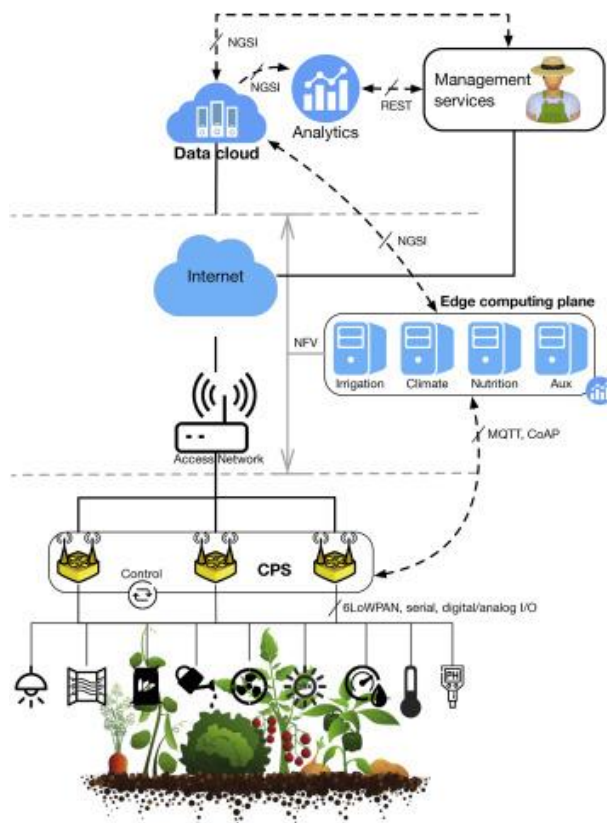


## Project Design Phase-II Technology Stack (Architecture & Stack)

Date	23 October 2022
Team ID	PNT2022TMID34687
Project Name	Project – 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	User can access this service by using a mobile application.	HTML, CSS, JavaScript
2.	Application Logic-1	Python is used for coding in iot.	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	MySQL is to store data.	MySQL
6.	Cloud Database	Database Service on Cloud	IBM DB2
7.	File Storage	All the information are stored here.	IBM Block Storage
8.	External API-1	It is used to forecast the weather.	IBM Weather API
9.	Infrastructure (Server / Cloud)	Cloud provides the server facility.	Local, Cloud Foundry, Kubernetes.

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Sensors are used for sensing the temperature.	sensors
2.	Security Implementations	Use of firewall technology.	e.g. SHA-256, Encryptions.
3	Availability	Availability of storage space is mandatory.	Distributed servers
4.	Performance	Performance of the system depends on the cache storage.	Cache