

Project Design Phase-II

Technology stack

Date	15 October 2022
Team ID	PNT2022TMID49537
Project Name	Smart Farmer - IOT Enabled smart farming Application
Maximum Marks	4 Marks

Technical Architecture:

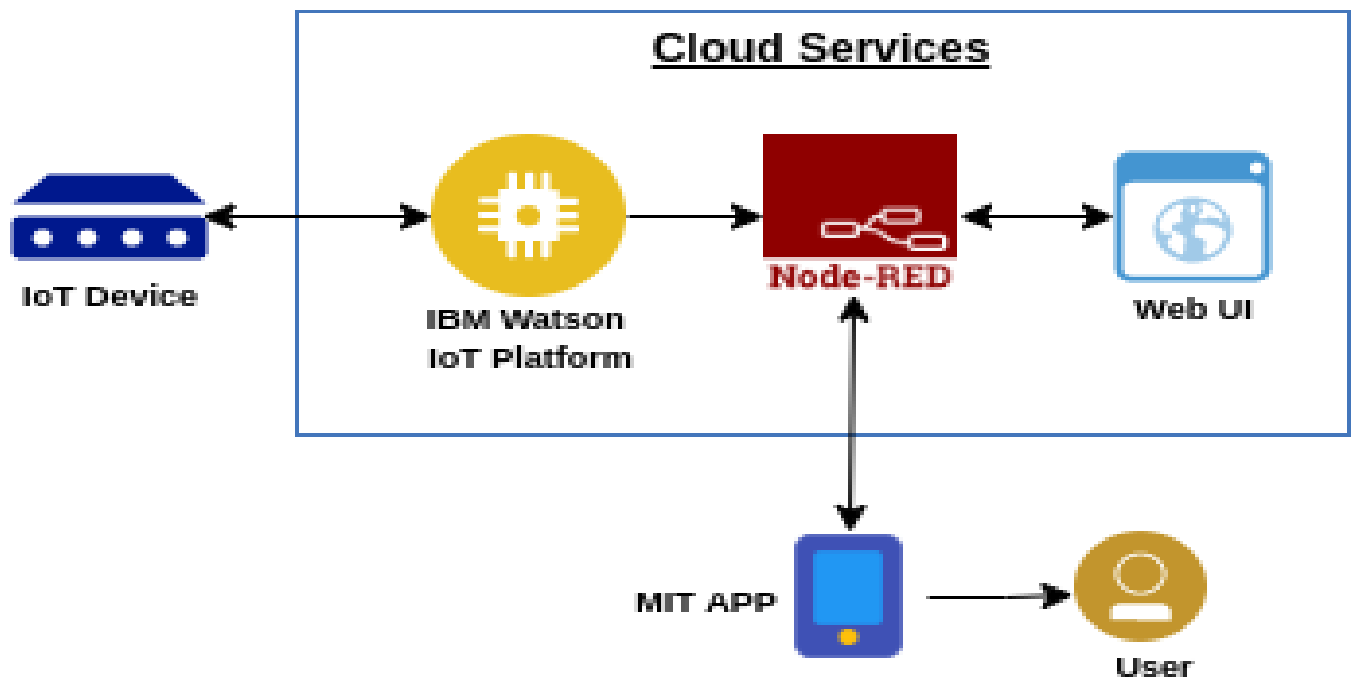


Table:-1 Components & Technologies:

S.no	Component	Description	Technology
------	-----------	-------------	------------

1.	User Interface	How user interacts with application e.g.normal message with mobile phone.	TCP SMPP protocol
2.	Application Logic-1	Logic for a process in the application	Python
3.	Data collection	Data can be collected	Internet application
4.	Dataset	Dataset can be used for training and testing the model	IBM cloud
5.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloud
6.	File Storage	Store the information	IBM cloud storage or local file system
7.	IBM Model	Purpose of IBM Model	Analyze and prediction the model
8.	Infrastructure (Server / Cloud)	Application Deployment cloud & service configuration	Cloud Foundry
9.	Mobile Notification	The purpose of notification is to information the water level analysis & prediction	Notification will be shown in communication device e.g.mobile phone

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-source Framework	List the Open-source frameworks used	WASP(Wireless application Service Provider)
2.	Security implementations	To ensure the access of good quality food for all people in a country.	Encryptions

3.	Scalable Architecture	Multiple cropping can increase production and income scalability can be measured by increased crop diversity, reduced use of inorganic fertilizers and pesticides.	Cloud
4.	Availability	The application gives alerts and live feeds 24/7 his system is available for every farmer.	Digital Twin Technology(DTT)
5.	Performance	The Performance of the Indian economy is dependent upon the growth of the agricultural sector. In 2021 India will be the world's second largest food producer.	GSM Technology