

## **Project Design Phase-I**

### **Solution Architecture**

Date	19 September 2022
Team ID	PNT2022TMID33440
Project Name	Project – Smart Farmer - IoT Enabled Smart Farming Application
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Maximum Marks	4 Marks

### **What is Solution Architecture:**

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behaviour, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.
- Solution architecture provides the ground for software development projects by tailoring IT solutions to specific business needs and defining their functional requirements and stages of implementation. It is comprised of many subprocesses that draw guidance from various enterprise architecture viewpoints.

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# *Smart Farming*



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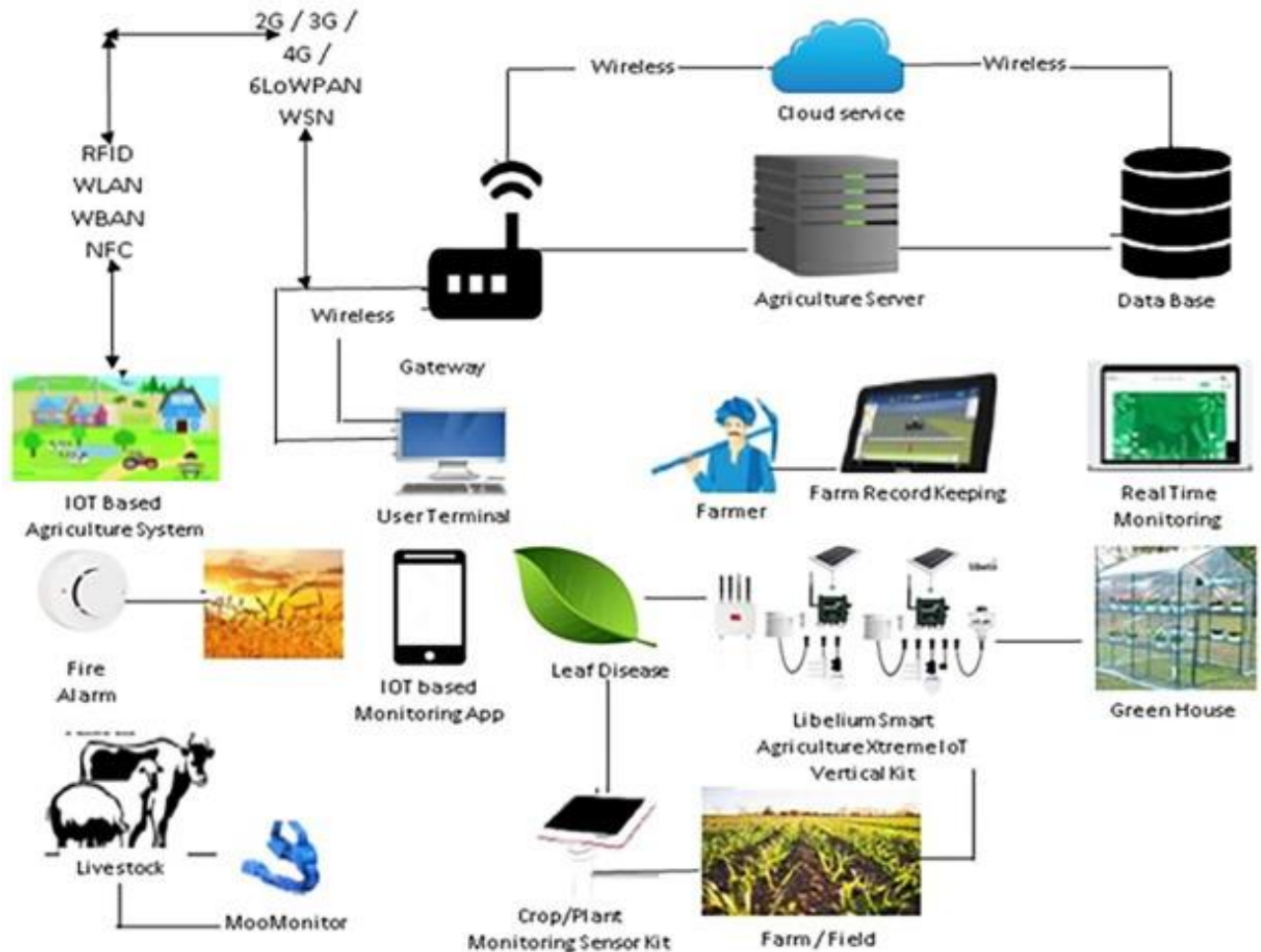


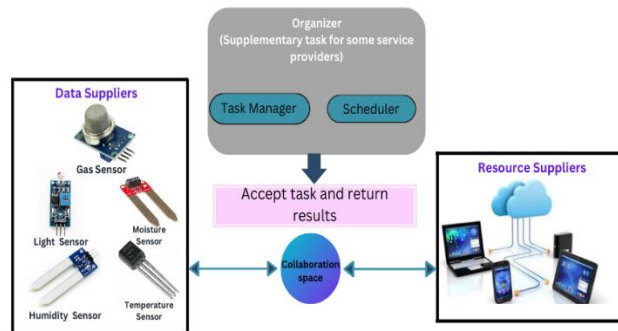
## **Solution Architecture Components in IOT enabled smart farming:**

The Smart devices in the agriculture field consist of some key features. They are as follows:

- Different agricultural parameters like Temperature, Wind, Humidity, and Moisture can be controlled and monitored by using sensors.
- Generates and Schedules a plan for irrigation and fertilization.
- Data can be obtained through wireless speckles.
- Provides external memory interface for the purpose of feeding and desertification.
- Provides awareness to the farmers by alerting while he is away from the field.
- Controls the equipment in the field through sensor devices like mobile phones, Tablets, computers etc.

# Solution Architecture for IoT Enabled Smart Farming Application





Sophisticated sensor-based architecture is proposed to monitor the conditions of the farms by using sensors and the information extracted from these sensors is stored on the internet.