Project Design Phase-I
Proposed Solution Template

Date	24 September 2022
Team ID	PNT2022TMID23394
Project Name	Smart farmer -IOT enabled smart farming application.
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To provide efficient decision support system using wireless sensor network which handle different activities of farm and gives useful information related to farm. In the case of traditional irrigation system water saving is not considered. Since, the water is irrigated directly in the land, plants under go high stress from variation in soil moisture, therefore plant appearance is reduced. The absence of automatic controlling of the system result in the improper water control system.
2.	Idea / Solution description	In smart farmer application, automated systems or intelligent pumps are used. Soil moistures sensors are used in different areas to get the moisture of the soil in agricultural land. Based on the results from the soil moisture sensors, the intelligent pumps are turned On/Off.
3.	Novelty / Uniqueness	IoT in agriculture focuses on optimizing the use of land, energy, and water. It is possible to quickly collect real-time data for varied sensors in the field. Farmers use the data to make accurate decisions and accurately allocate enough resources for farming efficiency. When the IoT-based agriculture monitoring system starts, it checks the Soil moisture, temperature, humidity, and soil temperature. It then sends this data to the IoT cloud for live monitoring. If the soil moisture goes below a certain level, it automatically starts the water pump.
4.	Social Impact / Customer Satisfaction	Smart Farming has enabled farmers to reduce waste and enhance productivity with the help of sensors (humidity, temperature, soil moisture, etc.) and automation of irrigation systems. Further with the help of these sensors, farmers can monitor the field conditions from anywhere.

5.	Business Model (Revenue Model)	A popular IoT business model is the data-driven model powered by the data generated by your devices. You build a product that provides value to customers and collects data that you can use for other products or sell to a third party.
6.	Scalability of the Solution	Scaling IoT projects challenges organizations' approach to such setups and existing architecture. It requires much more than additional sensors attached to more machines. IoT leaders must ensure their team and architecture can handle the increased connected devices and influx of data.