

Project Design Phase –II

Technology Stack(Architecture & Stack)

DATE	12 November 2022
TEAM ID	PNT2022TMID26051
PROJECT NAME	Project – IOT Based Smart Crop Protection System for Agriculture
MAXIMUM MARKS	4 marks

Team leader:

G.Poojitha Naidu

Team members:

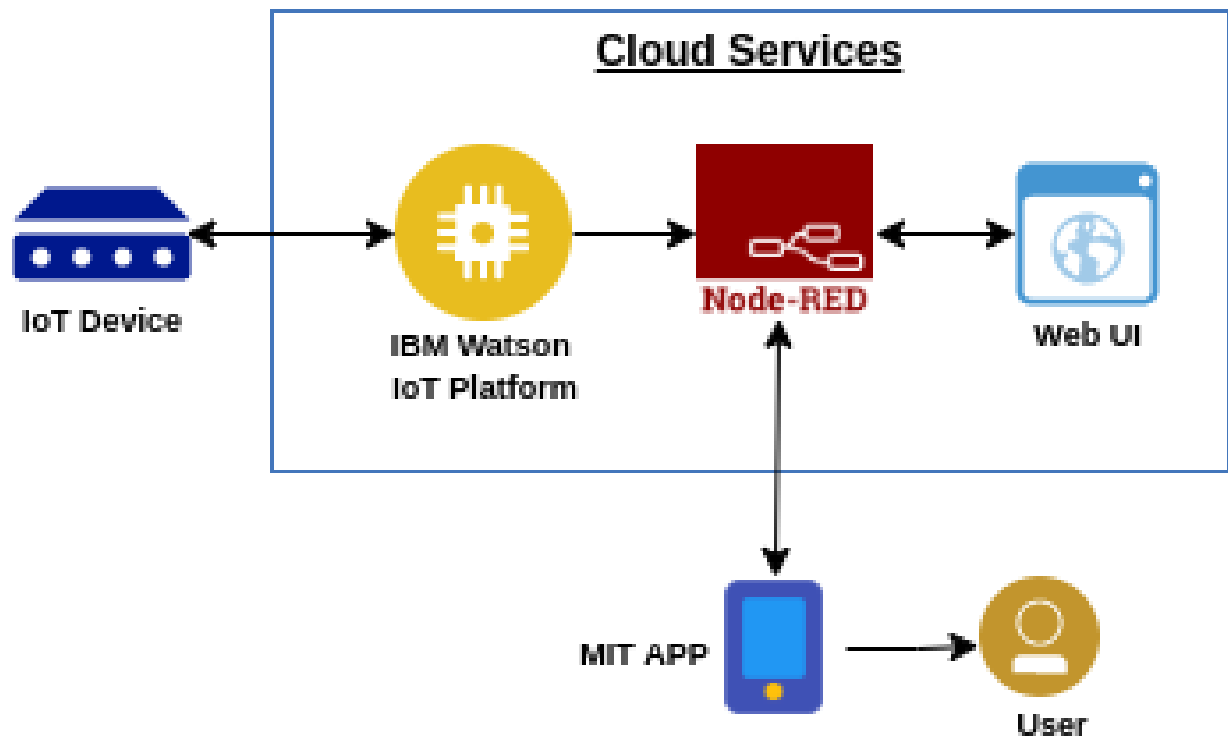
K.Pravalika

G.Shamitha

S.Bhavana

Technical Architecture: The architectural diagram of the model is as below and the Technology used is shown in table1 & table 2 .

References: https://www.researchgate.net/publication/349940582_Implementation_of_IIoT_based_smart_crop_protection_and_irrigation_system



Block Diagram

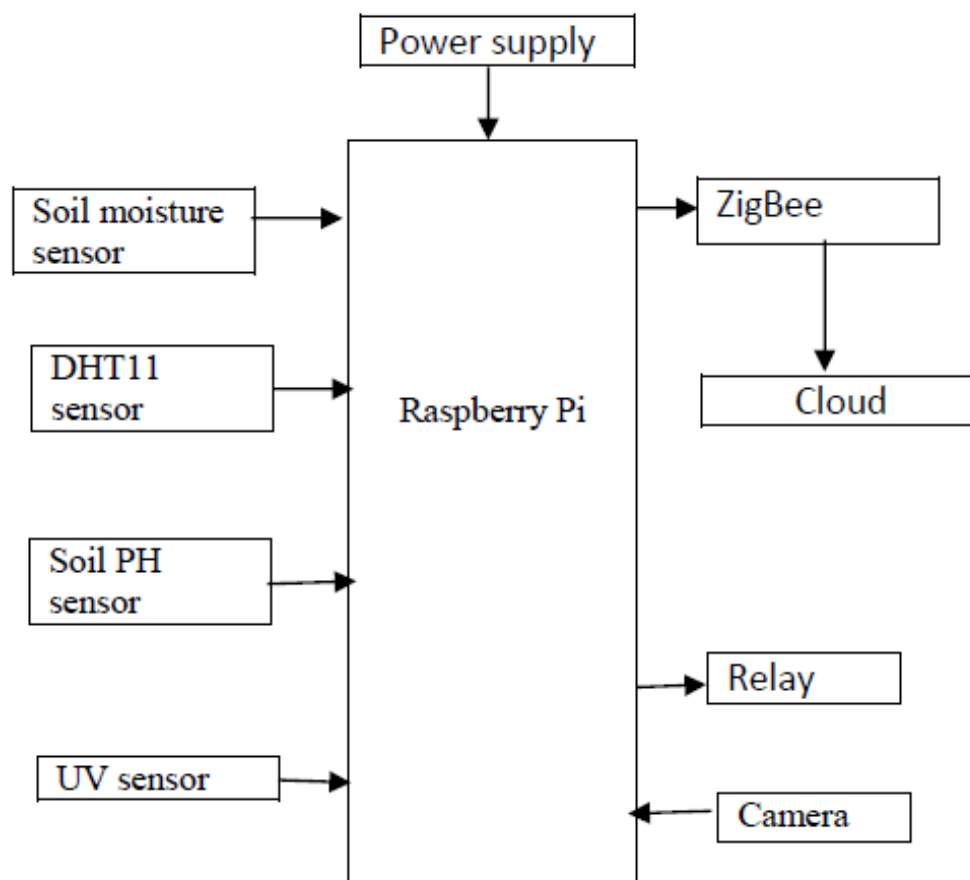


Table 1: Components &Technologies

S.N o	Component	Descriptio n	Technolog y
1	User Interface	How user interacts with application e.g., Mobile application	HTML, CSS, JavaScript / Angular JS /Node red
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, Configuratio ns etc.	MySQL, NoSQL, etc
6	Cloud Database	Database Service on Cloud	IBM DB2
7	File storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
9	IOT Model	Purpose of IoT Model is	IBM IoT Platform

		for integrating the sensors with a user interface.	
10	Infrastructure(server/cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc

References:

- 1.<https://www.researchgate.net/publication/349940582> Implementation of IIoT based smart crop protection and irrigation system
- 2.https://www.academia.edu/42697646/IOT_Based_Crop_Protection_System_against_Birds_and_Wild_Animal_Attacks

