purpose of External API used in the application	Aadhar API, user ID.
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: IBM Cloud Cloud Server Configuration : IBM Cloud	Local, IBM cloud..

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	IBM cloud framework is used	IBM cloud , Red node, MIT app inventor
2.	Security Implementations	Security to access controls implemented and use of firewalls is used.	Encryptions, Dyscryptions, OTP password.
3.	Scalable Architecture	In future it can be linked to form a smart agriculture system without the need of farmers supervise.	IOT, Cloud, RED Node
4.	Availability	Application is available 24/7 as it is hosted on IBM Cloud and can be used anywhere.	Technology used
5.	Performance	Customers will have a smooth experience while using the application, as it is simple and well optimized	Technology used

